CENTURION

CENTURION PRODUCT CATALOGUE | Access Control and Automation 2018-2019

FAAC
Simply automatic.

50 YEARS 1965 | 2015

WHY CENTURION?

About CENTURION

Centurion Systems (Pty) Ltd is an industry-leading gate automation and access control company, manufacturing as well as distributing a wide range of products including:

- Sliding gate operators
- Swing gate operators
- Traffic barriers and accessories
- Roller-shutter operators
- Intercom systems
- GSM devices and GSM-based intercoms
- Keypads
- Remote controls
- Proximity access control
- Bollards
- Door automation
- Turnstiles

We boast a dedicated R & D department with a crack team of fully-qualified engineers who conduct product development in-house, and we pride ourselves on our unrivalled after-sales support, devotion to quality and the personal touch evident in each and every product that we sell. Our award-winning product range includes a number of world-first technological advancements, including the revolutionary ChronoGuard timer technology as well as the Beam Alarm feature-set found on our D-Series range of gate operators.

Centurion Systems also takes great pride in our Training Department, who takes gigantic strides towards ensuring that all our clients and staff are comfortable and familiar with our products. We currently export to over 70 countries worldwide including New Zealand, the United Kingdom and several countries in Africa and the East. We are accredited with the prestigious ISO9001-2008 quality assurance certification. In addition to this, our design engineers have taken great care to ensure that our gate motors are compliant with most operating standards, including CE and UL325.

Lastly, our products have been designed with the express purpose of making life easier for installers, and that is why we continuously innovate to make the installation process a genuinely pleasurable and hassle-free experience.

Removable terminal strips, intuitive LCD interfaces and web-based operating platforms are just some of the ways in which we strive to facilitate ease of installation and administration of our products.

Key Technologies

CENTURION products feature a host of industry-leading technologies, all conducive to greater security, greater convenience and superior functionality. Just some of the advanced technologies found in our products are:

- **ChronoGuard** – a world-first timer technology that allows the user to set a myriad of Auto-activation and Time-barring functions using the onboard Real Time Clock and Calendar, which tracks the date up to the year 2099

- **Intruder-detection Alarms** – The novel feature-set – consisting of the Beam Alarm and Ambush Alarm - ups the security ante even further by providing an audible output when the infrared gate safety beams are obstructed, or remain interrupted for a pre-defined period of time

- **Code-hopping technology** – CENTURION remote controls are equipped with code-hopping encoders which process the outgoing transmission through a sophisticated encryption engine, making copying and cloning virtually impossible. No two transmitted codes will ever be alike

- **Onboard diagnostics** – Our D-Series range provides both audible and visual feedback of the gate status at any given time. In addition, a designated diagnostic screen makes fault-finding a breeze

- **High-volume capability** – CENTURION operators are designed to work hard, and work hard they do – with some operators such as the **SECTOR II** traffic barrier being capable of performing in excess of 3000 operations every single day

- **DC-powered and solar-ready** – CENTURION operators use low-voltage technology to deliver a safe, efficient and reliable access automation solution with intelligent battery-state monitoring. In addition, the majority of our products are completely solar-ready for the ultimate in energy autonomy

Awards

Throughout our proud history, dating back to 1986, we've always been driven by innovation and a yearning for true excellence. This inborn desire to be the undisputed best in the field of access automation is evident in the range of CENTURION products that have received awards.

- In 2002, our remote control range garnered the SABS Design Institute's prestigious Design Excellence Award for its attractive and functional design and ergonomic button placement

- In 2004, Centurion Systems was the winner of a Sustainable Growth Award in the 5-year Private Company category

- The **POLOphone** intercom system, with its revolutionary and undeniably stylish handset design, earned Centurion Systems yet another award in 2006 in the form of a second SABS Design Institute Design Excellence Award

- A mere year later, in 2007, Centurion Systems MD Pat Dickens was awarded the Emerging Entrepreneur Award for his part in establishing Centurion Systems as a key player in the local and global economy

- 2009 saw Centurion Systems receive a third Design Excellence Award, this time for the **VECTOR2** swing gate operator

- Our brainy, brawny **D10** industrial sliding gate operator was a finalist at the IFSEC 2010 Security Industry Awards

- Proving that dynamite truly does come in small packages, the **D2 Turbo** domestic sliding gate operator is chosen as a finalist in the IFSEC 2011 Security Industry Awards

Our Goals

Centurion Systems is a company driven by values, and we subscribe to the following Vision and Mission statements:

Vision:

To be the best access automation company in the world.

Mission:

- Delight our customers with world-class products and services
- Be the employer and employee of choice
- Grow through continuous improvement
- Care for our environment

24 Month Warranty

Centurion Systems stands by its products with an industry-leading 24 month warranty on all products manufactured by us (excluding batteries, which carry a 6 month warranty after date of purchase)

For a full list of Terms and Conditions, please visit our website **www.centsys.com**

CONTENT

Images are for illustrative purposes only - refer to text

SLIDING GATE OPERATORS

Centurion Systems' range of technologically-advanced sliding gate operators has been designed to automate virtually any sliding gate and suit a wide variety of applications; from private residences where the gate is only operated infrequently, to large complexes, businesses and industrial installations where the gate could almost be used constantly. Each and every operator offers functionality far beyond the scope of simply opening and closing your gate, putting a world of control literally at your fingertips.

SLIDING GATE OPERATOR QUICK SELECTION GUIDE

This quick selection guide will help you to select the perfect CENTURION for you or your client's sliding gate by providing the differentiating features and key specifications of each.

	D2 Turbo	D2 Turbo Low-Voltage	D5-Evo
Input voltage	90V - 240V AC / Solar	10V - 20V AC 10V - 28V DC	90V - 240V AC / Solar
Mains power required at gate	√ / Solar	-	√ / Solar
Gate mass – maximum	250kg	250kg	500kg
Gate speed – maximum	227mm/sec	400mm/sec	367mm/sec
Duty cycle – mains present	Domestic use [1]	Domestic use [1]	Light-industrial [1]
Daily operations - maximum	10 [2]	10 [2]	150 [2]
Interface type	Dial-based	Dial-based	LCD
Time-barring and automatic activation	-	-	√
Onboard multichannel receiver	√	√	√

1. Based on a 25° ambient temperature and unit not in direct sunlight

2. Battery-driven typically using a 7Ah (5Ah – D2 Turbo/D2 Turbo Low-Voltage) battery and a charger (battery can be upgraded for greater power failure autonomy – mounted separately). Solar power may also be used.

D5-Evo Low-Voltage	D10	D10 Turbo	A10 Endurance		A10 Heavyweight
15V - 19V AC 21V - 26V DC	90V - 240V AC / Solar	90V - 240V AC / Solar	220V - 240V AC		220V - 240V AC
-	√ / Solar	√ / Solar	√		√
500kg	1000kg	1000kg	Standard speed 1000kg	Sprint speed 600kg	2000kg
400mm/sec	433mm/sec	833mm/sec (varies with load)	Standard speed 267mm/sec	Sprint speed 500mm/sec	227mm/sec
Domestic use [1]	Industrial [1]	Industrial [1]	Heavy-industrial		Heavy-industrial
150 [2]	750 [2,3]	750 [2,3]	Only limited by duty cycle		Only limited by duty cycle
LCD	LCD	LCD	LED-based		LED-based
√	√	√	-		-
√	√	√	-		-

3. With a brush replacement interval of two years

D2 TURBO AND D2 TURBO LOW-VOLTAGE DOMESTIC SLIDING GATE OPERATORS

The **D2 Turbo** is a high-speed, cost-effective operator for domestic gates weighing up to 250kg, with a maximum speed of 400 millimetres per second and powerful peak push force rated at 9kgf. This operator is exceptionally quick and easy to install and set up, with all settings easily configurable via two dials on the controller. With loads of features, the **D2 Turbo** is the complete motor for a standard, domestic four metre gate.

The **D2 Turbo Low-Voltage** operator is designed specifically for sites with no mains at the gate to reduce installation costs while delivering outstanding reliability, comprehensive functionality and selectable high-security or standard speeds. With the **D2 Turbo Low-Voltage**, there is no need for costly high-voltage cable runs and expensive isolators. Simply use a low-voltage step-down transformer or solar power supply.

IFSEC2011 SECURITY INDUSTRY AWARDS **FINALIST**

MAIN FEATURES

Mechanical Features

- Battery backup
- Turbo speed for greater security and convenience
- Tough-as-nails steel pinion
- Very easy to install and set up, saving you time and money
- Easy mounting with a revolutionary jacking system
- Lockable, easy manual override
- Modular components clip together for easy maintenance

Electronic Features

- Simple user interface makes changing setup child's play
- Insect-proof controller housing with removable terminals
- Multiple Modes of Operation with enhanced user interface for exceptionally easy and versatile installation
- Adaptive Collision Sensing – intelligent enough to adapt to changes in the track, but sensitive enough to keep your loved ones safe
- Opening and Closing Safety Beam Inputs with beam circuit functional test
- High-security cleared beam Autoclose, in conjunction with Safety Beams (PIRAC)

- Automatic closing with adjustable time delay, and pushbutton override
- Remote gate-status indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Pedestrian Opening
- Holiday Lockout
- Courtesy/Pillar Light (fixed duration), with pre-delays and two Pre-flashing Modes
- Selectable gate speed modes – Low Speed/High Speed (High Speed is the default)
- Positive Close Mode (e.g. to ensure activation of electric fence contact switch)
- Onboard multichannel CENTURION code-hopping receiver with the ability to learn remote control buttons to specific functions (e.g. Gate Trigger, Pedestrian Opening, Holiday Lockout)
- Low-voltage AC or DC input - perfect for installations where there is no mains power at the gate **(D2 Turbo Low-Voltage)**
- Solar power-ready - energy-efficient, environmentally-friendly and offering greater autonomy

TECHNICAL SPECIFICATIONS

Technical Data	D2 Turbo	D2 Turbo Low-Voltage
Input voltage [1]	90V– 240V AC ±10%, 50Hz	10V - 20V AC ±10%, 50Hz; 10V - 28V DC
Motor voltage	12V DC	12V DC [3]
Motor power supply [4]	Battery-driven (standard capacity - 12V 5Ah)	Battery-driven (standard capacity - 12V 5Ah)
Battery charger [1]	Intergral with controller 1A @ 13.7V +/- 1%	Intergral with controller 1A @ 13.7V +/- 1% (Input voltage > 15V AC)
Current consumption (mains)	60mA	60mA
Current consumption (motor at rated load)	8/12A	8/12A
Current consumption (quiescent load)	95mA	95mA
Operator push force		
Starting	18kgf	18kgf
Rated	8kgf	8kgf
Gate mass – maximum	250kg	250kg
Gate length - maximum	20m	20m
Gate speed - m/min [6]	22 - 26m/min	22 - 26m/min
Gate speed - mm/sec	367 - 433mm/sec	367 - 433mm/sec
Drive Pinion	17T Module 4	17T Module 4
Maximum daily cycle	10 cycles/day	10 cycles/day
Design life	30 000 cycles	30 000 cycles
Operations in standby with standard battery [4,5]		
Half day	60 cycles	60 cycles
Full day	40 cycles	40 cycles
Collision sensing	Electronic	Electronic
Operating temperature	-15°C to +50°C	-15°C to +50°C
Degree of protection	IP54	IP54
Controller incorporated	D2 Controller_H	D2 Controller_L
Onboard receiver type	NOVA code-hopping onboard, multichannel	NOVA code-hopping onboard, multichannel
Receiver frequency	433.92MHz	433.92MHz
Receiver code storage capacity	32 transmitter buttons	32 transmitter buttons
Mass of unit packed	5kg	5kg
Packaging dimensions	Length: 255mm x Width: 188mm x Height: 333mm	Length: 255mm x Width: 188mm x Height: 333mm

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Plug-in transformer

3. Solar panel

4. Can increase battery capacity for longer standby times

5. Based on 4m gate with no external accessories such as infrared Safety Beams

6. Gate operating speed can be configured to run at a slower, 16m/min, depending on the requirements of individual installations

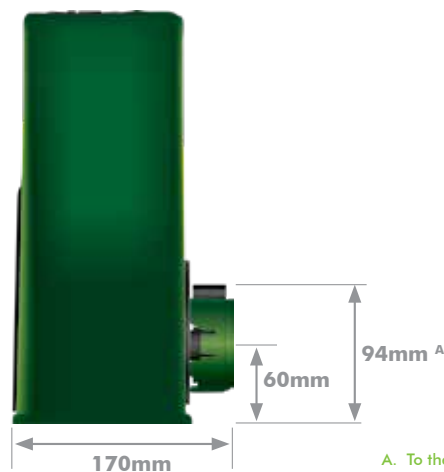**D2 Turbo single operator duty cycle as a function of operating time**
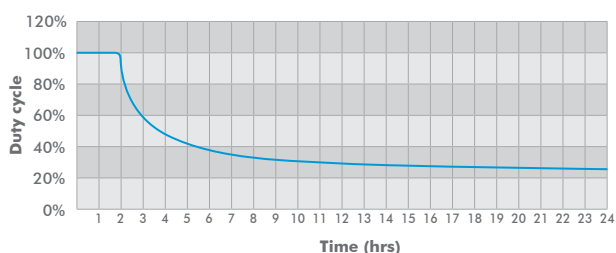
CABLING REQUIREMENTS

1. **D2 Turbo:** 220V - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm² SWA)[1]
   D2 Turbo Low-Voltage: 10V - 20V AC cable via transformer in dwelling (3 core LNE 1.5mm² Surfix)

Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1[6] + 6 core[3] 0.5mm² multi-stranded) or cable from control box to entry panel (n2[6] 0.5mm² multi-stranded)

3. Infrared Safety Beams (3 core 0.5mm² multi-stranded)

4. Access control device (3 core 0.5mm² multi-stranded[4])

5. Pedestrian keyswitch (2 core 0.5mm² multi-stranded) or

6. Keypad (3 core 0.5mm² multi-stranded)

7. External radio receiver (3 core 0.5mm² multi-stranded[5])

8. Pillar Lights (3 core LNE SWA[2], size according to power requirements)

9. Inductive loop detector for free-exit (1 core 0.5mm² multi-stranded - silicone-coated[6])

1. Possibly increase cable thickness if Pillar Lights are to be installed

2. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

3. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling

4. Number of cores and type of cable could vary depending on the brand of access control system being used

5. For optimum range an external radio receiver can be mounted on the wall

6. Number of cores required by the intercom

310mm

244mm

170mm

94mm [A]

60mm

A. To the centre of the tooth mesh point of the rack

CHOOSING THE RIGHT GATE MOTOR

Let's say, hypothetically, that you have finally grown tired of your old jalopy and you're in the market for a new, more reliable, mode of transportation. Naturally, there are a number of factors you would consider and things you would weigh up before finally settling on a car.

Is safety an important consideration for you? Are you in the market for a family sedan or a sports hatch? Are you looking for something with superior fuel economy?

Similarly, when you're preparing to have your world rocked by the amazing security and convenience provided by a gate motor, there are some things you need to think about to ensure that you get one that's right for your application. But don't worry, with some handy tips from your favourite access automation company you'll be wielding that remote like a magical sceptre in no time..

AC or DC

We're not referring to the Australian rock band of course (although our gate motors have been known to rock!), but rather to the form in which electric power is supplied to your operator. AC, or alternating current, means that the gate motor is being powered directly via the 230V mains supply from a distribution board in your house.

DC, or direct current, on the other hand, is a method of power delivery relying on some sort of "power store" such as a battery. You'll find that the vast majority of CENTURION gate motors are DC-operated.

And there's a good reason for that. Power delivery, especially in South Africa, is unfortunately quite unreliable and we've all borne the brunt of load shedding before. Your gate motor, being the holder of so many titles – security guard, butler, etc. – needs to be on duty around the clock, and DC units are able to continue operation even during lengthy power failures, whereas AC gate motors are not.

On the flipside of the coin, AC motors have a virtually unlimited duty cycle and will work tirelessly as long as they are being fed mains. Both of these modes of power delivery have their virtues, you simply need to decide which is best suited for your application. If you live in an area where power outages are commonplace, a DC unit is probably the best bet.

Weight of the Gate

Unless you're an ant or former Governor of California (and sometimes actor) Arnold Schwarzenegger, you probably can't carry much more than your body weight. But through the miracle of engineering gate motors are able to relatively effortlessly lug around several hundred times its own weight.

But that doesn't mean it should be unrealistically loaded. Subjecting it to that kind of abuse will invariably lead to problems down the line, so first get an approximation of what your gate weighs before selecting a motor. The good news is that gates are usually much, much lighter than we think. For example, if you can lift your gate to about the height of your shin, chances are it doesn't weigh much more than 250kg.

Pull Force

This is more an extension of the previous point than a whole new heading. Pull force plays a monumental role in what gate motor you install, and has a direct impact on both the reliability and the service life of the operator. If you struggle to open and close your gate manually, be sure to choose a device rated for a high push force such as a D10.

The easiest and most accurate way to determine the weight of the gate is to use a pull scale as found in any angling goods store.

Swing or Slide

This one might seem fairly obvious if you already have a gate fitted, but if you're looking to install a gate where there isn't currently one this might warrant some thought. The truth is that both swing and sliding gate motors are equally rich in merit and which one you choose to fit simply depends on preference or, in the case of an existing gate, what the setup necessitates.

If you are going with a swing gate, remember to take into account factors like the length of the individual leafs, wind loading, etc.

If you follow these few simple selection guidelines you're assured of a gate motor that'll faithfully serve you for years to come. And if you do get stuck, remember that our technical support centre is open Monday to Friday from 7am until 6pm. They're number is +2711 699 2451.

D5-EVO AND D5-EVO LOW-VOLTAGE DOMESTIC AND LIGHT-INDUSTRIAL SLIDING GATE OPERATORS

D5-Evo: The light-industrial **D5-Evo** is an evolution of the tried and tested D5, 500kg operator for domestic and light-industrial applications. Potent push force, along with intelligent speed control and smooth opening and closing, makes the **D5-Evo** the automatic choice for large private residences and townhouse complexes requiring reliable, feature-rich gate automation.

D5-Evo Low-Voltage: This variant enables you to enjoy all the amazing features and functionality of the flagship **D5-Evo** – even if you don't have mains power at the gate. All that is needed to breathe life into the feature-rich LCD controller is a low-voltage input, easily obtainable via a step-down transformer, dramatically reducing installation costs.

MAIN FEATURES

Mechanical Features

- Battery backup
- Lockable, easy manual override
- Custom-engineered gearbox molded from durable engineering polymer
- Save on cabling costs - no thick, expensive high-voltage cables (**D5-Evo Low-Voltage**)
- No need to fit costly isolators (**D5-Evo Low-Voltage**)

Electronic Features

- LCD interface - exceptionally easy setup with visual and audible fault-finding and notifications
- Advanced diagnostic screens indicating:
  - Battery-low
  - Battery charge level
  - Fuse blown
  - High current draw
  - Details of the last transmitter activated
  - Health of the drive electronics
  - Currently-activated gate inputs
  - See Diagnostics Made Easy booklet for further details

- Intelligent speed control - high-speed for greater security and convenience; slower speed for increased safety
- Local test button can be deactivated for added security
- Sensitive anti-crushing protection for greater safety
- Integrated ChronoGuard timer functionality (a world first) - Time-barring and Autoactivation features for switching on Pillar Lights, deactivating ground loops, etc.
- Multiple operating features including Intruder-detection Alarm Modes (a world first)
- Remote gate-status indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Onboard multichannel CENTURION code-hopping receiver incorporating the following functionality:
  - Selective add and delete
  - Onboard receiver can be disabled
  - 500 transmitter button memory
  - Automatic maintenance features like Delete-Not-Present
- Opening and Closing Safety Beam Inputs
- Integrated Beam Test hardware to ensure the beams are always working correctly

TECHNICAL SPECIFICATIONS

Technical Data	D5-Evo	D5-Evo Low-Voltage
Input voltage	220V AC +/-10% @ 50Hz [1]	15V - 19V AC [2, 3]
Motor voltage	12V DC	12V DC
Motor power supply [4]	Battery-driven (standard capacity - 12V 7Ah)	Battery-driven (standard capacity - 12V 7Ah)
Battery charger	CP84SM – 1.8A @ 13.7 +/-1%	CP84XTE – 800mA @ 13.7 +/- 1%
Current consumption (mains supply)	60mA	60mA
Current consumption (motor rated / peak load)	8/15A	8/15A
Current consumption (quiescent load)	75mA	75mA
Operator push force		
Starting	30kgf	30kgf
Rated	17kgf	17kgf
Gate mass – maximum	500kg	500kg
Gate length - maximum	100m	100m
Gate speed - m/min [6]	18 - 22m/min	18 - 22m/min
Gate speed - mm/sec	300 - 367mm/sec	300 - 367mm/sec
Drive Pinion	17T Module 4	17T Module 4
Maximum daily cycle	150 cycles/day	150 cycles/day
Design life	150 000 cycles	150 000 cycles
Operations in standby with standard battery [4, 5]		
Half day	70 cycles	70 cycles
Full day	60 cycles	60 cycles
Collision sensing	Electronic	Electronic
Operating temperature	-15°C to +50°C	-15°C to +50°C
Degree of protection	IP54	IP54
Controller incorporated	D-Series_12	D-Series_12
Onboard receiver type	NOVA code-hopping onboard, multichannel	NOVA code-hopping onboard, multichannel
Receiver frequency	433.92MHz	433.92MHz
Receiver code storage capacity	500 transmitter buttons	500 transmitter buttons
Mass of unit packed	10kg	10kg
Packaging dimensions	Length:303mm x Width: 231mm x Height: 432mm	Length:303mm x Width: 231mm x Height: 432mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
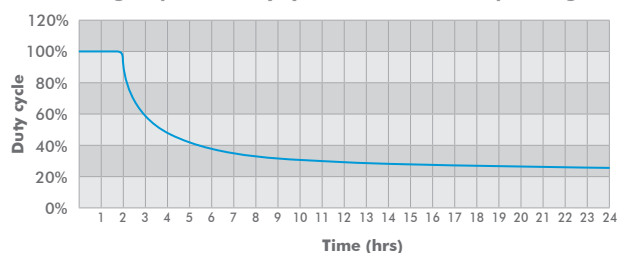2. Plug-in transformer
3. Solar panel
4. Can increase battery capacity for longer standby times
5. Based on 4m gate with no external accessories such as infrared Safety Beams

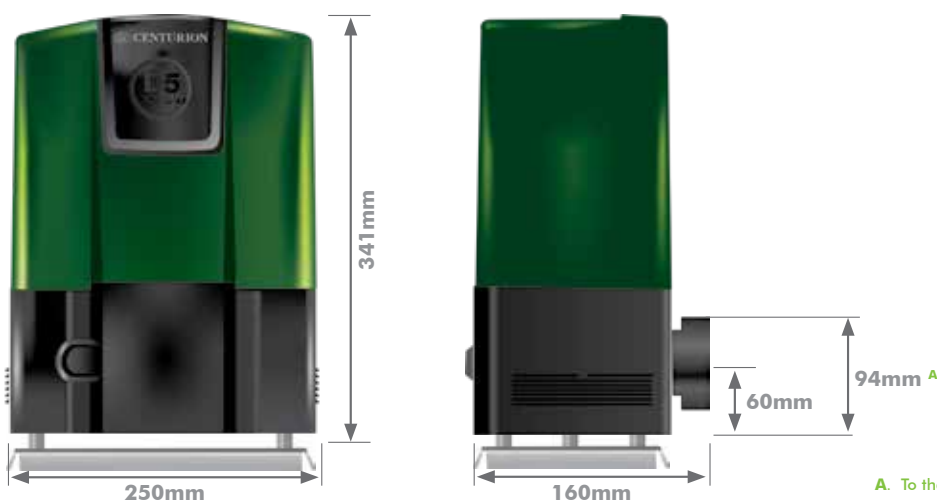**D5-Evo single operator duty cycle as a function of operating time**

CABLING REQUIREMENTS

1. **D5-Evo: 220V** - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm^2 SWA)[1]
   D5-Evo Low-Voltage: 15V - 19V AC cable via transformer in dwelling (3 core LNE 1.5mm^2 Surfix)

Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1[6] + 6 core[3] 0.5mm^2 multi-stranded) or cable from control box to entry panel (n2[6] 0.5mm^2 multi-stranded)

3. Infrared Safety Beams (3 core 0.5mm^2 multi-stranded)

4. Access control device (3 core 0.5mm^2 multi-stranded[4])

5. Pedestrian keyswitch (2 core 0.5mm^2 multi-stranded) or

6. Keypad (3 core 0.5mm^2 multi-stranded)

7. External radio receiver (3 core 0.5mm^2 multi-stranded[5])

8. Pillar Lights (3 core LNE SWA[2], size according to power requirements)

9. Inductive loop detector for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated[6])

1. Possibly increase cable thickness if Pillar Lights are to be installed

2. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

3. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling

4. Number of cores and type of cable could vary depending on the brand of access control system being used

5. For optimum range an external radio receiver can be mounted on the wall

6. Number of cores required by the intercom

341mm

250mm

94mm A

60mm

160mm

A. To the centre of the tooth mesh point of the rack

BECAUSE PEACE OF MIND IS WHAT MAKES A HOUSE A HOME

Centurion Systems is South Africa's leading manufacturer of access automation solutions for homes and businesses, with 30 years' experience keeping loved ones safe and baddies out.

Why automate?

A large number of hijackings and robberies occur in residential driveways as the homeowner is about to open or close the gate, or waiting for the gate to be opened. A gate motor ensures that the homeowner can get into and out of the property as quickly as possible.

Why CENTURION?

- Industry leader
- Extremely fast gate motors with automatic closing
- Built-in anti-crushing protection keeps children, pets and vehicles safe
- World-class after-sales support
- CENTURION is where you are! Branches nationwide and an extensive distribution network serves over 70 countries!

D5-EVO
sliding gate motor

SECTOR II
traffic barrier

VERT-X and VANTAGE
swing gate motors
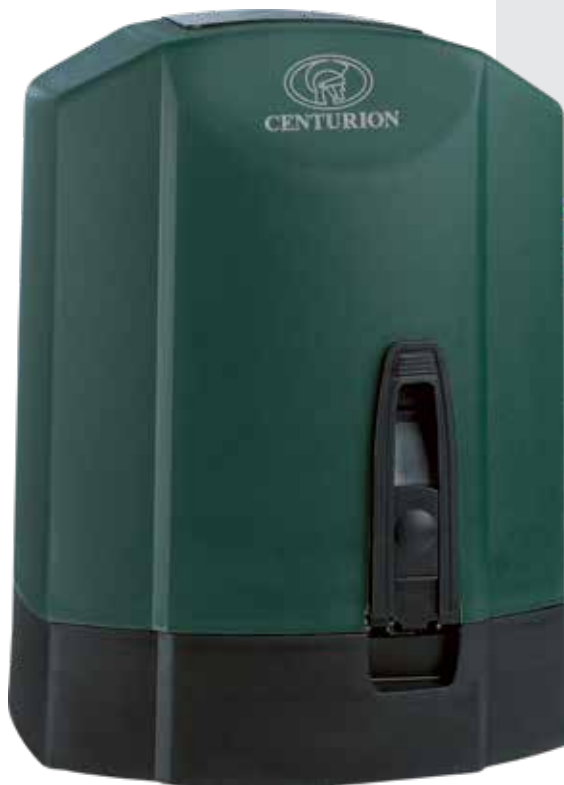
NOVA
remote

G-SPEAK ULTRA
GSM based intercom

D10 AND D10 TURBO
INDUSTRIAL SLIDING GATE OPERATORS

D10: Using CENTURION's proven 24V DC technology, this is the complete solution for commercial and industrial gates weighing up to 1000kg. A rock-solid die-cast aluminium gearbox and reliable battery backup make the **D10** ideally-suited for complexes with large gates and high traffic volumes, while an intelligent LCD controller with multiple Modes of Operation makes setup and diagnostics veritable child's play.

D10 Turbo: CENTURION's fastest operator yet! This is the ideal solution for extremely fast, feature-rich and high-security gate automation. With a top speed of 833 millimetres per second and all the amazing features that first made the **D10** a favourite among installers and end-users alike, the **D10 Turbo** offers the complete package of brains, brawn and expeditious speed.

iFSEC 2010 SECURITY INDUSTRY AWARDS FINALIST

D10   D10 TURBO

MAIN FEATURES

Mechanical Features

- Battery backup
- Lockable, easy manual override with anti-jamming
- Strong die-cast aluminium gearbox
- High-volume capability - for greater reliability in intensive use applications

Electronic Features

- Turbo speed for greater security and convenience (**D10 Turbo**)
- LCD interface – Exceptionally easy setup with visual and audible diagnostics and notification
- Diagnostic screens indicating:
  - Battery-low
  - Battery charge level
  - Motor fuse blown
  - High current draw
  - Details of the last transmitter activated
  - Health of the drive electronics
  - Currently activated gate inputs
  - See Diagnostics Made Easy booklet for further details
- High duty cycle capability - for greater reliability in high-volume applications
- Sensitive anti-crushing protection for greater safety
- Intelligent speed control - high-speed for greater security and convenience; slower speed for increased safety
- Integrated ChronoGuard timer functionality (a world first) - Time-barring and auto-activation features for switching on Pillar Lights, deactivating ground loops, etc.
- Multiple operating features, including Intruder-detection Alarm Modes (a world first)
- Onboard CENTURION code-hopping multichannel receiver incorporating the following functionality:
  - Selective add and delete
  - Onboard receiver can be disabled
  - 500 transmitter button memory
  - Automatic maintenance features like Delete-Not-Present
- Opening and Closing Safety Beam Inputs
- Integrated Beam Test hardware to ensure that the beams are always working correctly

TECHNICAL SPECIFICATIONS

Technical Data	D10	D10 Turbo
Input voltage [1]	220V AC +/-10% @ 50Hz	220V AC +/-10% @ 50Hz
Motor voltage	24V DC	24V DC
Motor power supply [2]	Battery-driven (standard capacity - 2 x 7Ah)	Battery-driven (standard capacity - 2 x 7Ah)
Battery charger	D10CHGRV02 – 1.8A @ 27.4V +/- 1%	D10CHGRV02 – 1.8A @ 27.4V +/- 1%
Current consumption (mains supply)	250mA	250mA
Current consumption (motor rated / peak load)	6/15A	8/15A
Current consumption (quiescent load)	80mA	80mA
Operator push force		
Starting	40kgf	20kgf
Rated	30kgf	15kgf
Gate mass – maximum	1000kg	240kg
Gate length - maximum	100m	50m
Gate speed - m/min	22 - 26m/min	43 - 51m/min
Gate speed - mm/sec	367 - 433mm/sec	717 - 850mm/sec
Drive Pinion	17T Module 4	20T Module 4
Maximum daily cycle	750 cycles/day	750 cycles/day
Design life	250 000 cycles	250 000 cycles
Operations in standby with standard battery [4, 5]		
Half day	120 cycles	120 cycles
Full day	100 cycles	100 cycles
Collision sensing	Electronic	Electronic
Operating temperature	-15°C to +50°C	-15°C to +50°C
Degree of protection	IP54	IP54
Controller incorporated	D-Series_24	D-Series_24
Onboard receiver type	NOVA code-hopping onboard, multichannel	NOVA code-hopping onboard, multichannel
Receiver frequency	433.92MHz	433.92MHz
Receiver code storage capacity	500 transmitter buttons	500 transmitter buttons
Mass of unit packed	13kg	13kg
Packaging dimensions	Length:355mm x Width: 288mm x Height: 485mm	Length:355mm x Width: 288mm x Height: 485mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Plug-in transformer
3. Solar panel

4. Can increase battery capacity for longer standby times
5. Based on 4m gate with no external accessories such as infrared Safety Beams

D10 and D10 Turbo single operator duty cycle as a function of operating time
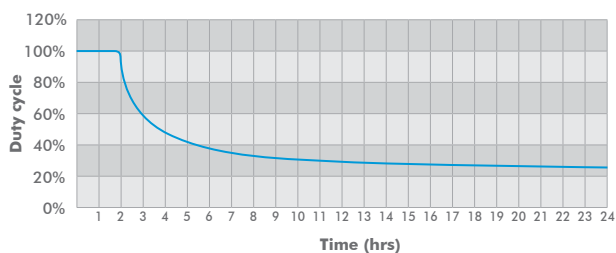
D10 Turbo maximum operating speed for corresponding gate mass

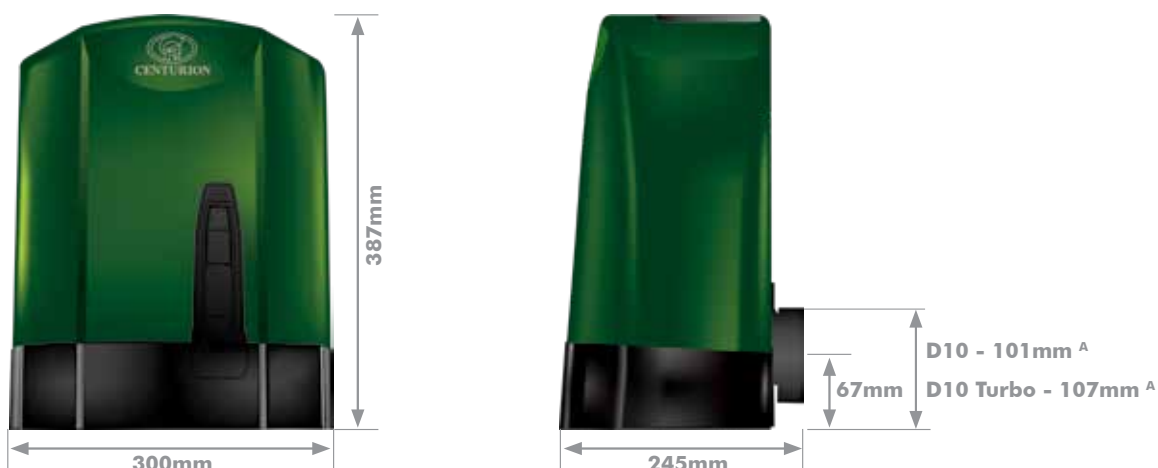| Gate mass	Maximum running speed
240kg	50m/min
300kg	42m/min
400kg	36m/min
500kg	32m/min
600kg	29m/min
700kg	27m/min
800kg	25m/min
900kg	24m/min
1000kg	23m/min

CABLING REQUIREMENTS

1. 220V - 240V AC mains cable via double pole mains isolator switch (3 core[1] LNE 1.5mm^2 SWA[2])

Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1[6] + 6 core[3] 0.5mm^2 multi-stranded) or cable from control box to entry panel (n2[6] 0.5mm^2 multi-stranded)

3. Infrared Safety Beams (3 core 0.5mm^2 multi-stranded)

4. Access control device (3 core 0.5mm^2 multi-stranded[4])

5. Pedestrian keyswitch (2 core 0.5mm^2 multi-stranded) or

6. Keypad (3 core 0.5mm^2 multi-stranded)

7. External radio receiver (3 core 0.5mm^2 multi-stranded[5])

8. Pillar Lights (3 core LNE SWA[2], size according to power requirements)

9. Ground loop for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated[6])

[1]. Possibly increase cable thickness if Pillar Lights are to be installed

[2]. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

[3]. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling

[4]. Number of cores and type of cable could vary depending on the brand of access control system being used

[5]. For optimum range an external radio receiver can be mounted on the wall

[6]. Number of cores required by the intercom

387mm

300mm

245mm

D10 - 101mm ^{A}

D10 Turbo - 107mm ^{A}

67mm

A. To the centre of the tooth mesh point of the rack

CONTINUOUSLY IMPROVING SECURITY FOR YOUR TOTAL PEACE OF MIND

New Theft-Resistant Cage for Popular Gate Motors

Gate motors are the latest domestic appliances to be targeted by criminals, with significant increases in gate motor theft being reported countrywide.

As the South African market leader in gate automation and access control, Centurion Systems is conscious of the gate motor theft epidemic currently sweeping the country.

"It's in the headlines with increasing regularity, and it's not something that one can ignore" says CENTURION's national branch manager Johan Lessing, speaking from his desk in North Riding, Johannesburg, where the company's head office and manufacturing facility are situated.

"We knew we had to ameliorate the situation," he continues. "We knew we had to come up with a viable countermeasure."

This realisation prompted CENTURION to relook the design of their current theft-resistant cage designed for the D5-Evo sliding gate motor – their most popular solution – and a completely overhauled version was announced earlier.

Following extensive and rigorous investigations performed by CENTURION's elite Research and Development team, it was found that the modus operandi employed in the majority of gate motor theft cases was to break the padlock securing the unit. With the new theft-resistant cage, the lock is housed within a secure steel enclosure which covers it completely, making it extremely difficult to access without a key.

Another significant improvement is that the critical bracket has been reinforced by means of welding for added strength and reliability.

Gate motors represent an important part of the home security mix, and the removal thereof leaves the access point vulnerable from a security perspective.

"Ultimately, what we strive for is complete security sliding complete peace of mind for the end-user who relies on our products to feel safe in their homes, and this new theft-deterrent will go a long way towards achieving that goal" explains Lessing.

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A10 ENDURANCE AND A10 HEAVYWEIGHT INDUSTRIAL SLIDING GATE OPERATORS

Using a powerful three-phase motor, the **A10** is the ultimate industrial automation solution. Since this beast is mains-powered, it is able to provide an almost unlimited duty cycle with rapid opening and closing courtesy of a die-cast aluminium gearbox and intelligent controller-inverter pairing.

A10 Endurance:
A rapid and robust operator with a three-phase motor for commercial and industrial gates up to 1000kg.

A10 Heavyweight:
An all-round performer for gates up to 2000kg.

MAIN FEATURES

Mechanical Features

- High push force for reliable operation of almost any gate
- High duty cycle capability - for greater reliability in high-volume applications
- Strong die-cast aluminium gearbox with anti-jamming

Electronic Features

- Extremely rapid operating speed - up to 30 metres per minute offers exceptional security and high-volume access control
- Multiple programmable features - to suit a wide variety of applications
- Optional DC Converter for reliable battery backup with full kit (DC_CONKITL):
  - On-demand battery backup protection
  - Brown-out power failure detection
  - Battery-protection circuitry

- Integrated battery charger
- Proven lightning protection
- Pedestrian Opening input – prevents unauthorised vehicle access
- Safety Beam input – connecting infrared safety beams dramatically increases the safety of the automated system
- Local and remote multi-function Gate Status LED
- Free-exit input (only opens gate)
- Timed potential-free contact (e.g. Courtesy Lights)
- Selectable/adjustable Autoclose timer (1 - 255 seconds)
- Override of Autoclose timer via trigger input
- Local diagnostic LEDs for easy programming diagnostics
- 12V DC auxiliary supply connecting safety beams, external receivers, keypads, etc.

TECHNICAL SPECIFICATIONS

Technical Data	A10 Endurance		A10 Heavyweight
Input voltage [1]	220V AC +/-10% @ 50Hz		220V AC +/-10% @ 50Hz
Motor voltage	220V AC 3 phase		220V AC 3 phase
Motor power supply [2]	Frequency inverter		Frequency inverter
Current consumption (mains supply)	6A		6A
Operator push force [2]			
Starting	40kgf	25kgf	47kgf
Rated	30kgf	22.5kgf	35kgf
Gate mass – maximum	1000kg	600kg	240kg
Gate length - maximum	20m		50m
Gate speed - m/min	16m/min	30m/min	43 - 51m/min
Gate speed - mm/sec	267mm/sec	500mm/sec	717 - 850mm/sec
Drive Pinion	20T Module 4		20T Module 4
Maximum daily cycle	Lockable lever with key release		750 cycles/day
Design life	1 000 000 cycles		250 000 cycles
Collision sensing	Electronic		Electronic
Operating temperature	-20°C to +50°C		-15°C to +50°C
Degree of protection	IP54		IP54
Controller incorporated	CP200E / CP201		D-Series_24
Mass of unit packed	15.5kg		13kg
Packaging dimensions	Length:355mm x Width: 288mm x Height: 485mm		Length:355mm x Width: 288mm x Height: 485mm

Technical Data	DC Converter
Input voltage	12V DC
Current draw @ rated thrust	30A
Rated output voltage	310V DC
Battery charger output	2A
Duty cycle [2]	20%
Thermal protection	Electronic
Degree of protection	IP65
Battery capacity [3]	Minimum 12V 7Ah but external 35Ah is recommended
Operating cycles per Ah of capacity	Minimum 1 open or close cycle
Packaging dimensions	Length: 269mm x Width: 145mm x Height: 365mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Based on 25°C ambient temperature and unit not in direct sunlight
3. Battery housed in separate enclosure

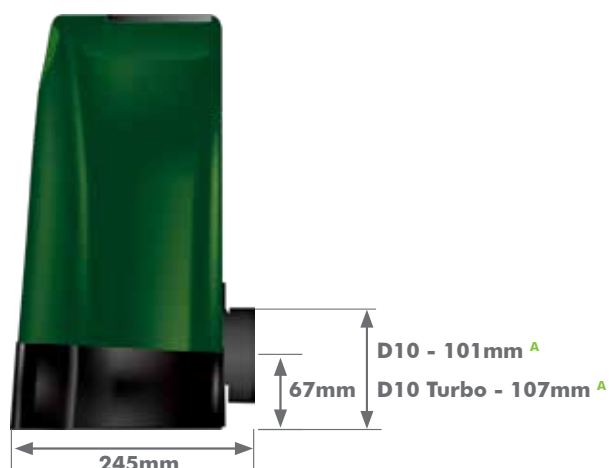**A10 single operator duty cycle as a function of operating time**
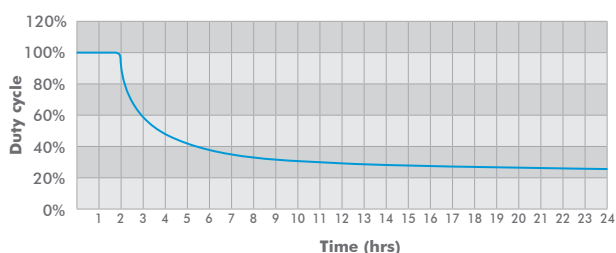
CABLING REQUIREMENTS

1. 220V - 240V AC mains cable via double pole mains isolator switch (3 core[1] LNE 1.5mm^2 SWA[2])

Optional Wiring (all cable is multi-stranded):

2. Intercom cable from control box to dwelling (n1[6] + 6 core[2] 0.5mm^2 multi-stranded) or cable from control box to entry panel (n2[6] 0.5mm^2 multi-stranded. Infrared Safety Beams (3 core 0.5mm^2 multi-stranded)

3. Access control device (3 core 0.5mm^2 multi-stranded[4])

4. Pedestrian keyswitch (2 core 0.5mm^2 multi-stranded) or

5. Keypad (3 core 0.5mm^2 multi-stranded)

6. External radio receiver (3 core 0.5mm^2 multi-stranded[5])

7. Pillar Lights (3 core LNE SWA[2], size according to power requirements)

8. Inductive loop detector for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated[6])

1. Possibly increase cable thickness if Pillar Lights are to be installed

2. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

3. Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling

4. Number of cores and type of cable could vary depending on the brand of access control system being used

5. For optimum range an external radio receiver can be mounted on the wall

6. Number of cores required by the intercom

387mm

300mm

245mm

D10 - 101mm [A]

D10 Turbo - 107mm [A]

67mm

A. To the centre of the tooth mesh point of the rack

SOUTH AFRICA'S FAVOURITE GATE MOTORS

What makes a house a home? Is it being surrounded by all your favourite things? Or is it the laughter of loved ones that provides the soundtrack to your happiest moments?

We believe that it's peace of mind, knowing that the things that make your world go round are taken care of. That's why we've been innovating gate automation solutions built on the twin pillars of **security** and **convenience** since 1986.

SA's favourite gate motors and remotes

Super-quiet, reliable garage door motors

WHY ARE CENTURION'S GATE MOTORS SA'S FAVOURITES?

- Strong and famously reliable
- Good-looking
- Packed with high-security features
- Features safe anti-crushing protection to keep kids, pets and vehicles out of harm's way
- Adjustable speed settings for the ultimate in control
- World-class after-sales support

No more getting out of the car to open your gate and putting yourself in danger. The time to upgrade to a CENTURION is now.

Keyless access control- perfect for staff

Infrared beams - keep your kids and cars safe

Answer your intercom with your mobile phone

Be alerted to power failures via SMS

www.centsys.com
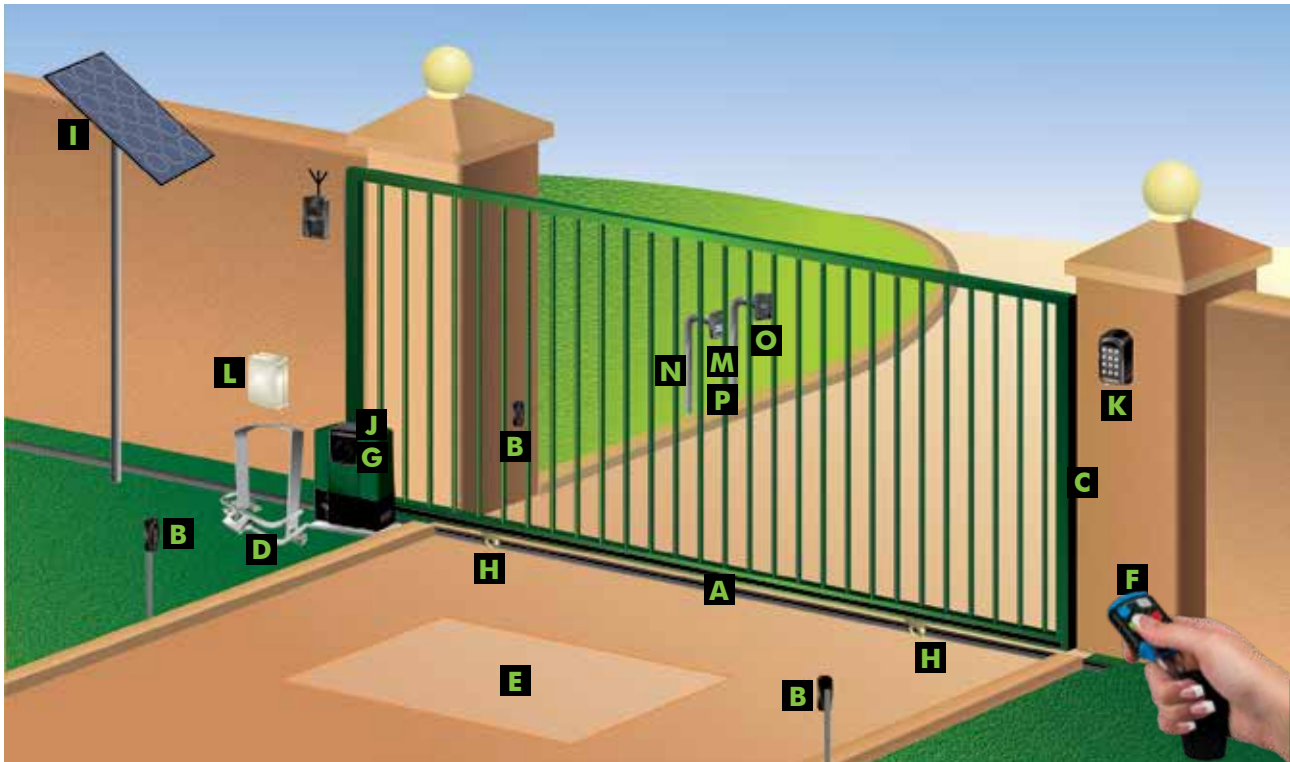
SLIDING GATE OPERATOR ACCESSORIES

STEEL, NYLON RAZ OR NYLON ANGLE RACK

A variety of rack available in different lengths, for different strengths.

CENTURION INFRARED SAFETY BEAMS

Always recommended on any gate automation installation to increase the safety of the automated system.

P36 PASSIVE SENSITIVE EDGE

Passive sensitive edge provides additional protection against crushing.

THEFT-RESISTANT CAGE

Retro-installable steel cage that increases the resistance of the operator against theft.

FLUX SA LOOP DETECTOR

Allows free-exit of vehicles from the property (requires ground loop to be fitted).

CENTURION NOVA TRANSMITTER

Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.

G

BACKUP MEMORY MODULE
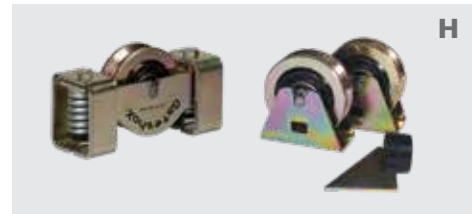Back up all the transmitters and operating details set up in the controller.

H

WHEEL KITS
A variety of wheel kits are available from Centurion Systems.

I

SOLAR SUPPLY
Alternative means of powering the system with our 20, 40, 60, 80, 120 or 150 Watt panels.

J

G-ULTRA GSM DEVICE
The ultimate new GSM solution for monitoring and activating electrical appliances via your mobile phone.

K

SMARTGUARD or SMARTGUARDAIR KEYPAD
Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

L

A10 DC CONVERTER
Provides battery backup and power failure autonomy for the A10 operator.

M

POLOPHONE INTERCOM
Allows visitors to communicate with people inside in order to gain access to the property.

N

GOOSENECK
Steel pole for mounting intercom gate station or access control.

O

SOLO/LATTICE PROXIMITY ACCESS CONTROL
Proximity reader for allowing access for both pedestrians and vehicles.

P

G-SPEAK ULTRA
Infused with the DNA of innovation, the G-SPEAK ULTRA allows wireless communication between the user and the intercom gate station, effectively turning the user's phone into the intercom handset

SLIDING GATE OPERATOR KITS

D2 TURBO FULL KIT   1

Product Code: **D2TFULLKIT_RAZ1 / D2TFULLKIT_ NYLON1 D2TFULLKIT_STEEL1**
- **1 x D2 Turbo operator including:**
  - 2 x 4 button CENTURION transmitters **F**
  - 1 x Foundation plate **O**
  - 1 x Controller **A**
  - 1 x Integral 1A charger **J**
- 1 x 5Ah battery **M**
- 4m x RAZ rack/Steel rack/Nylon angle rack **Q/R/S**

D2 TURBO LOW-VOLTAGE FULL KIT   1

Product Code: **D2TFULLKIT_RAZ1LV / D2TFULLKIT_ NYLON1LV D2TFULLKIT_STEEL1LV**
- **1 x D2 Turbo operator including:**
  - 2 x 4 button CENTURION transmitters **F**
  - 1 x Foundation plate **O**
  - 1 x Controller **B**
  - 1 x 800mA charger **J**
- 1 x 5Ah battery **M**
- 4m x RAZ rack/Steel rack/Nylon angle rack **Q/R/S**

D5-EVO FULL KIT   2

Product Code: **D5EVOFK_RAZ1 / D5EVOFK_STEEL2 / D5EVOFK_NYLON2**
- **1 x D5-Evo operator including:**
  - 2 x 4 button CENTURION transmitters **F**
  - 1 x Foundation plate **P**
  - 1 x Controller **C**
  - 1 x 2A charger **K**
- 1 x 7Ah Battery **N**
- 4m x RAZ rack/Steel rack/Nylon angle rack **Q/R/S**

D5-EVO LOW-VOLTAGE FULL KIT   2

Product Code: **D5EVOFK_RAZ1LV / D5EVOFK_STEEL2LV / D5EVOFK_NYLON2LV**
- **1 x D5-Evo operator including:**
  - 2 x 4 button CENTURION transmitters **F**
  - 1 x Foundation plate **P**
  - 1 x Controller **C**
  - 1 x 800mA charger **J**
- 1 x 7Ah battery **N**
- 4m x RAZ rack/Steel rack/Nylon angle rack **Q/R/S**

D10 FULL KIT   3

Product Code: **D101R**
- **1 x D10 Turbo operator including:**
  - 1 x Foundation plate **T**
  - 1 x Controller **D**
  - 1 x 2A 24V charger **K**
- 2 x 7Ah Battery **N**
- 4m x Steel rack **R**

D10 TURBO FULL KIT   3

Product Code: **D101T_FULL KIT**
- **1 x D10 Turbo operator including:**
  - 1 x Foundation plate **T**
  - 1 x Controller **D**
  - 1 x 2A 24V charger **K**
- 2 x 7Ah Battery **N**
- 4m x Steel rack **R**
- 2 x Sets i5 Safety Beams **G**
- 2m x Passive sensitive edge **H**

D10 TURBO PART KIT   3

Product Code: **D101T_PART KIT**
- **1 x D10 Turbo operator including:**
  - 1 x Foundation plate **R**
  - 1 x Controller **D**
  - 1 x 2A 24V Charger **K**
- 2 x 7Ah Battery **M**
- 2 x Sets i5 Safety Beams **G**
- 2m x Passive sensitive edge **H**

A10 ENDURANCE KIT   3

Product Code: **A10ER**
- **1 x A10 Turbo operator** (20T Pinion) **including:**
  - 1 x Foundation plate **T**
  - 1 x CP201 Controller **E**
  - 1 x CP200 Inverter **I**
- 4m x Steel rack **R**

A10 HEAVYWEIGHT KIT   4

Product Code: **A10GR**
- 1 x **A10 Operator** (17T Pinion) **including:**
  - 1 x Foundation plate **T**
  - 1 x CP201 Controller **E**
  - 1 x CP200 Inverter **I**
- 4m x Steel rack **R**

1 D2 Turbo/D2 Turbo Low-Voltage

2 D5-Evo/D5-Evo Low-Voltage

3 D10/D10 Turbo

4 A10 Endurance A10 Heavyweight

A
D2 Turbo
controller

B
D2 Turbo Low-Voltage
controller

C
D5-Evo
controller

D
D10
controller

E
CP201 A10
controller

F
CENTURION
transmitter

G
CENTURION
infrared beams

H
Passive Sensitive
Edge

I
A10
inverter

J
800mA XT
charger

K
2A Switch Mode
charger

L
2A 24V
charger

M
5Ah
battery

N
7Ah
battery

O
D2 Turbo/D2 Turbo
Low-Voltage
foundation plate

P
D5-Evo/D5-Evo
Low-Voltage
foundation plate

Q
RAZ rack

R
Steel rack

S
Nylon angle rack
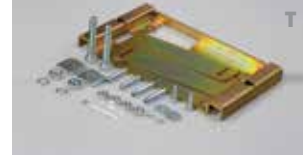
T
D10/D10 Turbo/A10
foundation plate

SWING GATE OPERATORS

There is virtually no limit to the capabilities of our swing gate operators; combining industry-leading functionality, world-class reliability and ease of installation, Centurion Systems' swing gate operators truly are in a league of their own. We have even given special attention to aesthetic value, ensuring that your gate operator is as good-looking as it is dependable.

SWING GATE OPERATOR QUICK SELECTION GUIDE

This quick selection guide will help you to select the perfect CENTURION for you or your client's swing gate by providing the differentiating features and key specifications of each.

	R3	R5
Input voltage [1]	220V - 240V AC	90V - 240V AC
Maximum gate leaf width for corresponding gate mass	2m - 250kg	2m - 600kg
	3.5m - 150kg	3.5m - 260kg
Typical gate opening time	14 sec	17 sec
Maximum daily operations	150	250
Onboard multichannel receiver	-	-
Interface type	LED-based	LED-based
Automatic beam test	-	-

1. Can operate off a solar supply, consult Centurion Systems for assistance

VERT-X	VANTAGE 400	VANTAGE 500
90V - 240V AC	90V - 240V AC	90V - 240V AC
1.5m - 600kg	2m - 500kg	2m - 750kg
3m - 150kg	4m - 200kg	4m - 310kg
11 sec	<14.3 sec	<17.8 sec
250	250	250
√	√	√
LCD	LCD	LCD
√	√	√

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VERT-X
LINEAR SWING GATE OPERATOR

With such striking, rugged good looks, the **VERT-X** linear swing gate motor for domestic gates is more than just a pretty face.

Combining an innovative open-nut drive system, advanced diagnostic capabilities and functionality, rugged die-cast aluminium construction and exceptional aesthetics for a wholly unobtrusive installation, **VERT-X** is positioned firmly at the apex of swing gate automation.

MAIN FEATURES

Mechanical Features

- Battery backup for uninterrupted operation during power failures
- Open-nut drive system and rugged die-cast aluminium construction for reliable operation
- Wallbox includes LED Gate Status Output and reliable anti-tamper indication
- Supports inward- and outward-opening gates without needing mechanical endstops
- Intelligent speed control - high-speed for greater security and convenience; slower speed for increased safety
- Robust and durable construction extends operating life of the system
- In-line design for improved aesthetic appeal

Electronic Features

- Onboard gate lock relay – can be configured to provide either a normally-open or normally-closed output, AC or DC
- Safe anti-crushing protection for greater safety – keep your children, pets and vehicles out of harm's way
- Automated limit setup for double and single swing gates
- Fail-safe opto-electronic position and collision detection

system ensures maximum safety
- Exceptionally easy system setup via LCD user interface
- Diagnostic screens indicating:
  - Battery-low
  - Battery charge level
  - Fuse blown
  - High current draw
  - Details of the last transmitter activated
  - Health of the drive electronics
  - Currently activated gate inputs
  - See Diagnostics Made Easy booklet for further details
- Full position control obviates the need for endstops and makes the system quick and easy to install
- Multiple operating features including Intruder-detection Alarm Modes (a world first)
- Onboard CENTURION code-hopping multichannel receiver with selective add and delete function operate a multitude of functions; for e.g. operate gate, switch on Pillar Light, Pedestrian Opening, etc.

TECHNICAL SPECIFICATIONS

Technical Data	VERT-X
Input voltage [1, 3]	220V AC ±10%, 50Hz
Motor voltage	12V DC
Motor power supply [2]	Battery-driven (standard capacity - 7Ah)
Battery charger [1]	CP84SM - 1.8A @ 13.7V
Current consumption (mains)	170mA
Current consumption (motor at rated load)	3/13A
Current consumption (quiescent load)	70mA
Operator push force - maximum	220kgf
Operator stroke	320mm
Maximum leaf width for corresponding to gate mass	2m/335kg
Maximum leaf width for corresponding to gate mass [5]	3m/150kg
Gate opening time - typical	11 sec
Maximum daily cycle	250 cycle/day
Design life	150 000 cycles
Operations in standby with standard battery [4]	
Half day	120 cycles
Full day	100 cycle
Collision sensing	Electronic
Operating temperature	-15°C to +50°C
Degree of protection	IP55
Controller incorporated	V-Series in separate wallbox
Onboard receiver type	NOVA code-hopping onboard, multichannel
Receiver frequency	433.92MHz
Receiver code storage capacity	60 transmitter buttons
Mass of unit packed	
Single kit	10kg
Double kit	18kg
Packaging dimensions	
Single kit [6]	Length: 1105mm x Width: 335mm x Height: 270mm
Double kit [6]	Length: 1105mm x Width: 335mm x Height: 270mm

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Plug-in transformer

3. Solar panel

4. Can increase battery capacity for longer standby times

5. To secure gat,a lock is recommended when gate is closed

6. Dimensions of the kit of components packed together

Vert-X single operator duty cycle as a function of operating time

— 7.2Ah battery with 1 x CP84SM 1.8A charger
— 33Ah battery with 1 x CP84SM 1.8A charger
- - - 33Ah battery with 1 x High Capacity charger

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CABLING REQUIREMENTS

1. 90V / 220V - 240V AC mains cable via mains isolator switch[1] (3 core LNE 1,5mm^2 SWA)[2], or low-voltage 15V - 19V AC cable via transformer in dwelling (3 core LNE 1.5mm^2 Surfix)[3]

2. Master Motor (MTR M) or Slave Motor (MTR S) cable (minimum, 2 core 2mm^2 + 4 core 0,5mm^2 multi-stranded) see note[6]

Optional Wiring (all cable is multi-stranded):

3. Intercom, cable from control box to dwelling (n1[7] + 6 core[4] 0.5mm^2 multi-stranded) or cable from control box to entry panel (n2[7] 0.5mm^2 multi-stranded)

4. Radio receiver cable (3 core 0,5mm^2 multi-stranded, optional)[5]

5. Pedestrian Keyswitch (2 core 0,5mm^2 multi-stranded) or optional keypad (3 core 0,5mm^2 multi-stranded)

6. Infrared Safety Beams or safety edge (3 core 0,5mm^2 multi-stranded or 4 core 0.5mm^2 for CE compliance)

7. Intercom cable (n2 + 2 core 0,5mm^2 multi-stranded) to gate station

8. Electric lock (2 core 1.5mm^2)

9. Pillar Light cable (3 core LNE SWA, size according to power regulations)

10. Inductive loop detector for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated)

1. Mains isolator must be fitted less than 1m from controller

2. Increase cable thickness if Pillar Lights are to be installed

3. Screened cable is always recommended to provide better protection against lightning - earth one end of screening

4. Domestic charger only

5. For optimum range an external receiver can be mounted on the wall

6. CENTURION has available custom **VERT-X** cable order reference: CABLEVEC68

7. Number of cores required by the intercom

VERT-X 918mm

790mm stroke

320mm stroke

790mm stroke

⌀133mm
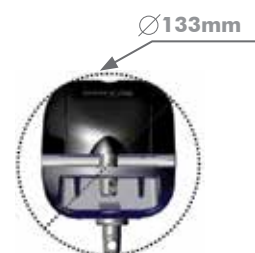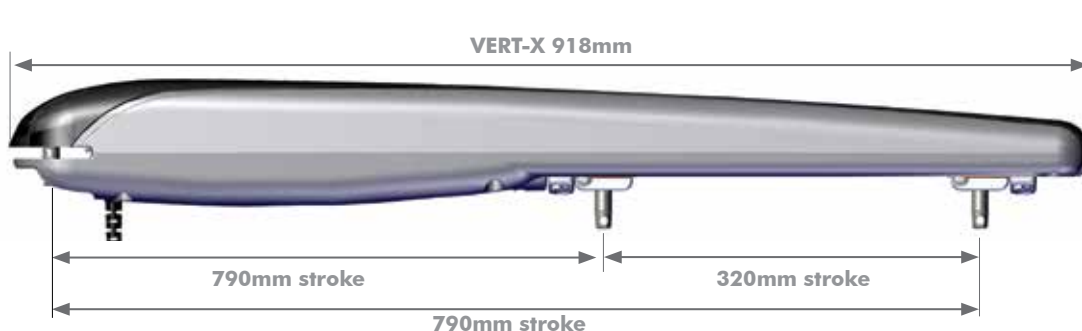
FIRST EVER ACCESS AUTOMATION EXPO A RESOUNDING SUCCESS:

It was an ambitious undertaking, to be sure – bringing together ten regional distributors for a technology showcase unlike anything the local security industry has ever seen – and, in the days leading up to the expo, emotions are running high.

At CENTURION's head office in North Riding, Johannesburg, a potent cocktail of excitement and nerves fuel the marketing, sales and technical teams as they handle the final preparations for the country's first ever Access Automation Expo. The technicians are variously assembling and testing, connecting and tightening, while designers court the muses to create the visual content that will form an integral part of the event.

Meanwhile, marketing manager Mark O'Brien and PA to the marketing director Rose Porter (also known as Wonder Woman, or at least she should be) delegate and coordinate like two crazed conductors. There's a lot riding on this expo.

When the day finally arrives, the nerves are still there, but there's also a sort of calm that descends over the venue – the lavish Galleria conference centre in Kramerville – as we count down the minutes until 9am, the expo's official opening time. After all, we are a world-class team, and we know how to put on a show. Are people not still talking about the D2 Turbo

launch at Zwartkops raceway seven years after the fact?

The answer, in case you were wondering, is an emphatic "yes".

Visitors have been arriving since before 7 and, by the time that the doors officially open, any concerns that may have existed regarding a poor turnout are well and truly put to bed

An hour into the event, and the considerable exhibition hall is packed to the rafters, as the saying goes. So phenomenal is the turnout that it's difficult to believe that this is the first event to be held under the Access Automation Expo banner and not an established and well-known trade show.

Scores of noticeably intrigued visitors stand huddled around engineers and product specialists as they demonstrate the latest tech, and both the morning and afternoon training sessions are presented to a full house.

Access Automation Expo 2017 wasn't all business, though, with visitors being treated to a heart-stopping display of sheer daring – some would say madness – courtesy of two daredevil FMX riders. Every last member of the spellbound audience seems to hold their breath as former Red Bull X-Fighter Nick de Wit makes the death-defying leap between the two ramps, performing a variety of tricks and

stunts mid-air before landing to the sound of about a hundred people exhaling in relief. Like the training sessions, each of the three FMX shows are exceptionally well attended.

But the real stars of the show are the three new additions to the CENTURION access automation stable.

While the landmark event undoubtedly acted as a springboard for CENTURION's latest product offerings, the company's communications coordinator, Charl Mijnhardt, points out that it presented an excellent networking opportunity for professionals involved with access automation and its related fields.

"There's never really been anything like this in South Africa, an event that focuses solely on access automation," explains Mijnhardt. "And judging by the incredible turnout, it's clear that it's something that the security industry has been waiting for".

With regards to the new products on display, Mijnhardt says that they tie in perfectly with CENTURION's brand promise of "compelling innovation".

"The three new products are all geared towards providing maximum convenience and maximum functionality, both for the installer and for the end-user".

VANTAGE
LINEAR SWING GATE OPERATORS

Boasting tough-as-nails die-cast aluminium construction throughout, a grade 304 stainless steel wormshaft for the ultimate in reliability and durability and with sophisticated electronics for smooth, safe operation, **VANTAGE** gives you everything you need to swing the future your way.

VANTAGE 400: Robust swing gate motor boasting tough-as-nails aluminium construction throughout for the ultimate in reliability and durability.

VANTAGE 500: Extended stroke for large domestic and industrial swing gates.

MAIN FEATURES

Mechanical Features

- Battery backup
- Linear actuator system for quick and easy installation
- Wallbox includes LED Gate Status Output and reliable anti-tamper indication
- Safe anti-crushing protection
- High push force to handle large gates and offer greater reliability in high-wind conditions
- Fast operating speed, with smooth acceleration and deceleration
- In-line design for improved aesthetic appeal

Electronic Features

- Onboard gate lock relay – can be configured to provide either a normally-open or normally-closed output, AC or DC
- Safe anti-crushing protection for greater safety – keep your children, pets and vehicles out of harm's way
- Quadra-drive technology – Soft Start and Stop and gate speed is adjustable in both directions
- LCD interface for exceptionally easy setup

- Diagnostic screens indicating:
  - Battery-low
  - Battery charge level
  - Fuse blown
  - High current draw
  - Details of the last transmitter activated
  - Health of the drive electronics
  - Currently activated gate inputs
  - See Diagnostics Made Easy booklet for further details
- Supports inward- and outward-opening gates without needing mechanical endstops
- Multiple operating features including Intruder-detection Alarm (a world first)
- Onboard CENTURION code-hopping multichannel receiver with selective add and delete - operate a multitude of functions; for e.g. operate gate, switch on Pillar Light, Pedestrian Opening, etc.
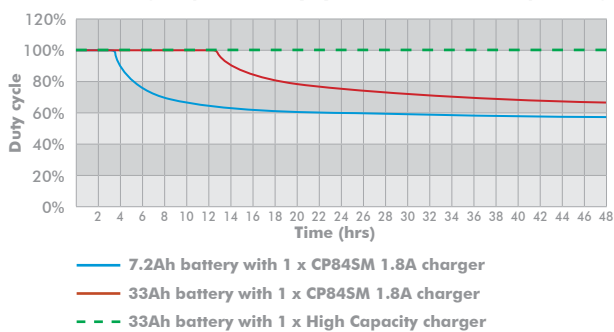
TECHNICAL SPECIFICATIONS

Technical Data	VANTAGE 400	VANTAGE 500
Input voltage [1,3]	220V AC ±10%, 50Hz	220V AC ±10%, 50Hz
Motor voltage	12V DC	12V DC
Motor power supply [2]	Battery-driven (standard capacity - 7Ah)	Battery-driven (standard capacity - 7Ah)
Battery charger [1]	CP84SM - 1.8A @ 13.7V	CP84SM - 1.8A @ 13.7V
Current consumption (mains)	170mA	170mA
Current consumption (motor at rated load)	3/13A	3/13A
Current consumption (quiescent load)	70mA	70mA
Operator push force - maximum	220kgf	220kgf
Operator stroke	400mm	500mm
Maximum leaf width for corresponding to gate mass	2m/500kg	2m/750kg
Maximum leaf width for corresponding to gate mass [5]	4m/200kg	4m/310kg
Gate opening time - typical	14 sec	17.5 sec
Maximum daily cycle	250 cycle/day	250 cycle/day
Design life	150 000 cycles	150 000 cycles
Operations in standby with standard battery [4]		
Half day	100 cycles	80 cycles
Full day	80 cycle	70 cycle
Collision sensing	Electronic	Electronic
Operating temperature	-15°C to +50°C	-15°C to +50°C
Degree of protection	IP55	IP55
Controller incorporated	V-Series in separate wallbox	V-Series in separate wallbox
Onboard receiver type	NOVA code-hopping onboard, multichannel	NOVA code-hopping onboard, multichannel
Receiver frequency	433.92MHz	433.92MHz
Receiver code storage capacity	60 transmitter buttons	60 transmitter buttons
Mass of unit packed		
Single kit	10.5kg	11kg
Double kit	19kg	20kg
Packaging dimensions		
Single kit [6]	Length: 1125mm x Width: 335mm x Height: 270mm	Width: 1105mm x Width: 335mm x Height: 270mm
Double kit [6]	Width: 1105mm x Width: 335mm x Height: 270mm	Width: 1105mm x Width: 335mm x Height: 270mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Plug-in transformer
3. Solar panel
4. Can increase battery capacity for longer standby times
5. To secure gat,a lock is recommended when gate is closed
6. Dimensions of the kit of components packed together

VANTAGE single operator duty cycle as a function of operating time

Duty cycle (%) vs Time (hrs)

— 7.2Ah battery with 1 x CP84SM 1.8A charger
— 33Ah battery with 1 x CP84SM 1.8A charger
- - - 33Ah battery with 1 x High Capacity charger

www.centsys.com

CABLING REQUIREMENTS

1. 90V / 220V - 240V AC mains cable via mains isolator switch[1] (3 core LNE 1,5mm^2 SWA)[2], or low-voltage 15V - 19V AC cable via transformer in dwelling (3 core LNE 1.5mm^2 Surfix)[3]

2. Master Motor (MTR M) or Slave Motor (MTR S) cable (minimum, 2 core 2mm^2 + 4 core 0,5mm^2 multi-stranded) see note[6]

Optional Wiring (all cable is multi-stranded):

3. Intercom, cable from control box to dwelling (n1[7] + 6 core[4] 0.5mm^2 multi-stranded) or cable from control box to entry panel (n2[7] 0.5mm^2 multi-stranded)

4. Radio receiver cable (3 core 0,5mm^2 multi-stranded, optional)[5]

5. Pedestrian Keyswitch (2 core 0,5mm^2 multi-stranded) or optional keypad (3 core 0,5mm^2 multi-stranded)

6. Infrared Safety Beams or safety edge (3 core 0,5mm^2 multi-stranded or 4 core 0.5mm^2 for CE compliance)

7. Intercom cable (n2 + 2 core 0,5mm^2 multi-stranded) to gate station

8. Electric lock (2 core 1.5mm^2)

9. Pillar Light cable (3 core LNE SWA), size according to power regulations)

10. Inductive loop detector for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated)

1. Mains isolator must be fitted less than 1m from controller
2. Increase cable thickness if Pillar Lights are to be installed
3. Screened cable is always recommended to provide better protection against lightning - earth one end of screening
4. Domestic charger only

5. For optimum range an external receiver can be mounted on the wall
6. CENTURION has available custom **VANTAGE** cable order reference: CABLEVEC68
7. Number of cores required by the intercom

VANTAGE 400: 1370mm extended
VANTAGE 500: 1570mm extended

VANTAGE 400: 970mm retracted
VANTAGE 500: 1070mm retracted

VANTAGE 400: 400mm stroke
VANTAGE 500: 500mm stroke

⌀100mm

95mm
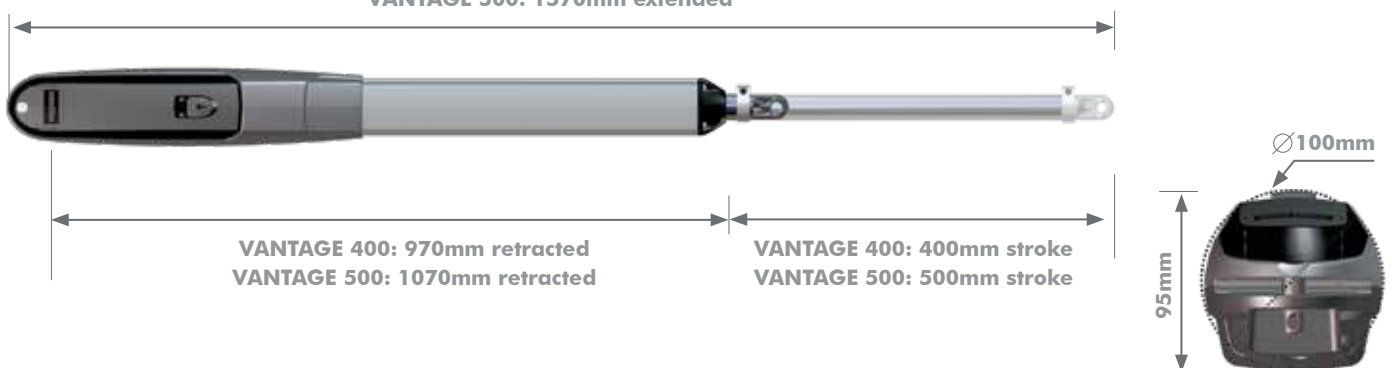
WIND-LOADING SWING GATES

In this modern age of smartphone apps and genetic engineering, there seems to be very few things that we don't have total control over. A recent radio segment even spoke about how, in a couple of years' time, we'll be printing 3D vital organs, meaning that we may even some day have control over how long we live. But one of the few things that in all likelihood will remain beyond our control is the weather. When it comes to the weather, we are forever at Mother Nature's mercy.

For exactly this reason, it's important to ensure that your swing gate operator can weather the storm, so to speak.

As we mentioned in a previous article, swing gates suffer more resistance in their trajectory since they operate in multiple planes whereas sliders operate in only a single plane. One thing to keep in mind is that, the longer the gate leaf, the more susceptible it will be to unfavourable wind loading. This is simple physics, really.

The larger the surface area, the more impact an applied force will have.

VERT-X and **VANTAGE** range has been outfitted with a revolutionary centrifugal brake system that is able to withstand significant force in the opposite direction, such as might be exercised by wind. To help you get the most out of your swing gate system, we have created the table below indicating the maximum wind loading conditions for corresponding gate length under which your swing gate motor will still perform optimally. You'll notice that your A and B installation dimensions, as well as the percentage of coverage of the gate leaf, also play an important role when determining these values.

For a 25% covered gate: (Palisades, etc.) x 1.8m high

Value of A or B dimensions once[1] installed	Up to 1.5m	Up to 2m	Up to 2.5m	Up to 3m^2	Up to 3.5m^2	Up to 4m^2
100mm	94km/h	48km/h	44km/h	41km/h	37km/h	37km/h
140mm	119km/h	65km/h	57km/h	51km/h	46km/h	46km/h
180mm	138km/h	78km/h	67km/h	60km/h	53km/h	53km/h
220mm	156km/h	89km/h	76km/h	67km/h	60km/h	60km/h
260mm	171km/h	99km/h	84km/h	74km/h	65km/h	65km/h
300mm	186km/h	108km/h	91km/h	80km/h	71km/h	71km/h
340mm	199km/h	116km/h	98km/h	86km/h	76km/h	76km/h

For a 100% covered gate: (Fully clad gates, etc.) x 1.8m high

Value of A or B dimensions once[1] installed	Up to 1.5m	Up to 2m	Up to 2.5m	Up to 3m^2	Up to 3.5m^2	Up to 4m^2
100mm	47km/h	33km/h	24km/h	22km/h	20km/h	19km/h
140mm	59km/h	43km/h	32km/h	28km/h	26km/h	23km/h
180mm	69km/h	50km/h	39km/h	34km/h	30km/h	27km/h
220mm	78km/h	57km/h	44km/h	38km/h	34km/h	30km/h
260mm	86km/h	63km/h	49km/h	42km/h	37km/h	33km/h
300mm	93km/h	68km/h	54km/h	46km/h	40km/h	35km/h
340mm	100km/	74km/h	58km/h	49km/h	43km/h	38km/h

1. An electric lock must be fitted   2.   Refer to the V-SERIES installation manual for installation details

R3 AND R5
ROTARY SWING GATE OPERATORS

These robust rotary swing gate operators allow for fast, smooth and quiet operation of the gate. Mounted separately on a pedestal, the **R3** and **R5** operators are ideal for gate installations with wide pillars. Besides offering very safe anti-crushing, the operators support a host of very useful functions for looking after the gate entrance.

R3: The logical choice for domestic gates with large pillars

R5: This unit is well-suited for large domestic and light-industrial swing gates

MAIN FEATURES

Mechanical Features

- Battery backup
- Rotary arm system – ensures smooth and exceptionally reliable operation
- Both wall- and pedestal-mount configurations for greater flexibility of installations
- Fast operation – for optimum security and convenience
- Whisper-quiet operation – totally unobtrusive operation

Electronic Features

- Multiple programmable features – to suit a wide variety of applications
- Master motor with integrated controller and charger simplifies the installation
- Adjustable Autoclose timer – gate is never left open unnecessarily, enhancing security
- Diagnostic LEDs for easy programming

- Dedicated Pillar Light Relay
- The following onboard inputs and outputs are provided:
  - Free-exit input
  - Trigger input
  - Solenoid lock connection
  - 12V DC output for auxiliary devices such as external receivers, gate safety beams, etc.
  - Input for infrared safety beams
  - Pedestrian Opening input
  - Dedicated Holiday Lockout input
- Fuse-protected

TECHNICAL SPECIFICATIONS

Technical Data	R3 Domestic	R5 Light-industrial
Input voltage [1]	220V AC +/-10% @ 50Hz	220V AC +/-10% @ 50Hz
Motor voltage	12V DC	12V DC
Motor power supply [2]	Battery driven (standard capacity - 7Ah)	Battery driven (standard capacity - 33Ah)
Battery charger	CP84E – 800mA @ 13.8V	CP84SM – 1.8A @ 13.7 +/-1%
Current consumption (mains supply)	60mA	170mA
Current consumption (motor rated / peak load)	4/10 A	6/15 A
Current consumption (quiescent load)	70mA	70mA
Operator output torque – maximum	95Nm	250Nm
Maximum leaf width for corresponding gate mass	2m/350kg	2m/600kg
Maximum leaf width for corresponding gate mass	3.5m/160kg	3.5m/260kg
Gate opening time - typical	11sec	17sec
Maximum daily cycles	150 cycles/day	250 cycles/day
Design Life	120 000 cycles	250 000 cycles
Operations in standby with 7Ah battery		
Half day	100 cycles	40 cycles
Full day	80 cycles	40 cycles
Collision sensing	electronic	electronic
Operating temperature	-15°C to +50°C	-15°C to +50°C
Degree of protection	IP55	IP55
Controller incorporated	CP75	CP75
Onboard receiver type	External, supplied separately	External, supplied separately
Receiver frequency	MHz	MHz
Receiver code storage capacity	Buttons	Buttons
Mass of unit packed		
Single kit	17.5kg	23kg
Double kit	33.5kg	44kg
Packing dimensions		
Single kit [3]	Length:1015mm x Width: 230mm x Height: 490mm	
Double kit [3]	Length:1015mm x Width: 230mm x Height: 490mm	

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Can increase battery capacity for longer standby times

3. Dimensions of the kit of components

R3/R5 single operator duty cycle as a function of operating time
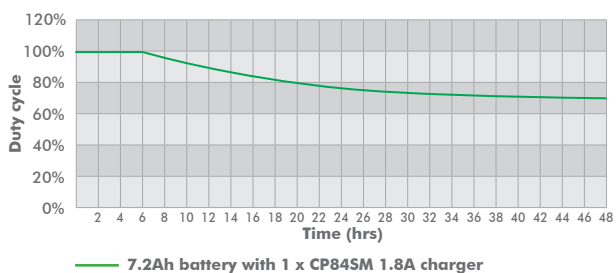
— **7.2Ah battery with 1 x CP84SM 1.8A charger**

CABLING REQUIREMENTS

1. 90V / 220V - 240V AC mains cable via mains isolator switch[1] (3 core LNE 1,5mm^2 SWA)[1,2], or low-voltage 15V - 19V AC cable via transformer in dwelling (3 core LNE 1.5mm^2 Surfix)[6]

2. Master Motor (MTR M) or Slave Motor (MTR S) cable (minimum, 2 core 2mm^2 + 4 core 0,5mm^2 multi-stranded)[6]

Optional Wiring (all cable is multi-stranded):

3. Radio receiver cable (3 core 0,5mm^2 multi-stranded, optional)[4]

4. Pedestrian Keyswitch (2 core 0,5mm^2 multi-stranded) or optional keypad (3 core 0,5mm^2 multi-stranded)

5. Infrared Safety Beams or safety edge (3 core 0,5mm^2 multi-stranded or 4 core 0.5mm^2 for CE compliance)

6. Intercom cable (n2[5] + 2 core 0,5mm^2 multi-stranded) to gate station

7. Electric lock (2 core 1.5mm^2)

8. Pillar Light cable (3 core LNE SWA), size according to power regulations)

9. Inductive loop detector for free-exit (1 core 0.5mm^2 multi-stranded - silicone-coated)

1. Mains isolator must be fitted less than 1m from controller

2. Possibly increase cable thickness if Pillar Lights are to be installed

3. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

4. For optimum range an external radio receiver can be mounted on the wall

5. Number of cores required by the intercom

6. Screened cable is always recommended to provide better protection against lightning. Earth one end of screening

INTELLIGENT AUTOMATION FOR YOUR FARM

G-ULTRA

G-SPEAK ULTRA

With the **G-ULTRA**, your peace of mind is not dependent on physical proximity, and the rules of physics can be bent so that it's almost like you're in two places at once.

With seamless integration with CENTURION gate motors, your **G-ULTRA** will let you know when your gate has been left open, or is in any other state specified by you through intelligent monitoring of the gate motor's status output.

Adjustable Filter settings mean that you can specify under which conditions you are notified about a particular gate status, for example, if the gate has remained open for longer than 20 seconds.

- Maximise security with a fast, strong and reliable gate motor
- Manage traffic flow with robust and reliable traffic control systems
- Receive SMS notifications when mains power is cut or your alarm is triggered
- Open your gate, arm an alarm or activate an irrigation system or borehole pump via a missed call or SMS
- Answer your intercom from anywhere in the world
- Monotor your water tank level

SWING GATE OPERATOR ACCESSORIES

A

CENTURION INFRARED SAFETY BEAMS

Always recommended on any gate automation installation to increase the safety of the automated system.

B

FLUX SA LOOP DETECTOR

Allows free-exit of vehicles from the property (requires ground loop to be fitted).

C

SOLAR SUPPLY

Alternative means of powering the system with our 20, 40, 60, 80, 120 or 150 Watt panels.

D

CENTURION NOVA TRANSMITTER

Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.

E

G-ULTRA GSM DEVICE

The ultimate new GSM solution for monitoring and activating electrical appliances via your mobile phone.

F

SMARTGUARD or SMARTGUARDAIR KEYPAD

Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

G

POLOPHONE INTERCOM
Allows visitors to communicate with people inside in order to gain access to the property.

H

G-SPEAK ULTRA
Infused with the DNA of innovation, the G-SPEAK ULTRA allows wireless communication between the user and the intercom gate station, effectively turning the user's phone into the intercom handset.

I

SOLO/LATTICE PROXIMITY ACCESS CONTROL
Proximity reader for allowing access for both pedestrians and vehicles.

J

GOOSENECK
Steel pole for mounting intercom gate station or access control.

K

V-SERIES WALLBOX
A fully weatherproof wall-mounted enclosure for your V-SERIES operator's electronics, providing a neat and convenient central point of operation.

L

V-SERIES CABLE
Cable has been optimised for the V-SERIES range of swing gate operators to provide reliable operation time and time again.

OPTIONAL MOUNTING KIT AVAILABLE

VERT-X MOUNTING TEMPLATES
The optional mounting kit enables the installer to easily determine the installation values for optimum mounting of the Wall and Gate Brackets. The templates provide installation support for both inward- and outward-opening gates, and help to ensure that the geometry of the installation is correct and that there is sufficient clearance between the gate and the bracket.

SWING GATE OPERATOR KITS

SINGLE VANTAGE 400 or 500 KIT   1

Product Code: **VAN4KITSLIND or VAN5KITSLIND**
- **1 x VANTAGE operator including:**
  - Mounting hardware N
- **1 x Wallbox including: F**
  - 1 x Mains isolator
  - 1 x LED indicator board D
  - 1 x 2A Switch Mode charger H
  - 1 x V-Series Controller A
- 1 x 7Ah battery J
- 2 x 4 button CENTURION transmitters E

DOUBLE VANTAGE 400 or 500 KIT   1

Product Code: **VAN4KITDLIND or VAN5KITDLIND**
- **2 x VANTAGE operators including:**
  - Mounting hardware N
- **1 x Wallbox including: F**
  - 1 x Mains isolator
  - 1 x LED indicator board D
  - 1 x 2A Switch Mode charger H
  - 1 x V-Series Controller A
- 1 x 7Ah battery J
- 2 x 4 button CENTURION transmitters E

SINGLE VERT-X KIT   2

Product Code: **VERTXKITSLIND**
- **1 x VERT-X operator including:**
  - Mounting hardware N
- **1 x Wallbox including: F**
  - 1 x Mains isolator
  - 1 x LED indicator board D
  - 1 x 2A Switch Mode charger H
  - 1 x V-Series Controller A
- 1 x 7Ah battery J
- 2 x 4 button CENTURION transmitters E

DOUBLE VERT-X KIT   2

Product Code: **VERTXKITDLIND**
- **2 x VERT-X operators including:**
  - Mounting hardware N
- **1 x Wallbox including: F**
  - 1 x Mains isolator
  - 1 x LED indicator board E
  - 1 x 2A Switch Mode charger H
  - 1 x V-Series Controller A
- 1 x 7Ah battery J
- 2 x 4 button CENTURION transmitter E

SINGLE R3 PEDESTAL/WALL-MOUNT KIT   3

Product Code: **Pedestal: R31PV2, Wall: R311WV2**
- **1 x R3 operator including:**
  - 1 x 800mA charger G
  - 1 x Controller B
  - 1 x 7Ah battery J
- Mounting hardware M

DOUBLE R3 PEDESTAL/WALL-MOUNT KIT   3

Product Code: **Pedestal: R32PV2, Wall: R32WV2**
- **2 x R3 operators including:**
  - 1 x 800mA charger G
  - 1 x Controller B
  - 1 x 7Ah battery J
- Mounting hardware M

SINGLE R5 PEDESTAL/WALL-MOUNT KIT   3

Product Code: **Pedestal: R511PV1, Wall: R511WV1**
- **1 x R5 operator including:**
  - 1 x 2A Switch Mode charger H
  - 1 x Controller B
  - 1 x 33Ah battery K
- Mounting hardware M
- 1 x Separate battery housing L

DOUBLE R5 PEDESTAL/WALL-MOUNT KIT   3

Product Code: **Pedestal: R521PV1, Wall: R521WV1**
- **2 x R5 operators including:**
  - 1 x 2A Switch Mode charger H
  - 1 x Controller B
  - 1 x 33Ah battery K
- Mounting hardware M
- 1 x Separate battery housing L

1 VANTAGE

2 VERT-X

3 R3 AND R5

A	B	C	D
V-SERIES controller	R3 R5 controller	CP77 24V controller	V-SERIES LED external indicator board

E	F	G	H
CENTURION NOVA transmitter	V-SERIES wallbox kit	800mA charger	2A Switch Mode charger

I	J	K	L
CP13E 24V charger	7Ah battery	33Ah battery	Battery housing

M	N
R3 R5 mounting hardware	V-SERIES mounting hardware

TRAFFIC BARRIER SYSTEMS

Traffic barriers offer a formidable means of controlling vehicular access, and we have gone to great lengths to ensure that Centurion Systems' barriers can handle the heaviest of traffic volumes while simultaneously offering superior security and a plethora of features. We have also developed a range of ancillary items that can be used to up the security and more when used alongside our traffic barriers.

SECTOR II
HIGH-VOLUME INDUSTRIAL TRAFFIC BARRIER

Introducing the heir to the throne of high-volume vehicular access control. With an updated look that perfectly matches its superior performance, an optimised design for the ultimate in ease of installation and boasting the awe-inspiring speed that made its predecessor king of the access control jungle, the **SECTOR II** is the embodiment of automation evolution.

Speed. Performance. Intelligence. The **SECTOR II** is the benchmark against which all others are measured

SECTOR II 3:   Rapid, high-volume barrier, 3 metre boom pole

SECTOR II 4.5:   High-volume barrier, 4.5 metre boom pole

SECTOR II 6:   High-volume barrier, 6 metre boom pole

In addition to the different boom pole lengths available, the **SECTOR II**'s housing is also available in three stylish and modern colour configurations to suit your aesthetic and brand requirements. Enquire at your local CENTURION agent.

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MAIN FEATURES

Mechanical Features

- Battery backup
- High-volume capability – up to 3000 operations per day for high-volume applications
- Very robust housings with varying degrees of corrosion protection for inland, coastal and marine environments
- Improved torsional rigidity for reliable operation in windy conditions
- Extended cabinet suitable for larger capacity batteries
- Included cable saddles along front flange for a neat and tidy installation
- Stylish, powder-coated aluminium lid with built-in condensation shield

Electrical Features

- Easy access to the electronics assembly situated at the top of the housing
- LCD user interface for simple setup
- Diagnostic screens for easy maintenance
- Smooth, intelligent speed control – set the pace for raising and lowering according to individual site requirements
- Rapid boom pole raise (3 metre version < 1.2 seconds)- can be slowed down if required
- Integrated ChronoGuard timer technology (a world first) – wide range of Time-barring and Auto-activation features
- Memory and non-memory barrier activation

- Full configuration of barrier operating parameters including independent pole raise and lowering speeds, ramp-up and ramp-down angles
- Multiple Operating Profiles to suit region – select between ZA, CE and UL325
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Barrier Raise, Barrier Lower, etc.)
  - Selectively delete specific transmitters that have been lost or stolen
  - Automatically learn transmitters into the system (Autolearn)
  - Automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Free-exit facility using an inductive loop detector or infrared beams
- Remote boom pole status indicator (Pole Position, Power Failure, Low Battery, Multiple Collision Detection and Security Light Status indication)
- Fully-configurable Pre-delays with Multi-modal Pre-flash
- Safety/Closing Beam input with beam functional test
- Lock/Emergency Stop input
- Ticket Vend Interlock which enables connectivity to a ticket vending machine
- Dedicated menus for seamless integration with CLAWS roadway spikes and traffic lights

TECHNICAL SPECIFICATIONS

Technical Data	SECTOR II 3	SECTOR II 4.5	SECTOR II 6
Input voltage [1]	220V AC +/-10% @ 50Hz		
Motor voltage	12V DC		
Motor power supply [2]	Battery driven (standard capacity - 7Ah)		
Battery charger	CP84SM – 1.8A @ 13.7 +/-1%		
Current consumption (mains supply)	170mA		
Current consumption (motor rated / peak load)	1/12 A		
Current consumption (quiescent load)	75mA		
Boom pole length	3.0m	4.5m	6.0m
Boom pole raise time	1.2 sec	3 sec	3 sec
Maximum daily cycles	3 000 cycles/day	3 000 cycles/day	3 000 cycles/day
Design life	2 000 000 cycles	1 800 000 cycles	1 500 000 cycles
Operations in standby mode with standard battery [3,4]	3000		
Half day [4]	3 000 cycles	2 900 cycles	2 900 cycles
Full day [4]	3 000 cycles	2 300 cycles	2 300 cycles
Collision sensing	electronic		
Operating temperature	-15°C to +50°C		
Degree of protection	IP54		
Controller incorporated	S-Series_12		
Onboard receiver type	NOVA rcode-hopping onboard, multichannel		
Receiver frequency	433MHz		
Receiver code storage capacity	500 Buttons		
Mass of unit packed	44kg	47.5kg	52kg
Packing dimensions	Length: 440mm Width: 350mm Height: 1250mm		

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Can increase battery capacity for longer standby times

3. Based on operator excluding closing loop detector

4. Limited by maximum daily usage

BARRIER HOUSING SPECIFICATION

	SECTOR II Standard	SECTOR II Grade 430	SECTOR II Grade 316
Application	Inland areas	Coastal plains - no airborne salt	Marine areas
Housing construction	Sheet metal housing, 1.6mm wall thickness with separate fabricated base frame, 3mm wall thickness to raise housing above ground. Separate fabricated sheet metal door with 1.2mm wall thickness. Die-Cast Grade LM24 Aluminium Cover with condensation shield		
Barrier housing surface protection	Pre-galvanised steel with epoxy coating.	Grade 430 stainless steel with epoxy coating.	Grade 316 stainless steel, brushed finish
Base frame surface protection	Mild steel hot dip galvanised	Mild steel hot dip galvanised	Grade 316 stainless steel
Housing colour	Cover: Red, Main Body: Traffic Yellow	Cover: Red, Main Body: Traffic Yellow	Cover: Red, Main Body: stainless steel, brushed finish

BOOM POLE SPECIFICATION

Material and profile	Aluminium, round profile with plastic end cap
Surface protection	Epoxy coating
Colour and markings	White with red reflective tape – spiral pattern
Weight	800g/metre
Dimensions	OD 76.2mm x 1.27mm wall thickness

www.centsys.com

The **SECTOR II** is available in three stylish and modern colour configurations to suit your aesthetic requirements. We are also able to provide barriers in custom colours. However, price premiums and longer lead times may apply. Enquire at your local CENTURION agent for more information.
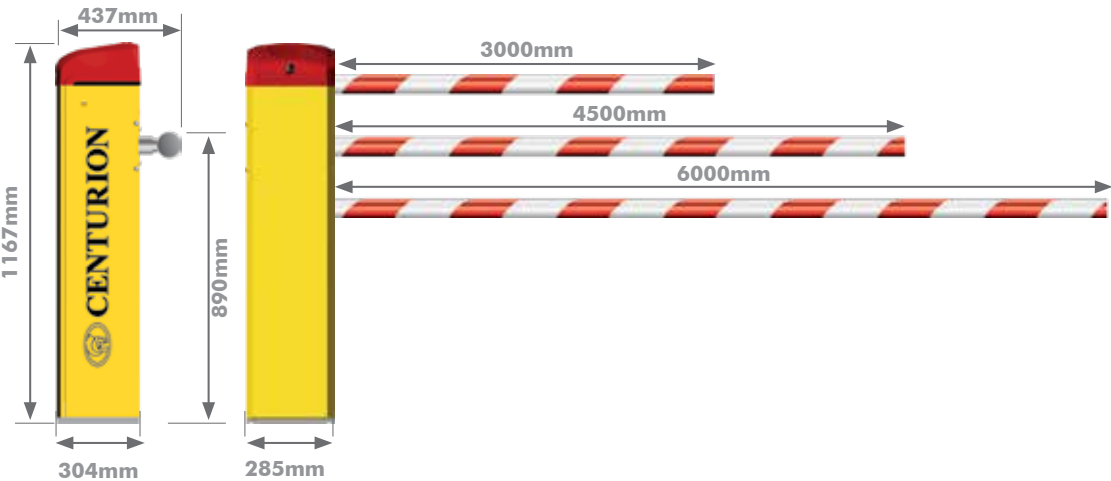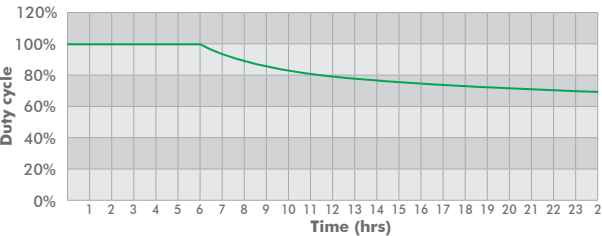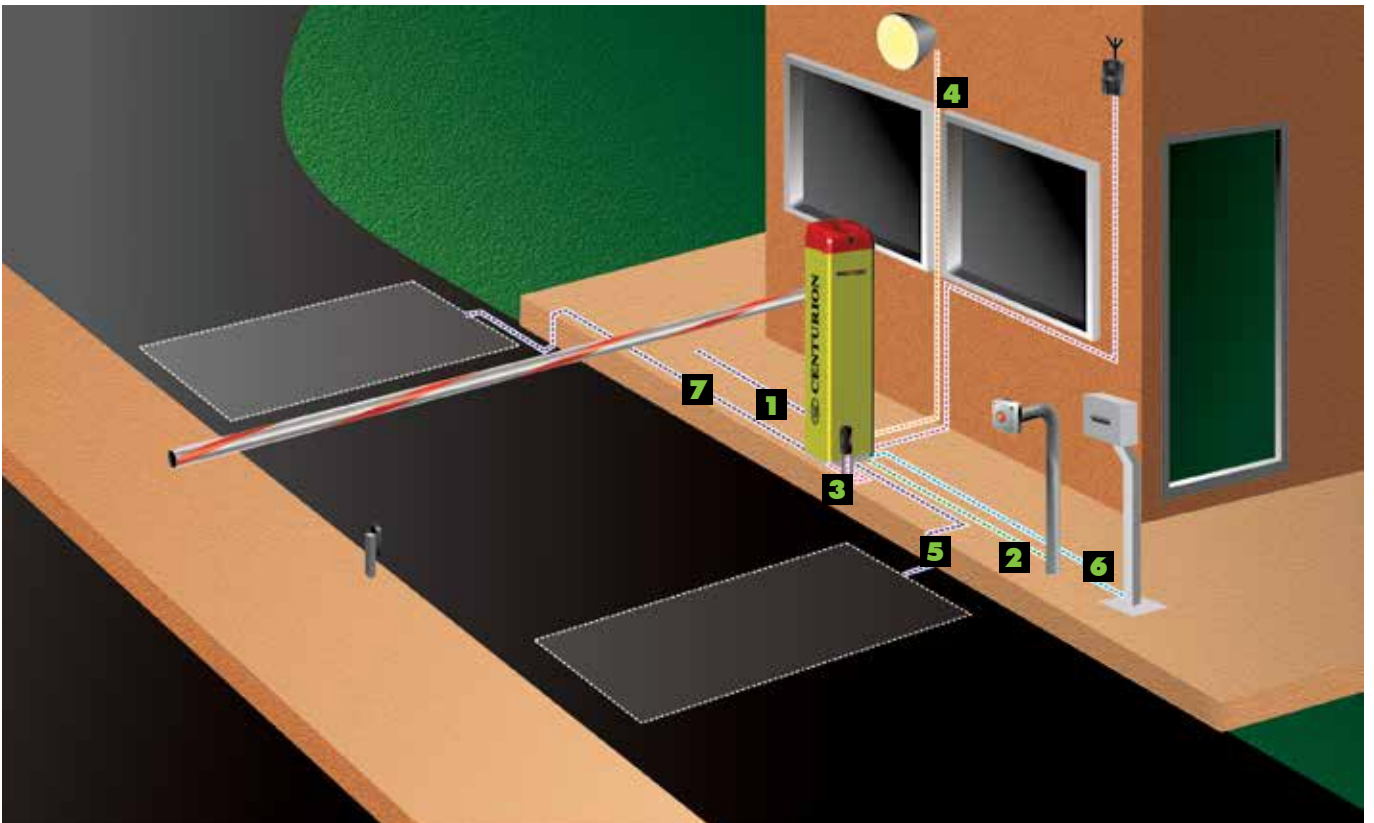

Yellow

White

Gun-metal grey[1]

1. A price premium applies for the grey finish.

437mm
3000mm
4500mm
6000mm
1167mm
890mm
304mm
285mm

SECTOR II single operator duty cycle as a function of operating time

Duty cycle

120%
100%
80%
60%
40%
20%
0%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 2

Time (hrs)

CABLING REQUIREMENTS

1.   220V - 240V AC mains cable (3 core LNE 1.5mm^2 SWA)[1]

Optional Wiring (all cable is multi-stranded):

2.   Pushbutton control (2 core 0.5mm^2 multi-stranded)

3.   Infrared Safety Beams (3 core 0.5mm^2 multi-stranded)

4.   Optional Pillar Lights (3 core LNE SWA[1], size according to power requirements)

5.   Inductive Loop Detector for closing or safety (1 core 0.5mm^2 multi-stranded silicone-coated)

6.   Access control device (2 core 0.5mm^2 multi-stranded)[2]

1. Type of cable must adhere to municipal bylaws but typically SWA (steel wire armoured) cable is recommended. The armouring provides excellent screening, which gives better protection against lightning – earth one end of the screening

2. Number of cores and type of cable could vary depending on brand of access control system being used

CENTINEL
MANUAL TRAFFIC BARRIER

When we designed the **CENTINEL** manual traffic barrier, we had the user in mind. After all, just because it's a manual barrier doesn't mean you have to do all of the work!

We outfitted the **CENTINEL** with an innovative internal spring balance mechanism – which not only gives the barrier a compact slimline appearance, but also means that the most feather-light of touches can set it in motion...because you don't necessarily want a shoulder workout when manning a barrier.

CENTINEL 3: Manual barrier, 3 metre boom pole

CENTINEL 4.5: Manual barrier, 4.5 metre boom pole

CENTINEL 6: Manual barrier, 6 metre boom pole

MAIN FEATURES

- **Internal spring counterbalance**
  This innovative system contributes both to the **CENTINEL**'s undeniably attractive slimline look and – most importantly – makes raising and lowering a very nearly automated action

- **Professional, compact appearance**
  Sleek and slender, the **CENTINEL** is a looker and will blend in seamlessly with the aesthetic of any modern business park. It might even receive a few amorous wolf-whistles from the other parking equipment!

- **Comfortable operating handle**
  You don't need alligator hide on your hands for you to conveniently and comfortably operate the **CENTINEL**. The actuating handle is designed for comfortable and easy handling of the pole

- **Simple locking system**
  But what if there's heavy traffic flow? Will the hapless guard need to stand there keeping the pole raised until every muscle and sinew aches? Not with a **CENTINEL** installed! To secure the pole in the raised or lowered position, simply turn the convenient, easy-to-use thumbwheel

- **Strong and durable**
  The **CENTINEL** will willingly submit to the operator's touch, but its incredibly robust construction ensures that it will firmly stand its ground against the elements

TECHNICAL SPECIFICATIONS

| Technical Data	CENTINEL 3	CENTINEL 4.5	CENTINEL 6
Boom pole length [1]	3m	4.5m	6m
Counterbalance spring	Internal		
Mass of unit packed	29kg		
Packing dimensions	Length: 320mm x Width: 310mm x Height: 1120mm		

1   A catchpost is recommended to support and lock the pole in the lowered position

BARRIER HOUSING SPECIFICATION

	CENTINEL Standard	CENTINEL Grade 430
Application	Inland areas	Coastal plains - no airborne salt
Housing construction	Sheet metal housing, 3mm wall thickness with 5mm mounting plate	
Barrier housing surface protection	Mild steel with epoxy coating.	Grade 3CR12 stainless steel with epoxy coating.
Housing colour	Main Body: Traffic Yellow	Main Body: Traffic Yellow

BOOM POLE SPECIFICATION

Material and profile	Aluminium, round profile with plastic end cap
Surface protection	Epoxy coating
Colour and markings	White with red reflective tape – spiral pattern
Weight	800g/metre
Dimensions	OD 76.2mm x 1.27mm wall thickness
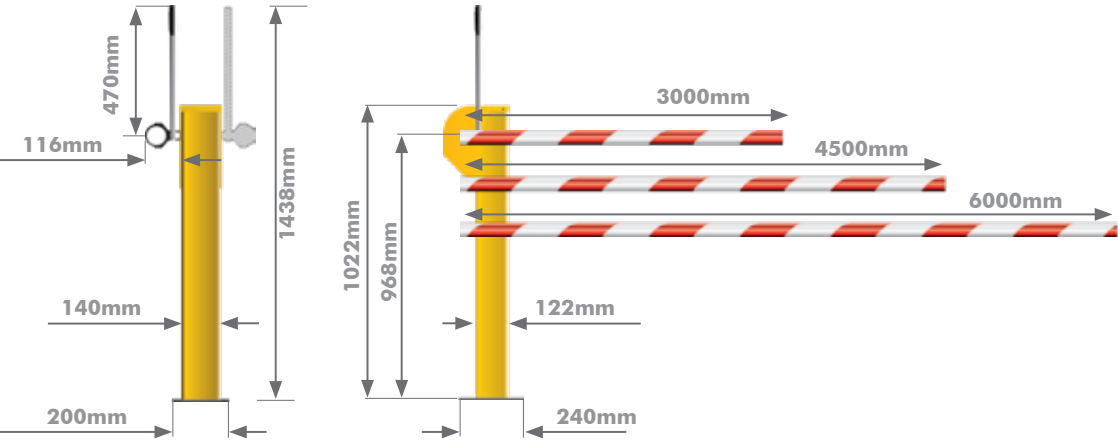
CLAWS ROADWAY SPIKES
## FOR HIGH-VOLUME ACCESS CONTROL

CLAWS barrier spikes are designed to enhance the security at high-volume entry and exit points. They provide a formidable deterrent to would-be criminals and, due to their robust construction, they are very difficult to defeat.

Surface-mount - Direct Drive: For installations that are mounted above the road surface. Uses the SECTOR II's drive mechanism to drive the **CLAWS**

Surface-mount - Indirect Drive: For installations that are mounted above the road surface. Uses its own drive mechanism and controller, syncronised with the SECTOR II's controller
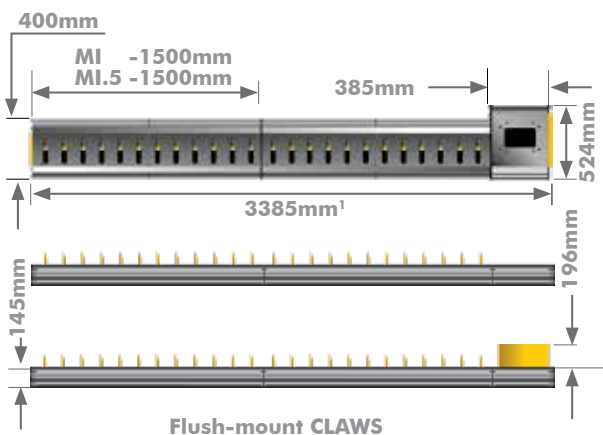
Flush-mount - Direct Drive: For installations that need to be flush with the roadway. Uses the SECTOR II's drive mechanism to drive the **CLAWS**

Flush-mount - Indirect Drive: For installations that need to be flush with the roadway. Uses its own drive mechanism and controller, synchronised with the SECTOR II's controller
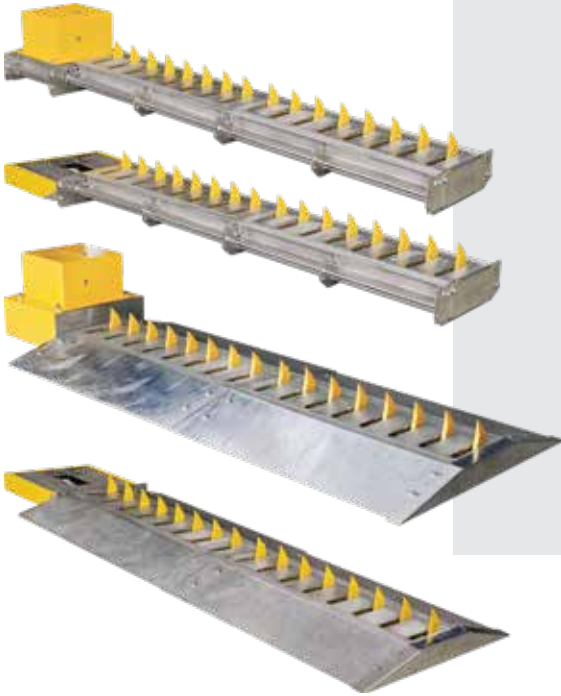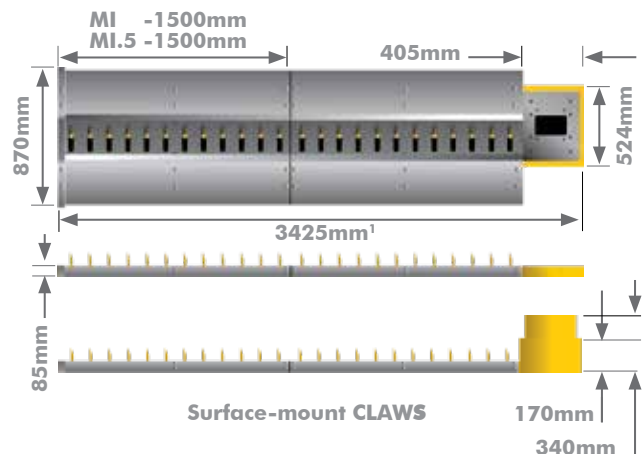
MAIN FEATURES

- Reliable battery backup – continued operation even during power failures
- High-torque DC motor for long-term reliability
- Selectable High-security or Safe Modes
- Independent Drive model has its own drive mechanism and controller which synchronises with the **SECTOR II** controller
- Direct Drive model utilises the **SECTOR II**'s drive mechanism
- Flush-mount and surface-mount options available
- Modular construction – flexible and easy to transport

- Modular units allow for ex-stock delivery
- Traffic light systems are easily interfaced

Flush-mount CLAWS

400mm
MI -1500mm
MI.5 -1500mm
385mm
524mm
3385mm[1]
196mm
145mm

1. Overall length using 2 x M1.5 modules

Surface-mount CLAWS

MI -1500mm
MI.5 -1500mm
405mm
870mm
524mm
3425mm[1]
85mm
170mm
340mm

TECHNICAL SPECIFICATIONS

Technical Data	Independent Drive CLAWS - Drive Unit	Independent Drive CLAWS with Co-Installed SECTOR II	Direct Drive CLAWS with Co-Installed SECTOR II
System input voltage	220V AC +/-10% @ 50Hz[1]	Connects to the **SECTOR II** Barrier supply[1]	NA
Motor voltage	12V DC	12V DC	NA
Motor power supply	Battery driven (standard capacity - 7Ah)	Connects to the **SECTOR II** Barrier supply	NA
Battery charger	CP84SM – 1.8A @ 13.7 +/-1%	Connects to the **SECTOR II** Barrier supply	NA
System current consumption (mains supply)	170mA	300mA	170mA
System current consumption (motor rated / peak load)	2/12 A	3/12 A	4/12 A
System current consumption (quiescent load)	75mA	150mA	75mA
Spike raise time	1.2 sec	1.2 sec	Refer to Co-Installed **SECTOR II**
Maximum daily cycles	3 000 cycles/day	3 000 cycles/day	3 000 cycles/day
System design life	2 000 000 cycles	1 800 000 cycles	1 000 000 cycles
Operations of system in standby mode with standard battery			
Half day	2 900 cycles	0 cycles	2 900 cycles
Full day	2 300 cycles	0 cycles	2 300 cycles
Collision sensing	electronic	electronic	Refer to Co-Installed **SECTOR II**
Operating temperature	-15°C to +50°C	-15°C to +50°C	Refer to Co-Installed **SECTOR II**
Degree of protection	IP54	IP54	Refer to Co-Installed **SECTOR II**
Controller incorporated	S-Series_12_Claws	S-Series_12_Claws	NA

1. Can operate independently with its own power supply - requires a separate wallbox for the controller, charger and battery

HOUSING SPECIFICATION

Technical Data	Independent Drive CLAWS - Drive Unit	Independent Drive CLAWS with Co-Installed SECTOR II	Direct Drive CLAWS with Co-Installed SECTOR II
Application	Inland to Coastal plains – no airborne salt	Inland to Coastal plains – no airborne salt	Inland to Coastal plains – no airborne salt
Housing construction	Flush and Surface Mount available	Flush and Surface Mount available	Flush and Surface Mount available
Barrier housing surface protection	Zinc Electroplated Mild Steel, Powder- Coated	Zinc Electroplated Mild Steel, Powder- Coated	Zinc Electroplated Mild Steel, Powder- Coated
Base frame surface protection	Hot-Dip Galvanised Mild Steel	Hot-Dip Galvanised Mild Steel	Hot-Dip Galvanised Mild Steel
Housing colour	Drive Body: Traffic Yellow, Frame: Speckled Silver of Galvanising	Drive Body: Traffic Yellow, Frame: Speckled Silver of Galvanising	Skirt: Traffic Yellow, Base Frame: Speckled Silver of Galvanising
Packing weight			
Unit - flush mount	37 kg	37 kg	28 kg
Unit - surface mount	33 kg	33 kg	26 kg
Packing dimensions			
Unit - flush mount	Length:490mm x Width: 390mm x Height: 340mm	Length: 490mm x Width: 390mm x Height: 340mm	Length: 490mm x Width: 390mm x Height: 145mm
Unit - surface mount	Length: 470mm x Width:390mm x Height: 380mm	Length: 470mm x Width: 390mm x Height: 380mm	Length: 530mm x Width: 410mm x Height: 85mm

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TRAPEX
BARRIER FENCE

The **TRAPEX** Barrier Fence is a robust and effective barrier designed to prevent pedestrians from circumventing the SECTOR II vehicle access control system. Its tough, all-weather aluminium construction makes it suitable for coastal and inland applications.

The robust materials and clever industrial design ensure that your **TRAPEX** will perform day in and day out, relentlessly, throughout its service life.

MAIN FEATURES

- **Enhanced security:** The clever link-arm assembly attached to the traffic barrier operator prevents the **TRAPEX** from being pushed aside

- The obstructive vertical poles extend past the barrier pole to create a formidable hurdle, helping to prevent would-be intruders from climbing over the barrier pole

- **Easy to install:** The simple, yet effective design of the **TRAPEX** allows you to pop-rivet the **TRAPEX** modules into place onto the barrier pole, which in turn lets the **TRAPEX** swivel freely and ensures extremely easy vertical alignment of the upright poles
The modular construction allows for the **TRAPEX** to be installed by a single technician, providing for a hassle-free installation and saving you time and money. The only thing easier than installing it, is watching it work trouble-free year upon year

- **All-weather construction:** The powder-coated aluminium materials used to construct the **TRAPEX** allows you to install it just about anywhere

- **Intelligent design: TRAPEX** modules are available in 1.5 metre sections, making each module easy to transport and even easier to install the length that you need
Modules can be assembled in 1.5, 3 and 4.5 metre lengths. The all-terrain foot assembly and link arm carry the weight of the **TRAPEX**, resulting in superior reliability and reduced maintenance

- **It's all in the box: TRAPEX** modules are semi-assembled. They come in 1.5 metre modules and include a Mounting Kit consisting of the steering arm assembly, foot assembly and all of the fasteners, spacers and end-caps you may require for a quick and easy installation

## TECHNICAL SPECIFICATIONS

Existing installation

Boom pole length	Requirement
3 metres	The counterbalance spring in the 3m **SECTOR II** barrier must be upgraded to that of a 4.5m unit - The running speed of the **SECTOR II** operator must be reduced to correspond to that of a 4.5m barrier (Raise/Lower time must be changed from 1.2 to 3 seconds)
4.5 metres	The counterbalance spring in the 4.5m **SECTOR II** barrier must be upgraded to that of a 6m unit -
6 metres	It is not possible to fit the **TRAPEX** to a 6m **SECTOR II** barrier

New installation

Boom pole length	Requirement
3 metres	A 4.5m **SECTOR II** barrier must be ordered for this application, along with a 3m boom pole and 2 x 1.5m modules of the **TRAPEX** barrier fence
4.5 metres	A 6m **SECTOR II** barrier must be ordered for this application, along with a 4.5m boom pole and 3 x 1.5m modules of the **TRAPEX** barrier fence
6 metres	It is not possible to fit the **TRAPEX** to a 6m **SECTOR II** barrier

Dimensions and materials

Modular sections length	1.5m, pre-assembled
Vertical members	6 per 1.5m length with 250mm spacing
Vertical member length below barrier boom pole	692mm
TRAPEX fence members	19mm aluminium round tube
Weight	1.3kg/m
	1.5m Module weighs 2kg
Aluminium flatbar section	25mm x 25mm
Rivets used to fit the aluminium flatbar	5mm
Packaging weight	
Connectors kit	700g
Trapex sections	3kg/1.5m
Packaging dimensions	
Connectors kit	Length: 10mm x Width: 10mm x Height: 677mm
Trapex sections	Length: 100mm x Width: 100mm x Height: 2220mm
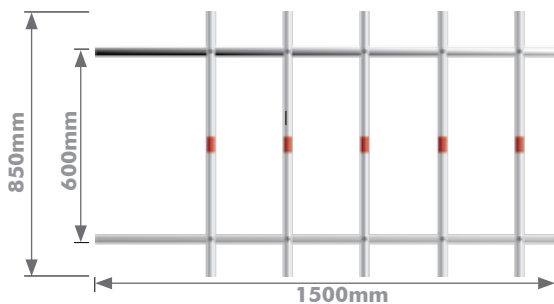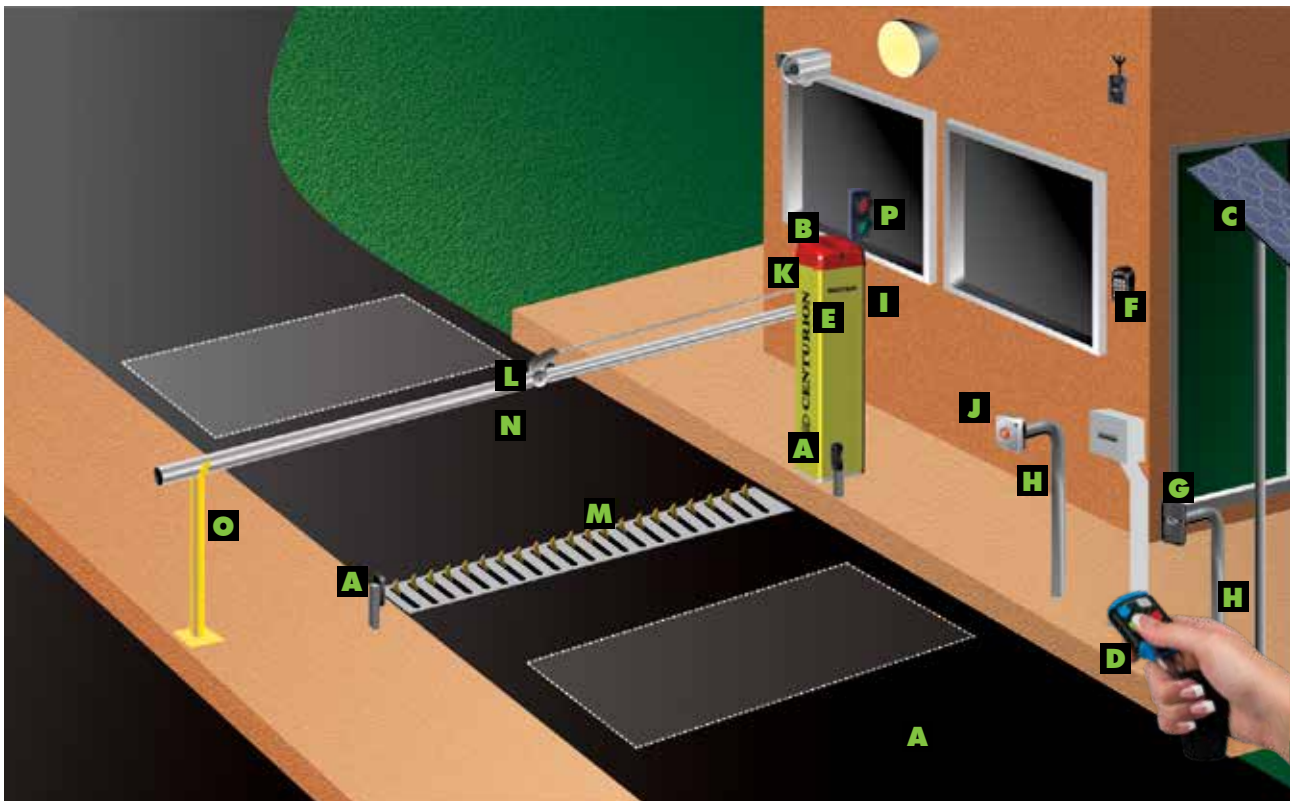
TRAFFIC BARRIER ACCESSORIES

A

CENTURION INFRARED SAFETY BEAMS

Always recommended on any barrier automation installation to increase the safety of the automated system.

B

FLUX SA AND FLUX 11 LOOP DETECTORS

Allows free-exit of vehicles from the property (requires ground loop to be fitted)

C

SOLAR SUPPLY

Alternative means of powering the system with our 20, 40, 60, 80, 120 or 150 Watt panels.

D

CENTURION NOVA TRANSMITTER

Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.

E

G-ULTRA GSM DEVICE

The ultimate new GSM solution for monitoring and activating electrical appliances via your mobile phone.

F

SMARTGUARD or SMARTGUARDAIR KEYPAD

Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

G

SOLO/LATTICE PROXIMITY ACCESS CONTROL
Proximity reader for allowing access for both pedestrians and vehicles.

H

GOOSENECK
Steel pole for mounting intercom gate station or access control.

I

BACKUP MEMORY MODULE
Back up all the transmitters and operating details set up in the controller.

J

MANUAL PUSHBUTTON
Industrial-rated switch, typically to allow a guard to manually activate the barrier.

K

BREAKAWAY COUPLING
Allows the boom pole to hinge away from the barrier if it is accidentally knocked, reducing the chance of being damaged.

L

SECTOR JACK-KNIFE ASSEMBLY
The **SECTOR II** Jack-knife Assembly (fabricated from Grade 304 stainless steel) allows the boom pole to fold, decreasing the required height in which the **SECTOR II** barrier operates.

M
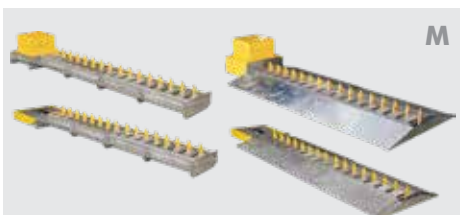
CLAWS
Add real security with seamless integration to our **SECTOR II** - available in Flush- or Surface-mounted models.

N

TRAPEX
A traffic barrier pedestrian fence that stops people from circumventing the **SECTOR II** access control point.

O

CATCHPOST
CENTURION's Catchpost provides additional support for particularly long boom poles, such as the six metre pole on a **SECTOR II** or **CENTINEL** barrier, when lowered.

P

MIDI TRAFFIC LIGHT
An effective vehicular access control ancillary solution that enables visual indication when it is safe for vehicles to proceed. An excellent accompaniment to the **CLAWS** roadway spikes system.

www.centsys.com

SECTOR II BARRIER KIT   1

Product Code: **Dependent on boom pole length, corrosion protection level and FLUX inclusion**

- **1 x SECTOR II barrier including**:
  - 1 x 7Ah battery **D**
  - 1 x Controller **A**
  - 1 x FLUX 11 **H**
  - 1 x FLUX SA **I**
  - 1 x Counterbalance Spring **E**
  - 1 x 2A Switch Mode charger **B**
- 1 x Boom Pole 3m / 4.5m / 6m **C**

CENTINEL MANUAL BARRIER KIT   2

Product Code: **Dependent on boom pole length and corrosion protection level**

- **1 x CENTINEL barrier**
- 1 x Boom Pole 3m / 4.5m / 6m **C**
- 1 x Counterbalance Spring **E**

CLAWS INDEPENDENT DRIVE FLUSH-MOUNT KIT   3

Product Code: **SPIKEDFKIT_S2**

- **1 x Independent Flush-mount drive mechanism.**
- 1 x Controller **A**
- Flush-mount Spike Modules (Available in 1m and 1.5m lengths) **F**

CLAWS INDEPENDENT DRIVE SURFACE-MOUNT KIT   3

Product Code: **SPIKEDSKIT_S2**

- **1 x Independent Flush-mount drive mechanism.**
- 1 x Controller **A**
- Surface-mount Spike Modules (Available in 1m and 1.5m lengths) **G**

CLAWS DIRECT DRIVE FLUSH-MOUNT KIT   3

Product Code: **SPIKEDF1KIT_S2**

- **1 x Direct Drive Flush-mount mechanism**
- 1 x Flush-mount Spike Modules **F**
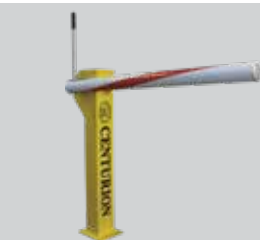
CLAWS DIRECT DRIVE SURFACE-MOUNT KIT   3

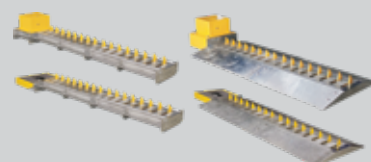Product Code: **SPIKEDS   1KIT_S2**

- **1 x Direct Drive Flush-mount mechanism**
- 1 x Surface-mount Spike Modules **G**

1 SECTOR II BARRIER

2 CENTINEL MANUAL BARRIER

3 CLAWS SURFACE- AND FLUSH-MOUNT SPIKES

A SECTOR controller

B 2A Switch Mode charger
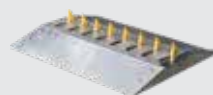
C 3m/4.5m/6m boom pole

D 7Ah battery

E CENTINEL counter-balance spring

F Flush-mount CLAWS module 1m and 1.5m module

G Surface-mount CLAWS module

H FLUX 11 loop detector

I FLUX SA loop detector

J SECTOR II 24V battery kit

PLUG AND PLAY VEHICLE DETECTION

The FLUX 11 and FLUX SA are CENTURION's highly sensitive range of loop detectors, offering complete mastery over ground loops.

- Not only will you save time and money thanks to the user-friendly interface, but you'll have a vehicle access system that starts out working and stays that way!

- Two models available:
  - 12V - 24V DC and 220V - 240V AC
  - Standardised 11-pin connector allows for **FLUX 11** to be incorporated into an existing 11-pin base
  - Very fast detection speed for quick response times
  - Excellent immunity to external interference for improved reliability
  - Audible and visual diagnostics for ease of setup and maintenance

- Incorporates Presence and Pulsed outputs to suit a wide range of vehicle access applications

- Selectable Permanent Presence feature to prevent unintended gate closure

- Dedicated reset button to assist with quick maintenance procedures

- Wide, adaptive self-tuning range for outstanding reliability

- Automatic Sensitivity Boost feature for reliable detection of variable vehicle height

- Bootloader interface for ease of firmware upgrades

GARAGE DOOR OPERATORS

Centurion Systems offers automation solutions for all the major garage door types, including tip-up, sectional and roll-up. Our garage door operators are whisper-quiet, easy to install and, above all else, supremely reliable.

SDO4
GARAGE DOOR OPERATOR

We know that arriving home is more than just some automatic action or daily ritual. It's an experience that's charged with emotion – the feeling of seeing your loved ones, your pets, the big-screen TV and all the other comforts that you miss during the day.

With the **SDO4**, that experience begins the moment that you open your garage door.

With whisper-quiet operation and movement that's smoother than a Barry White song, the **SDO4** garage door operator for tip-up and sectional doors lets you know you're home.

## MAIN FEATURES

Mechanical Features

- The **SDO4** switches seamlessly between mains and battery power in the event of a power outage
- Suitable for virtually any size domestic garage door with the T10 for smaller doors up to 12 square metres, or automate your bigger door with the powerful T12 model
- 24V geared DC motor provides enough power to move even the largest door quietly and reliably
- Built-in anti-crushing circuitry causing the door to stop and reverse if an obstruction is detected, helping to prevent serious damage or injury
- Ease of installation, adjustment and setup
- Manual Override which can be disengaged or re-engaged in any position
- Can be electronically locked to even prevent a learned-in remote control from operating the door, increasing security during holidays
- Activate or deactivate the Autoclose feature at the press of a button
- Onboard CENTURION code-hopping multichannel receiver with selective add and delete
- Effortlessly switch between sectional and tip-up doors, and

toggling between the two using the intuitive LED display automatically and intelligently
- Door Service Monitor keeping an eye on things and a courtesy lamp which flashes and a buzzer which sounds when your door springs are worn-out and need maintenance
- Courtesy Light which is activated during operation or switch it on and off as needed, using one of the Wireless Wall Switch or remote control buttons
- Intelligent template learning feature. You can learn all the buttons on your four-button remote control or Wireless Wall Switch in a set configuration in a matter of seconds!
- Energy-saving Sleep Mode technology reaching a record low power consumption of 0.5W

TECHNICAL SPECIFICATIONS

Technical Data	T10	T12
Input voltage	220-230V AC @ 50/60Hz1	220-230V AC @ 50/60Hz1
Motor voltage[1]	24V DC	24V DC
Motor power supply[2] - rated	80W DC	100W DC
Motor supply	Battery supply 2 x 3.4Ah 24V DC	Battery supply 2 x 3.4Ah 24V DC
Maximum door width	6.5 metres	6.5 metres
Maximum door area	12 metres^2	15 metres^2
Maximum lifting capacity	1000N	1200N
Operations in standby mode	12 to 30, dependent on door size, weight, height and duration of power failure	12 to 30, dependent on door size, weight, height and duration of power failure
Opener travel speed	Tip-up 80mm/sec. Sectional 140mm/sec with fully-charged batteries	Tip-up 80mm/sec. Sectional 140mm/sec with fully-charged batteries
Door travel adjustment	Physical end-stops	Physical end-stops
Safety obstruction force system	Built-in menu	Built-in menu
Light	LED 2W	LED 2W
Autoclose[2]	Internal menu option	Internal menu option
Infrared safety beams	Internal menu option	Internal menu option
Onboard receiver type	Code-hopping single channel	Code-hopping single channel
Receiver code storage capacity	20 transmitters	20 transmitters

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Can increase battery capacity for longer standby times

2992.6mm (Sectional) **1872.6mm (Tip-up)**

28.4mm

70.6mm
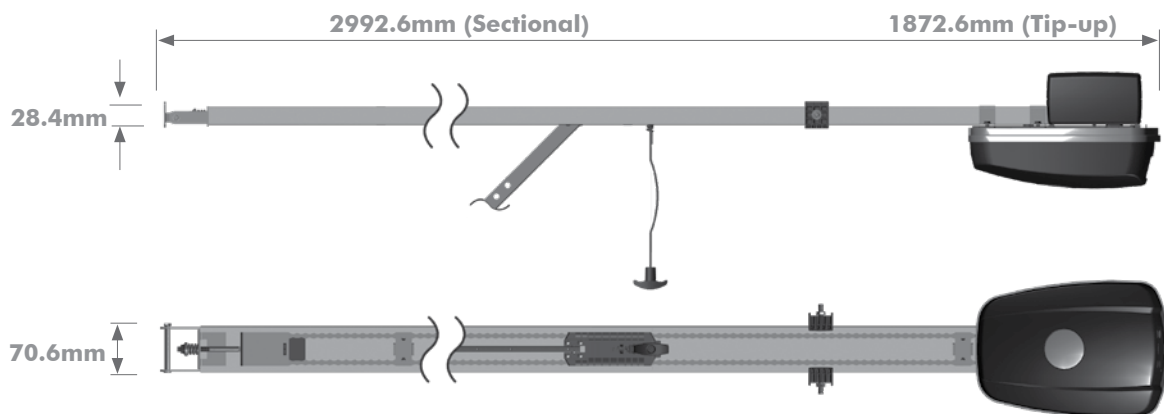
RDO II
GARAGE DOOR OPERATOR

This is the way we like to roll! With our **RDO II**, that is. A 24V DC high-torque motor, operating so quietly you'll need to look at the door just to be sure that it's moving. With an **RDO II** not even power outages can close you down. Its reliable battery backup will keep you coming and going like there's no tomorrow.

All this opening and closing had better be safe and secure. Utilising CENTURION's ultra-secure code-hopping remote controls, and coupled with its anticrushing sensitivity, the **RDO II** has you covered.

MAIN FEATURES

Mechanical Features

- Battery backup
- Whisper-quiet operation
- Strong lifting capability
- Quick and easy installation
- Anti-crushing protection for greater safety
- Convenient manual override

Electronic Features

- Onboard CENTURION code-hopping multichannel receiver with selective add and delete
- Activate up to four different features
  - Open and close the garage door
  - Switch the Courtesy Light on and off
  - Electronically lock the system for greater security
 - Override the Autoclose facility

- Wall-mounted controller with Courtesy Light – bathes entrance in light whenever **RDO II** is activated and remains on for a pre-set period of time afterwards

TECHNICAL SPECIFICATIONS

Technical Data	RDO II
Input voltage [1]	220V AC +/-10% @ 50Hz
Motor voltage [2]	24V DC
Motor power supply	Battery driven (standard capacity - 1.2Ah)
Battery charger	Plug-In Charger - 250mA @ 13.8V +/- 1%
Current consumption (mains supply)	60mA
Current consumption (motor rated / peak load)	3/10 A
Current consumption (quiescent load)	50mA
Opening speed	100 - 150 mm/sec
Maximum daily cycles	50 cycles/day
Design Life	30 000 cycles
Operations in standby with 1.2Ah battery	40 cycles
Collision sensing	electronic
Operating temperature	-15°C to +50°C
Degree of protection	IP54
Controller incorporated	XTRAC Controller
Onboard receiver type	NOVA code-hopping onboard, multichannel
Receiver frequency	433 MHz
Receiver code storage capacity	22 Buttons
Mass of unit packed	7kg
Packing dimensions	Length: 330mm x Width: 288mm x Height: 180mm

1. Can operate off a solar supply, consult Centurion Systems for assistance

2. Can increase battery capacity for longer standby times

www.centsys.com
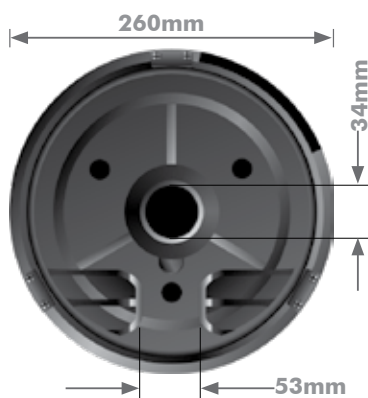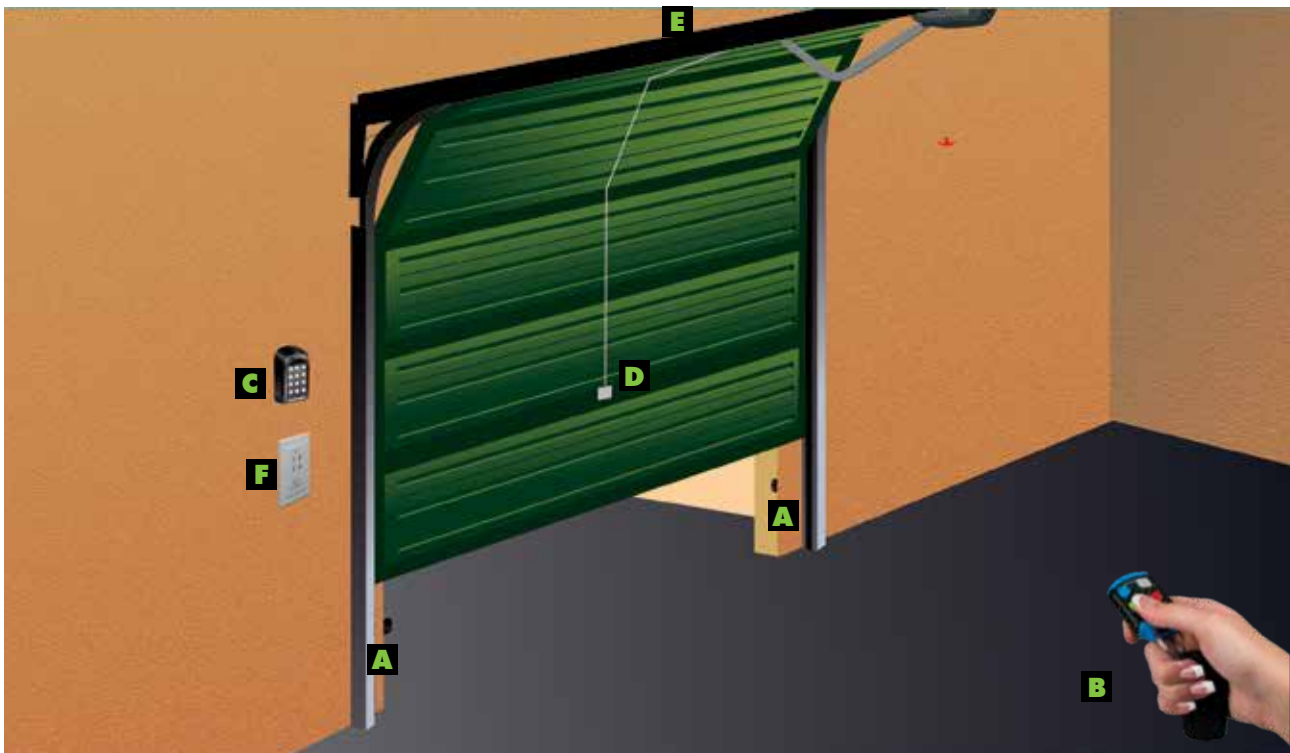
GARAGE DOOR OPERATOR ACCESSORIES

CENTURION INFRARED SAFETY BEAMS

Always recommended on any gate or garage automation installation to increase the safety of the automated system.

CENTURION NOVA TRANSMITTER

Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.
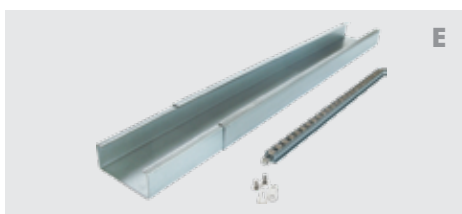

SMARTGUARD or SMARTGUARDAIR KEYPAD

Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

EXTERNAL MANUAL OVERRIDE

Key-operated release for convenient manual override of door opener from the outside.

RAIL EXTENSION KIT

Available in 1000mm and 350mm lengths. Allows for increased garage door opening height. Converts sectional to a caravan-height door.

WIRELESS WALL SWITCH

The four-button Wireless Wall Switch can operate the door, turn on the light and activate Holiday Lockout all without running any unsightly wires

GARAGE DOOR OPERATOR KITS

SDO4 T10 SECTIONAL DOOR OPERATOR FULL KIT 1

Product Code: **SDO4T10C01**

- 1 x SDO4 T10 operator (head and drive unit):
  - Mounting hardware **E**
  - 2 x 3.4Ah 24V DC battery supply **B**
  - 2 x Four-button CENTURION transmitters **A**
  - 1 x Charger **C**
- Sectional track chain **F1**

SDO4 T10 SECTIONAL DOOR OPERATOR FULL KIT 1

Product Code: **SDO4T10C02**

- 1 x SDO4 T10 operator (head and drive unit):
  - Mounting hardware **E**
  - 2 x 3.4Ah 24V DC battery supply **B**
  - 2 x Four-button CENTURION transmitters **A**
  - 1 x Charger **C**
- Tip-up track chain **F2**

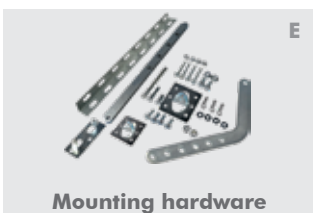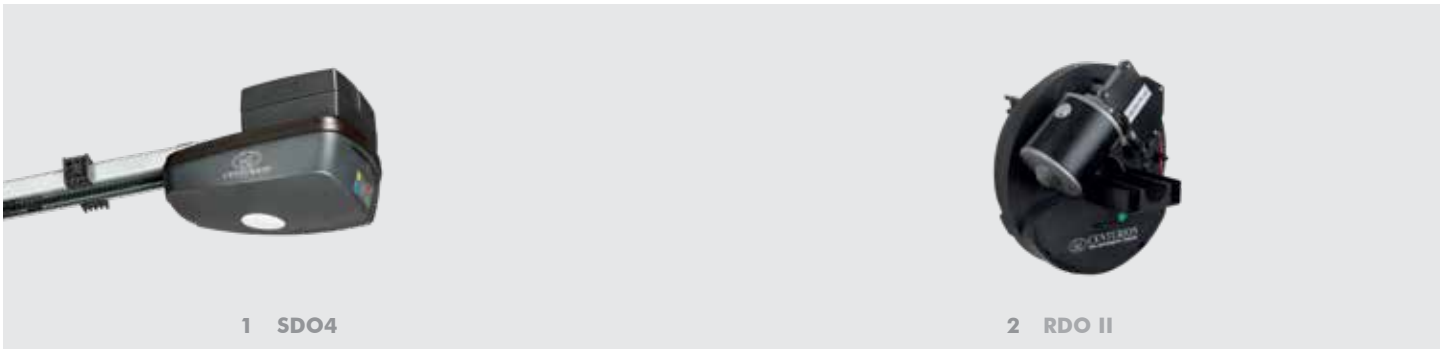## SDO4 T12 SECTIONAL DOOR OPERATOR FULL KIT 1

Product Code: **SDO4T12C01**

- 1 x SDO4 T12 operator (head and drive unit):
  - Mounting hardware **E**
  - 2 x 3.4Ah 24V DC battery supply **C**
  - 2 x Four-button CENTURION transmitters **A**
  - 1 x Charger
- Sectional track chain **F1**
- 1 x Wall Switch **B**

SDO4 T12 SECTIONAL DOOR OPERATOR FULL KIT 1

Product Code: **SDO4T12C02**

- 1 x SDO4 T12 operator (head and drive unit):
  - Mounting hardware **E**
  - 2 x 3.4Ah 24V DC battery supply **C**
  - 2 x Four-button CENTURION transmitters **A**
  - 1 x Charger
- Tip-up track chain **F2**
- 1 x Wall Switch **B**

RDO II OPERATOR FULL KIT 2

Product Code: **RDO0001**

- 1 x RDO II operator:
  - Controller **D**
  - 2 x Four-button CENTURION transmitters **A**
  - 2 x 1.2Ah batteries **C**
  - Weight bar **G**
  - Plug-in charger **H**

1 SDO4

2 RDO II

A

CENTURION
NOVA transmitter

B

Wireless Wall Switch

C

1.2Ah / 3Ah battery

D

RDO controller

E

Mounting hardware

F1
F2

SDO4 3m Sectional and
SDO4 2m Tip-up drive track

G

Plug-in charger

H

RDO weight bar

ROLLER-SHUTTER OPERATORS

The Centurion Systems industrial **RSO** range has been designed to safely automate extremely heavy roller-shutter doors such as entrances to factories and loading bays. There are five models available, each tailor-made to suit individual installation requirements.

ROLLER-SHUTTER OPERATOR QUICK SELECTION GUIDE

Whatever your industrial automation requirements, this quick selection guide will help you choose the best operator for the job. Our website also provides a useful calculator for calculating approximate door speed.

Technical Data	RSO5DC	RSO5R3P
Description	Full logic; battery backup	Basic; three-phase
Input voltage	90V - 240V AC	380V AC 3Ø
Shutter mass – maximum	500kg	500kg
Duty cycle	35%	30%
Daily operations – maximum[1]	350	320
Battery backup	√	-
Can connect ancillary equipment, e.g. Safety Beams, access control components, etc.[2]	√	-
Time-barring and automatic activation	√	-
Onboard receiver	√	-

1. Over a 24 hour period

2. For example, Safety Beams, Access Control Equipment

RSO5RE	RSO9
Basic; Endurance	Heavy duty
220V - 240V AC	380V AC 3Ø
500kg	900kg
40%	30%
430	320
-	-
-	-
-	-
-	-

RSO
INDUSTRIAL ROLLER-SHUTTER OPERATORS

The Centurion Systems industrial **RSO** range has been designed to safely automate extremely heavy roller-shutter doors such as those at entrances to factories and loading bays. There are five models available, each tailor-made to suit individual installation requirements.

RSO5DC: Incorporates an intelligent LCD controller and reliable battery backup for complete power failure autonomy. It can lift shutters weighing up to 500kg.

RSO5R3P: A powerful 380V, three-phase operator capable of delivering greater starting thrust and also boasts an increased duty cycle, for shutters weighing up to 500kg.

RSO5RE: An endurance model ideal for high-volume automation of shutters weighing up to 500kg. The vastly improved duty cycle and high number of possible daily operations are made possible by a ventilated planetary gearbox.

RSO9: A heavy-duty model utilising a 380V, three-phase power supply enabling it to lift very heavy shutters weighing up to 900kg.

MAIN FEATURES

Mechanical Features
- Automate heavy roller-shutters; e.g. at entrances to factories, shops and warehouses
- Rock-solid mounting system
- Convenient manual operation
- The **RSO5DC** model incorporates full battery backup and an LCD interface
- Feature-rich and basic, cost-effective models available
- Safe and reliable position control
- Allows for the connection of safety devices and ancillary equipment [1]
- Integrated ChronoGuard timer functionality (a world first) [2]
- Onboard CENTURION code-hopping multichannel receiver with selective add and delete [2]
- Intruder-detection Alarm Modes (a world first) [2]
  1. **SO5DC** only
  2. **RSO5DC** only

TECHNICAL SPECIFICATIONS

Technical Data	RSO5DC	RSO5R3P	RSO5RE	RSO9
Input voltage	90V - 240V AC, 50Hz	380V AC 3Ø, 50Hz	220V - 240V AC, 50Hz	380V AC 3Ø, 50Hz
Shutter door mass	500kg	500kg	500kg	900kg
Motor voltage	24V DC	380V 3ø	230V AC	380V 3ø
Power	220W	360W	375W	550W
Current	4.6A 1ø	1.5 - 2A 3ø	3Aø	2.2A 3ø
Duty cycle	35%	30%	40%	30%
Temperature protector	70°C	70°C	125°C	115°C
Output shaft rotation	50rpm	35rpm	28rpm	17rpm
Gear ratio	55:1	55:1	64:1	105:1
Gear transmission	Double-row oblique gear	Single-row oblique gear	Double-layer planetary gear	Double-layer oblique gear
Material of gearbox	Aluminium	Aluminium	Cast-iron	Aluminium
Drive type	Chain-driven	Chain-driven	Chain-driven	Chain-driven
Sprocket	9T	9T	9T	10T
Chain	5/8 inch	5/8 inch	5/8 inch	1 inch
Length	450mm	500mm	530mm	600mm
Net weight	9.64kg	12.8kg	20.2kg	22.1kg
Gross weight	10.4kg	13.5kg	21kg	23.0kg
Packing dimensions	Length 265mm x Width: 210mm x Height: 570mm	Length 265mm x Width: 210mm x Height: 570mm	Length 260mm x Width: 200mm x Height: 665mm	Length 345mm x Width: 285mm x Height: 600mm

RSO5R3P
540mm
260mm

RSO5RE
665mm
260mm

RSO5DC
410mm
165mm

RSO9
600mm
345mm

TECHNICAL SPECIFICATIONS

|	RSO5DC	RSO5R3P	RSO5RE	RSO9
Maximum shutter weight	500kg	500kg	500kg	900kg
Battery backup	√	-	-	-
Integrated Wall switch	Uses D-Series controller	√	√	√
Manual override facility	√	√	√	√
Hand chain	√	√	√	√
Safety beam input	√	-	-	-
Input for ancillary devices, e.g. keypads, pushbuttons, etc.	√	-	-	-
Pillar light input	√	-	-	-
Autoclose	√	-	-	-
Onboard receiver	√	-	-	-
ChronoGuard timer	√	-	-	-
Modes of operation	Standard, Condo, PIRAC, PLC, Deadman, Reversing	NA	NA	NA
Local test button	√	-	-	-
Position control	2 x N/O Micro switches	2 x N/C Micro switches	2 x N/C Micro switches	2 x N/C Micro switches

1. +/-10% with 200mm sprocket

RSO KITS

Kit Components	RSO5DC	RSO5R3P	RSO5RE	RSO9
Product code	RSO5DC_FKIT	RSO5R3P_FKIT	RSO5RE_FKIT	RSO90_FKIT
Operator	√	√	√	√
Sprocket	√	√	√	√
Drive chain	√	√	√	√
Taper bush	√	√	√	√
Integrated wall switch	Intelligent LCD controller	√	√	√
Foundation plate	√	√	√	√
Backup battery and wallbox	√	-	-	-
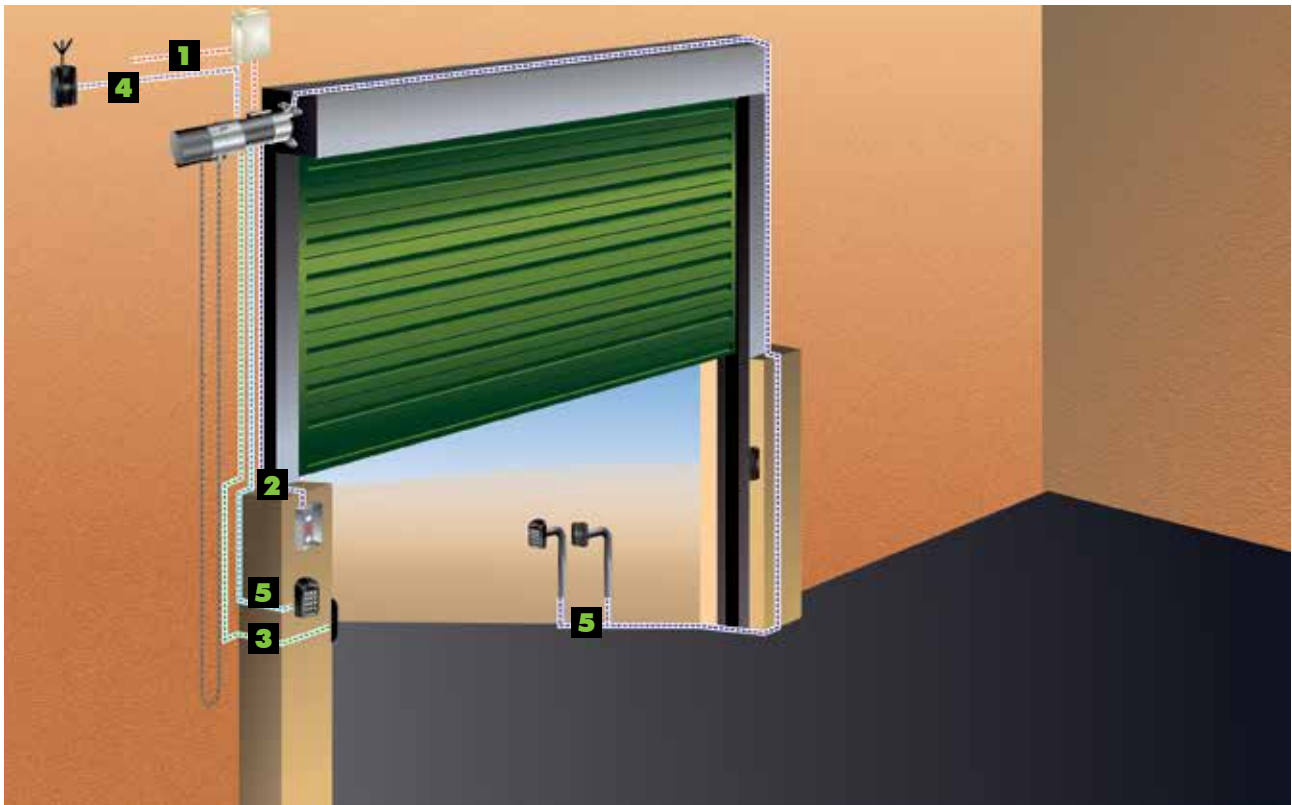
CABLING REQUIREMENTS

1. 220V - 240V AC mains cable (3 core LNE 1.5mm² SWA)[1]

2. Cable for Wall Switch (supplied)

3. Optional but recommended infrared Safety Beams (3 core 0.5mm² multi-stranded)[2]

4. Radio receiver cable (3 core 0.5mm² multi-stranded)[2]

5. Optional keypad or proximity access control reader (3 core 0.5mm² multi-stranded)[2]

[1]. 380V AC 3Ø for three-phase models

[2]. Applies to **RSO5DC** only
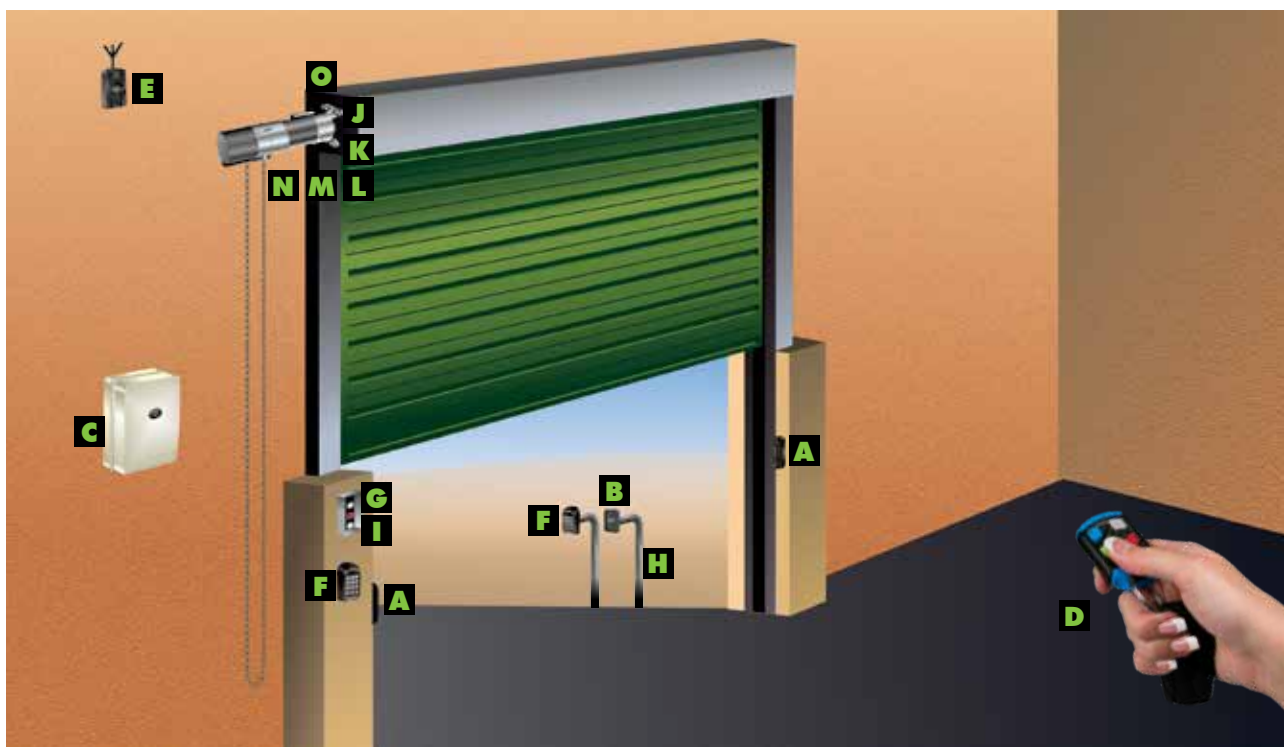
ROLLER-SHUTTER OPERATORS ACCESSORIES

A

CENTURION INFRARED SAFETY BEAMS

Always recommended on any automation installation to increase the safety of the automated system.

B

SOLO/LATTICE PROXIMITY ACCESS CONTROL

Proximity reader for allowing access for both pedestrians and vehicles.

C

RSO WALLBOX

A fully weatherproof wall-mounted enclosure for your **RSO5DC** operator's electronics, providing a neat and convenient central point of operation

D

CENTURION NOVA TRANSMITTER

Incorporates ultra-secure code-hopping technology. Available in one-, two-, three- and four-button variants.

E

G-ULTRA GSM DEVICE

The ultimate new GSM solution for monitoring and activating electrical appliances via your mobile phone.

F

SMARTGUARD or SMARTGUARDAIR KEYPAD

Cost-effective and versatile wired or wireless keypad, allowing access for pedestrians.

G

LOCKABLE BOX FOR WALL SWITCH

A stylish, lockable stainless steel enclosure for the **RSO** Wall Switch to increase the security of the system by preventing unauthorised use of the pushbutton controls.

H

GOOSENECK

Steel pole for mounting intercom gate station or access control.

I

MANUAL PUSHBUTTON

Industrial-rated switch, typically to allow a guard to manually activate the barrier.

J

RSO DRIVE CHAIN

Drive chain with a pitch of 5/8th of an inch for use with the **RSO5R**, **RSO5RE**, **RSO5R3P** and **RSO5DC** models.

K

RSO9 DRIVE CHAIN

Drive chain with a pitch of 1 inch for use with the **RSO9** model.

L

RSO9 MOUNTING PLATE

An exceptionally hardy foundation plate used for mounting the **RSO9** industrial roller-shutter operator.

M
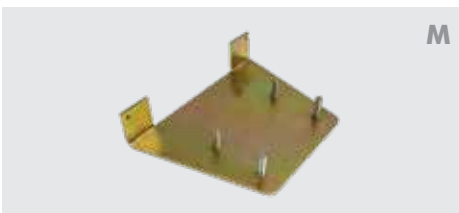
MOUNTING PLATE

A sturdy foundation plate used for mounting the **RSO5R**, **RSO5DC**, **RSO5R3P** and **RSO5RE** models.

N

RSO TAPER LOCK BUSH

The taper lock bush is used to secure the **RSO** sprocket to the curtain's shaft. Available in two sizes to suit the majority of industrial roller-shutters.

O

Fits onto the door shaft and engages with the RSO pinion to drive the curtain. Available for the **RSO5R**, **RSO5DC**, **RSO5R3P** and **RSO5RE** models as well as for the **RSO9**

ROLLER-SHUTTER OPERATOR KITS

RSO5R3P 500KG OPERATOR KIT — 1

Product Code: RSO5R3P_FKIT

- **1 x RSO5R3P operator including:**
  - 1 x Sprocket **A**
  - 1 x Drive chain **B**
  - 1 x RSO lock taper bush **C**
  - 1 x Wall Switch **D**
- 1 x Mounting plate **E**

RSO5RE 500KG OPERATOR KIT — 2

Product Code: RSO5RE_FKIT

- **1 x RSO5RE operator including:**
  - 1 x Sprocket **A**
  - 1 x Drive chain **B**
  - 1 x RSO lock taper bush **C**
  - 1 x Wall Switch **D**
- 1 x Mounting plate **E**

RSO9 900KG OPERATOR KIT — 3

Product Code: RSO90_FKIT

- **1 x RSO9 operator including:**
  - 1 x Sprocket **A**
  - 1 x Drive chain **B**
  - 1 x RSO lock taper bush **C**
  - 1 x Wall Switch **D**
- 1 x Mounting plate **E**

RSO5DC 500KG OPERATOR KIT — 4

Product Code: RSO5DCKIT

- **1 x RSO5DC operator including:**
  - 1 x Sprocket **A**
  - 1 x Drive chain **B**
  - 1 x RSO lock taper bush **C**
  - 1 x Wall Switch **D**
- **1 x Wall box including G**
  - 1 x 7Ah battery **H**
  - 1 x Controller **J**
  - 1 x 2A 24V charger **I**
- 1 x Mounting plate **E**

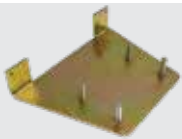| 1   RSO5RE | 2   RSO5R3P | 3   RSO5DC | 4   RSO9 |

| A | B | C | D |
| Sprocket assembly | Drive chain | RSO lock taper bush | Wall Switch |

| E | F | G | H |
| Mounting plate | RSO9 mounting plate | Wallbox | 7Ah Battery |

| I | J |
| 2A 24V charger | RSO controller |

SOLAR EQUIPMENT FOR ACCESS AUTOMATION

Centurion Systems now offers a comprehensive range of solar panels and supporting equipment to help you harness the power of the sun, enjoy a greener lifestyle, reduced electricity bills and complete power failure autonomy. There's no better time to go solar!

CENTURION
SOLAR PANELS AND ACCESSORIES

Our range of solar panels are constructed from ultra-efficient polycrystalline and have been designed to provide a reliable and cost-effective alternative energy solution for applications where mains power is either not available, or not desirable. We also supply brackets, regulators, deep-cycle batteries and battery enclosures, meeting your every solar need.
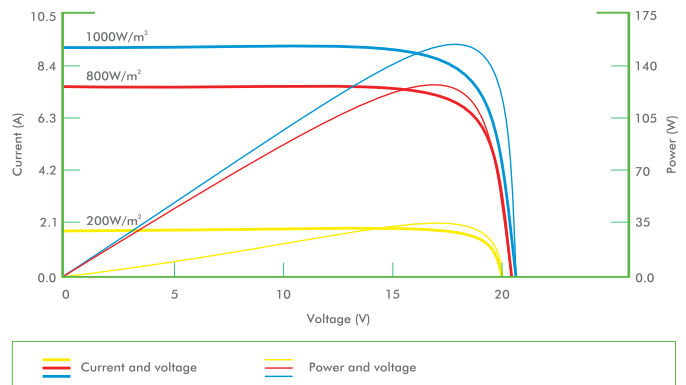
MAIN FEATURES

Mechanical Features

- Minimal voltage drops, even in shade
- Great solar cell conversion efficiency
- White tempered glass, EVA resin, weatherproof film and anodised aluminum frame to provide efficient protection from the severest environmental conditions
- Perfect for grid applications
- Durable with limited maintenance and repair
- Easy to install and set up with our custom-made mounting bracket, saving you time and money
- Complete power failure autonomy, off-the-grid
- Cost-effective and reliable source of power
- Helps decrease your consumption of electricity from the grid
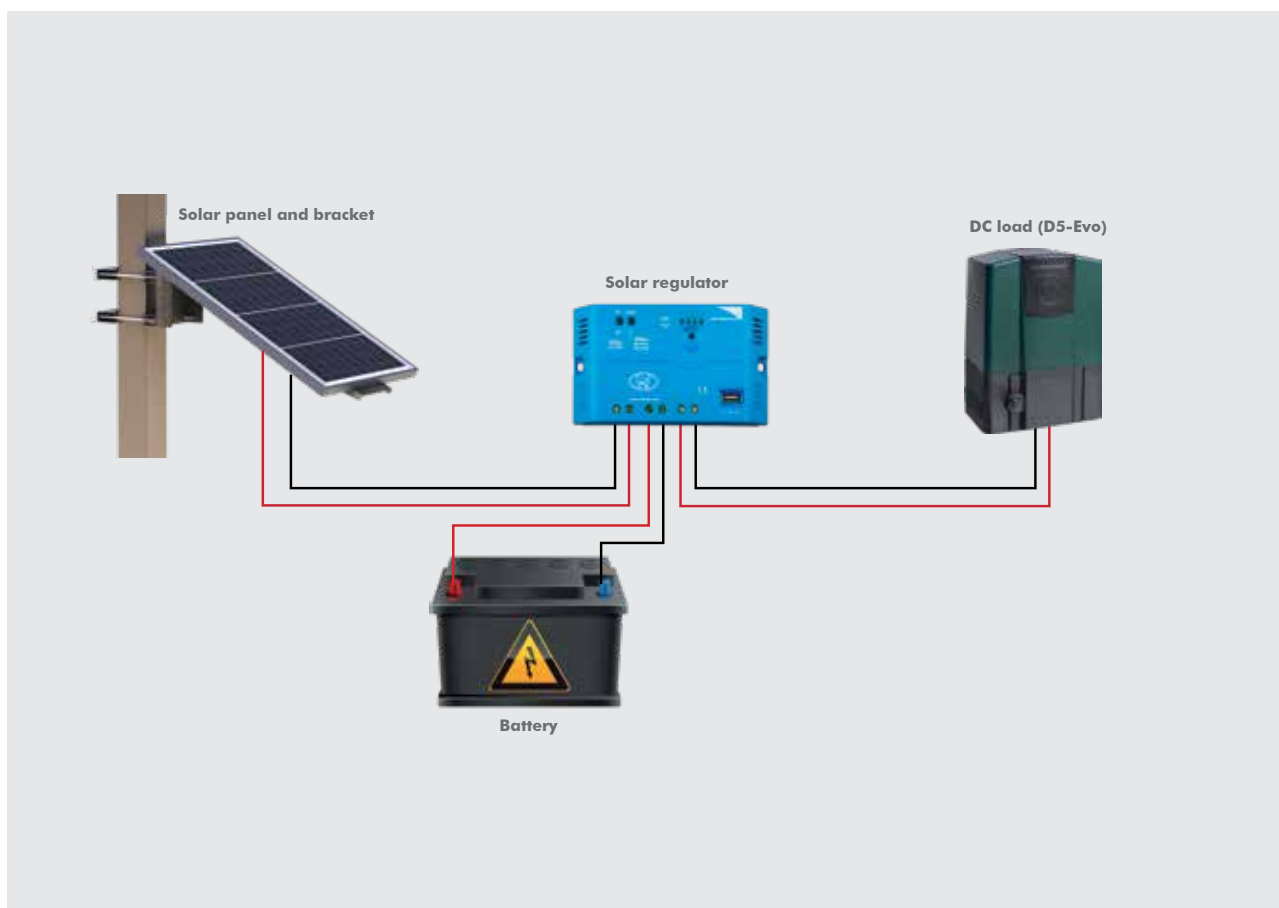- Environmentally friendly

SOLAR PANELS

Type of module	40W	60W	80W	100W	150W
Maximum power	40W	60W	80W	100W	150W
Tolerance	± 3%	± 3%	± 3%	± 3%	± 3%
Open-circuit voltage	22.2V	22.2V	22V	22V	22.5V
Short-circuit current	2.37A	3.56A	4.85A	6,06A	8,56A
Maximum power voltage	18.2V	18.2V	18V	18V	18.5V
Maximum power current	2.2A	3.3A	4.44A	5.56A	8.11A
Module efficiency	12.84%	14.22%	13.05%	14.9%	15.2%
Solar cell efficiency	17.3%	17.26%	17.2%	17.2%	17.1%
Series fuse rating	15A	15A	15A	15A	15A
Terminal box	IP65	IP65	IP65	IP65	IP65
Maximum system voltage	1000V DC	1000V DC	1000V DC	1000V DC	1000V DC
Operating temperature	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C	-40°C to 85°C
Weight	4kg	5.1kg	7.3kg	8kg	12kg
Packaging dimensions	Length: 465mm x Width: 670mm x Height: 25mm	Length: 630mm x Width: 670mm x Height: 30mm	Length: 915mm x Width: 670mm x Height: 30mm	Length: 1005mm x Width: 670mm x Height: 30mm	Length: 1480mm x Width: 670mm x Height: 35mm

Current-voltage and power-voltage characteristics - various irradiance levels

Typical perfomance characteristcs	
Current Temperature Coefficient %/°C	+0.06
Voltage Temperature Coefficient %/°C	-0.34
Power Temperature Coefficient %/°C	-0.47
Performance Warranty: 90%output, 12 year 80%output, 25 years	

Legend: Current and voltage — Power and voltage

Solar panel and bracket

Solar regulator
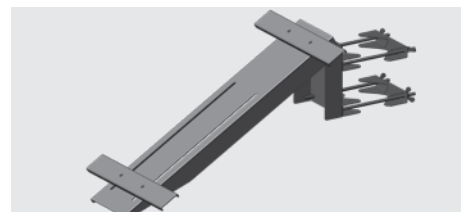
DC load (D5-Evo)

Battery

SOLAR EQUIPMENT FOR ACCESS AUTOMATION GUIDE

SOLAR REGULATOR 20A CHRG L/SHED PWM USB

For monitoring the condition of your battery according to the power generated by your solar panels.

UNIVERSAL SOLAR PANEL BRACKET ASSEMBLY

Robust and versatile galvanised mild steel bracket suitable for mounting a variety of solar panels between 20W and 150W in size.

BATTERY BOX

Durable and secure for the safety and protection of your battery. 2 x CP5C2 fits into the secure box. Comes with a theft-resistant cage.

BATTERY BOX

Durable and secure for the safety and protection of your battery. Suitable for a single CP5C2.

DEEP-CYCLE BATTERY

CABLE SOLAR 4mm AND 6mm

Black and red with insulation and jacket materials. Extremely resistant to weathering, UV-radiation, abrasion, water and acids.

MALE SERIES MC4 CONNECTOR – POSITIVE

An easy-to-install connector system used to connect CENTURION solar panels. Consists of male and female connecting to the branch connectors.

FEMALE SERIES MC4 CONNECTOR – NEGATIVE

An easy-to-install connector system used to connect CENTURION solar panels. Consists of male and female connecting to the branch connectors.

MALE PARALLEL BRANCH CONNECTOR – POSITIVE

Branch Connectors are used to connect two MC4 Connectors in parallel.

FEMALE PARALLEL BRANCH CONNECTOR – NEGATIVE

Branch Connectors are used to connect two MC4 Connectors in parallel.

www.centsys.com

SERIES CONNECTION

The **Series Connection** is commonly used to increase your voltage range. If you require a 24V setup you would connect two 12V batteries together by connecting the positive and negative terminals of each battery together.
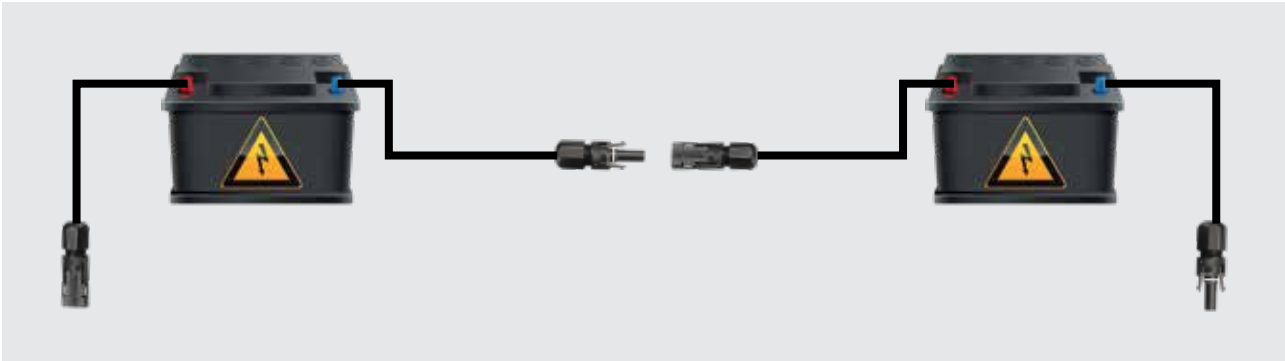
PARALLEL CONNECTION

The **Parallel Connection** is commonly used to increase the system capacity (watts) while still only supplying 12V. This is achieved by joining the positive and negative connections together as one.
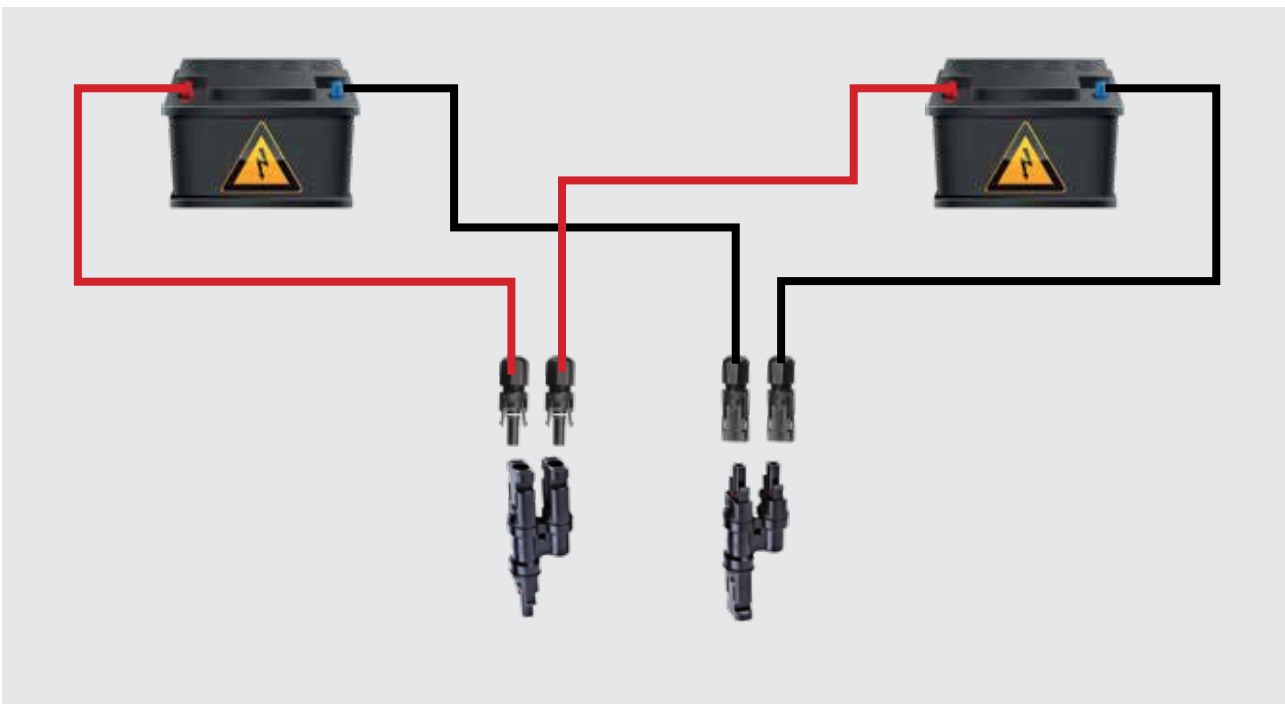
GOOD MORNING SUNSHINE

Is there anything more spectacular than an African sunrise? That gorgeous blood-red sphere sits atop its throne of clouds, playfully throwing its amber rays and painting the landscape like an artist would a blank canvas. The very horizon seems ablaze as the grass of countless fields, the concrete spines of many skyscrapers, again feel the warm caress of another beautiful morning.

Of course, the sun is good for more than Instagram fodder or the backgrounds to motivational Facebook postcards, and in recent years has become an important source of renewable energy. Amid worries about the effects of global warming – which is caused by trapped greenhouse gasses, the result of excessive carbon emissions – and concerns regarding the country's unstable power supply, people are turning their attention skyward, towards the world's oldest power cell. The rising popularity of solar has also meant that the prices of equipment and installations have come down significantly since it first came onto the scene, while lower energy bills make up yet another reason to stick it to the energy companies and go off-grid.

You'll be pleased to know that everything you need for a complete solar installation can be found at your nearest CENTURION branch, including:

Solar Panels

Solar panels are photovoltaic systems, which basically means that they convert light into electricity. We commonly refer to devices that convert one type of energy into another as "transducers", if you want to get all science-y about it. Simply put, the panels absorb the light from the sun and pump out electricity at the other end, which is a pretty sweet deal, if you ask us.

Centurion Systems stocks high-quality, robust and efficient solar panels in the following sizes: 40W, 60W, 80W, 100W, 150W,

Regulators

Imagine the line at your local licensing office without marshals to control the flow of people into and out of the building: total chaos, right? That's a bit what the electricity is like when it first comes out of the solar panel. Without anything to regulate it, the voltage can be too high, too low, or simply too erratic to be of

any real use. Luckily, you can get some reliable (and great-looking) solar regulators from CENTURION!

Brackets

Mount your panels in style with our versatile galvanised mild steel solar mounting brackets. They're easy to install and adjust, and they look good, too!

Batteries

Naturally, the whole raison d'être of solar systems is to power or charge something that would otherwise require mains power. Solar configurations are typically connected to batteries or some other power store, which are charged via the regulated voltage output. Solar power takes the place of mains voltage, replenishing the energy expended by the battery. The bigger the battery, the longer it will take to empty its "energy reservoir", and the more efficient the system will be. Why not let CENTURION take care of your power store requirements? Get your 65Ah, 100Ah or 200Ah battery directly from us!

AUDIO INTERCOM SYSTEMS

An intercom completes any access control system by providing a means for the user of screening visitors before granting access, thereby significantly increasing security.

POLOPHONE
AUDIO INTERCOM SYSTEM

The **POLOphone** is an incredibly versatile and reliable audio intercom for domestic and small commercial or industrial installations. Using only two wires, the award-winning **POLOphone** system is simple, quick and easy to install and is expandable up to five components with a maximum of two Entry Panels. This intercom system showcases a happy union of exquisite form and the ultimate in function, and makes for a formidable and cost-effective home security system.
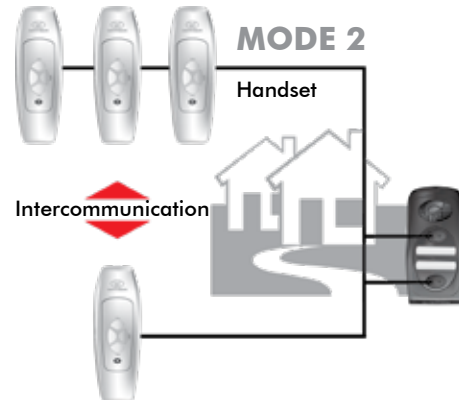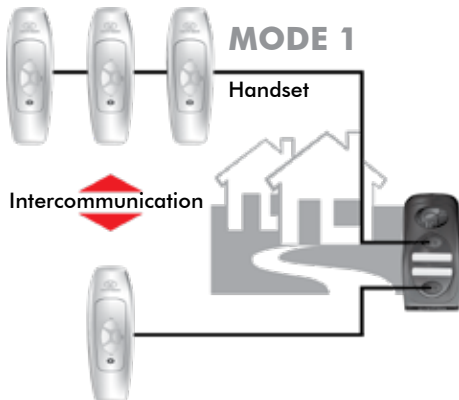
MAIN FEATURES

- Each Entry Panel fitted with two Call Buttons allowing for separate or joint calling

- Single or dual Call Button Modes of Operation – greater versatility as the system grows

- Intercommunication between two groups of handsets for added convenience

- **Each handset incorporates:**

  - Gate release for each Entry Panel

  - Auxiliary control button

  - Intercommunication Call Button

  - Gate status LED

- 12V DC operation with optional battery backup – connect to a battery backup supply for critical power failure protection

- Built-in lightning protection – for greater reliability

- An optional POLOswitch may be fitted to maximise the security of the installation
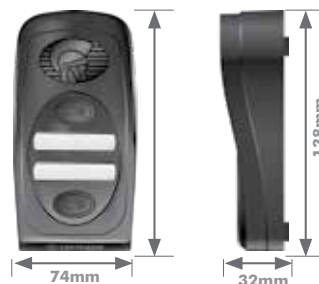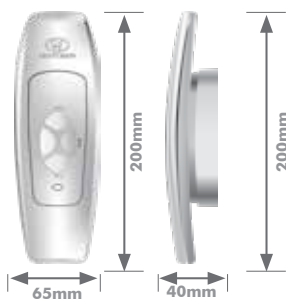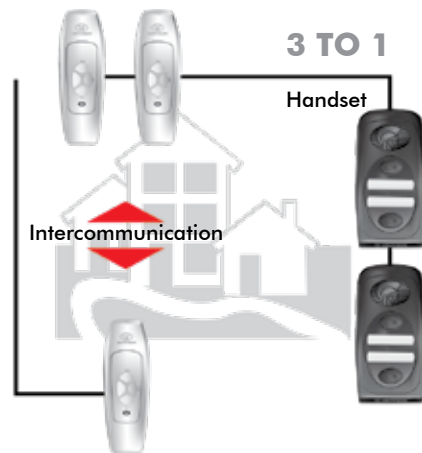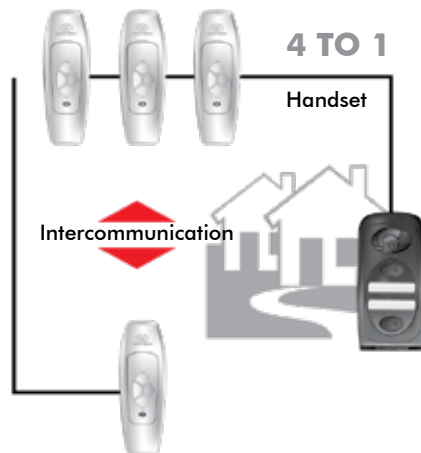
SYSTEM EXPANDABILITY AND OPERATION

The **POLOphone** system can be expanded to include five components as follows:

• Up to two Entry Panels

• Each Entry Panel is fitted with two Call Buttons

• Two groups of handsets

• Up to three handsets per group

• Intercommunication between the two groups of handsets

In addition, the **POLOphone** supports two ways for calling handsets from the Entry Panel(s). In one mode, pressing either Call Button on the entry panel(s) will ring all the handsets in the system. In the second mode, each Call Button rings a separate handset group.

MODE 1

Handset

Intercommunication
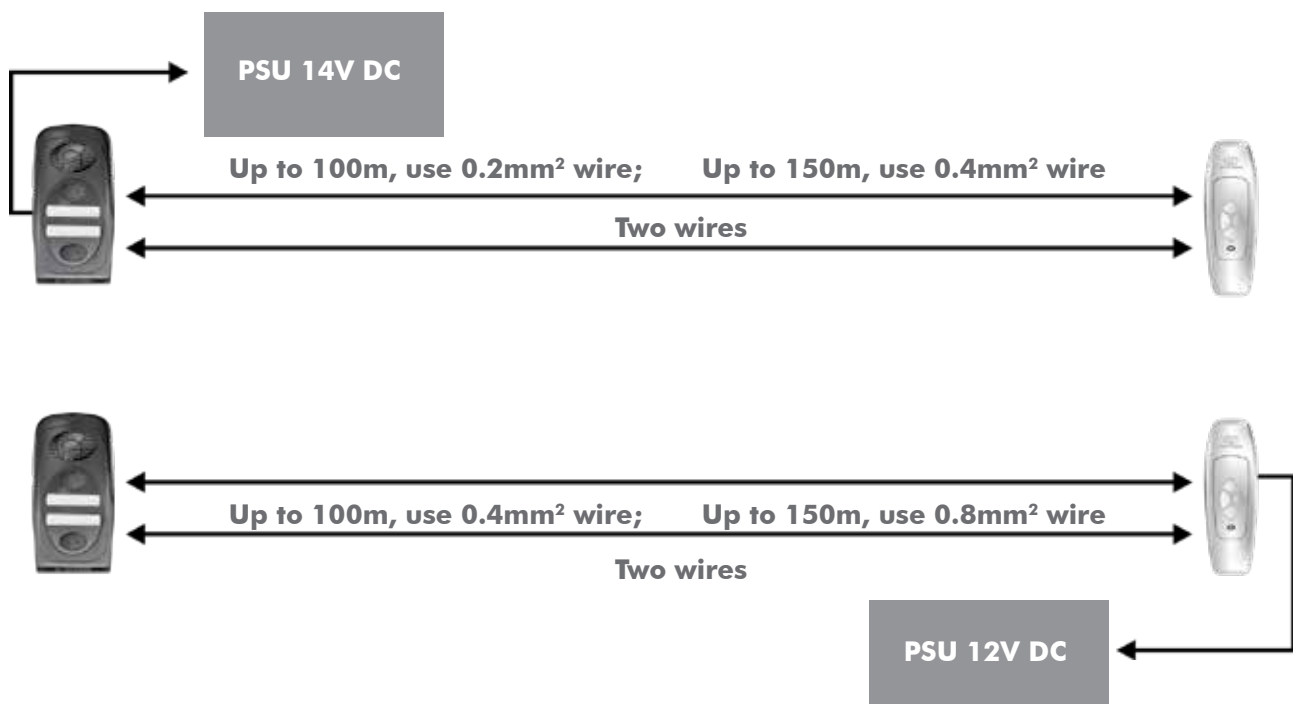
MODE 2

Handset

Intercommunication

SYSTEM EXPANDABILITY AND OPERATION

1 TO 1

4 TO 1

Handset

Intercommunication

3 TO 1

Handset

Intercommunication

200mm

200mm

65mm

40mm

138mm

74mm

32mm

TECHNICAL SPECIFICATIONS

Technical Data	POLOphone
Input voltage[1]	12V – 14V DC supplied at anyone of the components[1]
Current draw	Quiescent – 150mA ±60mA for a One-to-One kit maximum – 200mA
Speech volume	Adjustable at each Entry Panel and handset
Wiring	Two common wires polarised for speech, call and lock release
Ring tone	Electronic while button is depressed with separate tones when calling from each Entry Panel in a system or between groups of handsets
Call confirmation at entry panel	√
Wiring distance	Refer to thickness chart below
Gate/door release	Potential-free normally-open contact
Handset auxiliary contact	Requires separate wiring via two-wire bus
Operating temperature	-20°C to +50°C
Humidity	0 – 90% (non-condensing)
Degree of protection	IP55
Surge protection	√
Packaging dimensions	
Handset	Length: 70mm x Width: 47mm x Height: 211mm
Entry panel	Length: 70mm x Width: 40mm x Height: 150mm

1. If the 12V DC gate motor supply dips when the motor starts up and the intercom is being used at the same time, the speech quality might be affected.

WIRING DISTANCE AND THICKNESS

PSU 14V DC

Up to 100m, use 0.2mm² wire;   Up to 150m, use 0.4mm² wire

Two wires

Up to 100m, use 0.4mm² wire;   Up to 150m, use 0.8mm² wire

Two wires

PSU 12V DC

POLOPHONE ACCESSORIES

POLOPHONE HANDSET

Winner of the DISA Style Award. The design of the POLOphone handset is state-of-the-art. It showcases a happy union of exquisite form and the ultimate in function, making a formidable and cost-effective home security system.

POLOPHONE ENTRY PANEL

The easy-to-install Entry Panel is used to ring through to and communicate with all handsets on the two-wire bus line.

ANTI-KNOCK SHIELD

Provides greater protection for the Entry Panel against vandalism. It is fabricated from 304 grade stainless steel with a brushed finish.

POLOPHONE POWER SUPPLY

POLOphone power supply (two-pin mains adaptor) including an adaptor for three-pin socket.

GOOSENECK

Steel pole for mounting intercom gate station or access control.

INTERCOM CABLE

A polarised 8-core two wire indoor communication cable.

POLOSWITCH

The POLOswitch functions either to make up an external ring extender for a particular group of handsets or acts as a secure gate trigger for a particular Entry Panel.

G-SPEAK ULTRA
ADVANCED GSM-BASED INTERCOM SYSTEM

Answer your intercom from anywhere in the world for maximum security and convenience

The **G-SPEAK ULTRA** promotes the ultimate in convenience and peace of mind by combining wireless GSM technology with CENTURION's futuristic and stylish ULTRA interface. Infused with the DNA of innovation, the **G-SPEAK ULTRA** allows wireless communication between the user and the intercom gate station, effectively turning the user's phone into the intercom handset.

MAIN FEATURES

- Answer your intercom - and open your gate - from anywhere
- Two call buttons - learn up to two numbers per call button
- Call buttons can be individually time-barred
- Easy programming via G-WEB PLUS
- LCD screen for easy access to diagnostics
- No messy and expensive wiring
- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)
- Time-barring: Supported on Access Numbers, Inputs and Outputs

USER EXAMPLES

Simple, effortless dialling to dedicated numbers - easy to use and prevents abuse. Ideal for:

- Small children to reach their parents
- Elderly persons to reach their children and care-givers
- Warehouse receiving areas
- B & Bs and guesthouses

Devices that can be monitored via the inputs House alarm: activated:

- Electric fence: alarm triggered
- Geyser status: On/Off
- Mains power: On/Off
- Fridge aboard your boat: On/Off
- Borehole pump status: Running/Off
- Water reservoir: Full/Empty

- Entrance gate status: Open/Pedestrian
- Vehicle monitoring: Ignition or alarm activated, or off or your reservoir is full or empty
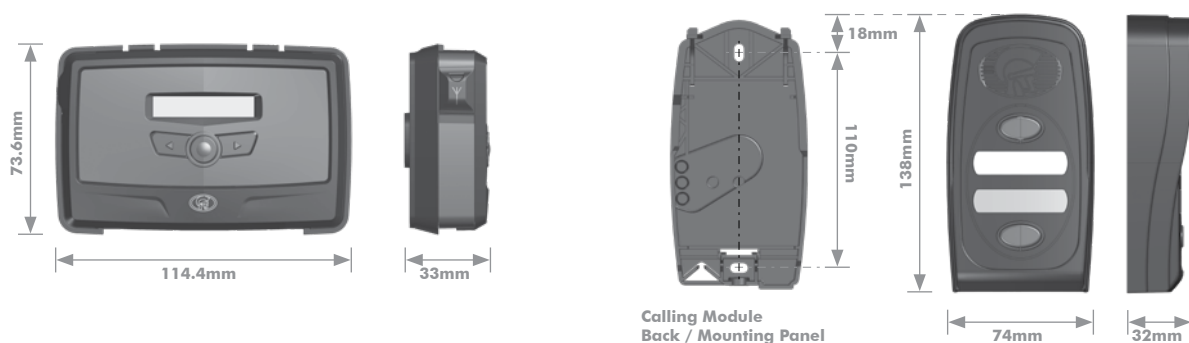
Devices that can be controlled via the outputs on Automated entrance gates

- Geysers
- Appliances, e.g. the fridge aboard your boat
- Air conditioners
- Borehole pumps
- Disable vehicle ignition systems
- Lighting systems
- Irrigation and water features
- Alarm systems

TECHNICAL SPECIFICATIONS

Technical Data	G-SPEAK ULTRA
Supply voltage range	11-24V DC
Maximum current draw	300mA @ 12V DC
Input/output current rating	50mA (Open Collector)
Input sense voltage range	0-24V DC (0-1.6V Low-input State, 5V-24V High-input State)
SIM card	Micro-format, Activated Vodacom SIM Card Supplied [1,2]
Number of configurable input/ output channels	4
Call buttons on calling module	2
Call confirmation at calling module	Yes
Speech volume	Adjustable at Calling Module using Call Buttons
Calling Module illumination	Call Buttons and labels with back-lit white LEDs
Memory capacity	• 5000 Event logs • 20 Access Profiles • 1 Custom Welcoming SMS Message for New Access Numbers • 20 Custom Output Activation SMS Messages (From User to Device) • 30 Custom Input Notification SMS/Email Messages (From Device to User) • 100 Visitor Time-barring Windows (Windows are the periods between two dates) • 30 Generic Time-barring Windows (Windows are weekly recurring) • 10 Output Activation Schedules (Schedules are weekly recurring) • 3 Daylight Saving Periods • 4 Input to Output Mapping Configurations
GSM	Quad-band: GSM850, GSM900,DCS1800, PCS1900 GPRS Class 12

1. May not be used in devices other than **G-SPEAK ULTRA.**

2. Remains the property of Centurion Systems (Pty) Ltd.

73.6mm

114.4mm

33mm

18mm

110mm

138mm

Calling Module Back / Mounting Panel

74mm

32mm

MKII (LITE)
MULTI-USER INTERCOM SYSTEM

A multi-unit intercom system that allows convenient screening of visitors at the entrance to large residential or business properties before allowing access. The system can be managed and programmed via a secure website. Since the system operates via GSM technology, there is no need for additional wiring other than the mains supply, making for a quick and easy installation. The **MKII** system also features greater security against SIM card theft by using new embedded SIM technology, thereby obviating the need for a removable SIM card.

MAIN FEATURES

- Quick and easy installation, no wiring other than mains supply – operates via 2G GSM network
- Greater security against SIM card theft using new embedded SIM technology - SIM card not required
- Mobile or fixed-line telephone doubles as an intercom handset and can activate the entrance gate and two other access devices
- Visitor may select from three contact numbers to call for access
- Allows for visitor departure control (Free-exit facility)
- Convenient web-based interface for system updating and reporting
- Programming can be done online or manually at the unit
- Online resident database administration
- Battery backup and built-in lightning protection for excellent reliability
- Robust and durable Entry Panel
- CENTURION code-hopping remote control integration and management
- Time-based access control allows for limited access to certain types of visitors, for e.g. contractors
- PIN-code entry (two pre-programmed codes per unit)
- Bulk SMS and email to complex residents
- Individual resident reporting for phone bills and gate openings

- Both successful and attempted-only gate openings are reported
- Unlimited, controlled access for residents
- Ability to communicate with security personnel at the gate
- Backlit LCD display (double-line) for easy-to-read, detailed messages
- Weatherproof enclosure suitable for outdoor or indoor environments
- Quick and reliable synchronisation and firmware updating

390mm
285mm
105mm

5 COOL USES FOR YOUR GSM MODULE

#1. Switch on a fridge

Fridges are notoriously heavy on electricity and, if it's one that you only use occasionally – say, a fridge aboard your boat or in your "man cave" - it's probably rather impractical (not to mention expensive) to keep the thing running year-round until it has run up a utility bill that looks like a teenager's phone bill. So what do you do? Just hook that puppy up to a GSM Module, Missed Call or SMS the unit an hour or two before the big game – and enjoy your ice cold brewskies right on cue. Now that's a bro move.

#2. Arm an alarm

Allow us to posit the following bone-chilling scenario: You're on your way to the dam armed with your rods and your cooler box, the sun has just started to creep over the horizon painting the sky in majestic shades of ochre. Today, you fish. And nothing is going to stop you. Suddenly you realise, much to your chagrin, that you forgot to arm the house alarm and there has been a spate of burglaries in your neighbourhood. Do you turn the car around and miss out on the opportunity to show the bass who's boss (see what we did there?)? Not if you have a GSM Module installed!

#3. Keep tabs

Up until this point we've mostly been focussing on our GSM products' switching capabilities, but did you know that you can use them for monitoring as well? Receive SMS notifications on your phone when your alarm is activated, mains power has failed or even when someone is blocking the infrared gate Safety Beams in front of your gate!

#4. Control the aircon

If airconditioners come with remotes, why would you want to control them with your phone? That's a fair point, but what if you're not in the physical vicinity of the aircon unit? Say, for example, that you're the proprietor of a bed and breakfast and you'd like guests to be greeted by a nice, cool room upon arrival but you don't necessarily have the time and resources to go to each and every room and switch on the aircon (or to switch it off once the ambient temperature has been sufficiently cooled down). Then, kemo sabe, you simply whip out your cell phone and issue the command, as it were.

#5. Monitor fluid level

Whether you want to know when your Koi pond is full, or you'd like to be notified when a diesel generator needs refilling, you can't go wrong with a GSM module acting as sentry.
Since the module will notify you via text alert once the fluid reaches a certain level, there's no need to check on it manually and thus you'll have time for life's more important things (read: fishing and watching rugby).

In what creative way have you used your GSM module? Visit our Facebook page and let us know.
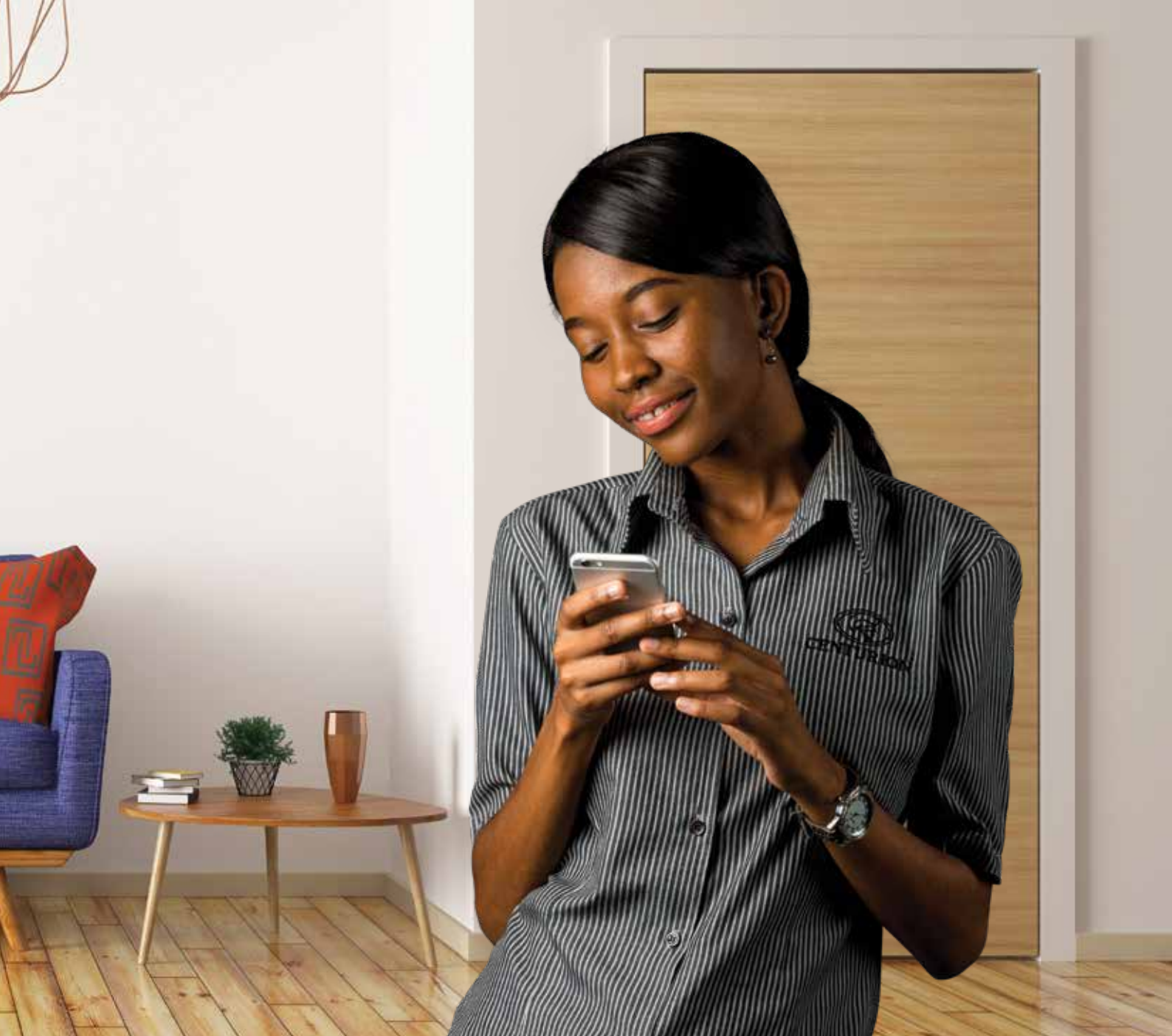
GSM-BASED MONITORING AND CONTROL DEVICES

GSM modules are the wave of the future when it comes to high-security – yet cost-effective – monitoring and control.

GSM modules from Centurion Systems allow you to monitor and control electrical devices using your mobile phone or landline, giving you the freedom and peace of mind to take home security with you wherever you go.

G-ULTRA GSM-BASED
MONITORING AND CONTROL DEVICES

With the **G-ULTRA**, your entire world fits into the palm of your hand, giving you complete control at your fingertips. This is the evolution of GSM technology, designed to offer you the ultimate flexible, mobile-based access control and monitoring solution and allowing you to transcend archaic notions of what GSM can achieve.

Unbridled. Unchained. Unmatched. Ultra.

MAIN FEATURES

- Password-protected with password changing as often as necessary so your security is never compromised
- Built-in Weekly and Visitor Access Modes to control access right down to the minute!
- Set arrival and departure dates and times; guests will only be able to activate the device's outputs between these limits, giving you maximum security and affording your guests maximum convenience
- Can be configured to monitor up to four separate electrical devices, such as your home alarm or even a water reservoir. It could send you an SMS, give you a missed call or even send you a push notification, letting you know if your alarm is on or off or your reservoir is full or empty
- Easy programming via G-WEB PLUS
- LCD screen for easy access to diagnostics
- No messy and expensive wiring
- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)

- Time-barring: Supported on Access Numbers, Inputs and Outputs
- Unlock the power of the ULTRA range with the G-REMOTE mobile app

Customisable for:

- B & Bs and guesthouses – with flexible scheduling, time-barring and automatic activations
- Complexes – 1500 user memory
- Existing gate motors – open, close and intelligently monitor your gate status, all via your phone!
- Access automation – control a plethora of access control devices including gate motors, traffic barriers and garage door operators
- Miscellaneous security applications – be notified via SMS, missed call, email or push notification of alarm activations, electric fence triggers and mains power failures

TECHNICAL SPECIFICATIONS

Technical Data	G-ULTRA
Supply voltage range	11-24VDC
Maximum current draw	300mA @ 12VDC
Input / output current rating	50mA (Open Collector)
Relay contact current rating	1A, 30V AC/DC (Resistive)
Input sense voltage range	0-24VDC (0-1.6V Low Input State, 5V-24V High Input State)
SIM card	Micro Format, Activated Vodacom® SIM Card supplied. NOTE: The supplied SIM card may only be used with this specific G-ULTRA device. The SIM Card will be deactivated and blacklisted upon insertion into any other GSM device.
Number of configurable input /output channels	4
Number of relays	2
Memory Capacity	• 1500 Access numbers • 5000 Event logs • 20 Access profiles • 1 Custom welcoming SMS message for new access numbers • 20 Custom output activation SMS messages (from user to device) • 30 Custom input notification SMS/email messages (from device to user) • 100 Visitor Time-barring Windows (Windows are the periods between two dates) • 30 Generic time-barring windows (windows are weekly recurring) • 10 Output activation schedules (schedules are weekly recurring) • 3 Daylight saving periods • 4 Input to output mapping confgurations

EXAMPLES OF DEVICES THAT CAN BE MONITORED VIA G-ULTRA INPUTS:

- House alarm: Activated
- Electric fence: Alarm triggered
- Geyser status: On/Off
- Mains power: On/Off
- Fridge aboard your boat: On/Off
- Borehole pump status: Running/Off
- Water reservoir: Full/Empty
- Entrance gate status: Open/Pedestrian
- Vehicle monitoring: Ignition or alarm activated or deactivated, or off or your reservoir is full or empty

EXAMPLES OF DEVICES THAT CAN BE SWITCHED ON, OFF OR ACTIVATED VIA G-ULTRA OUTPUTS:

- Automated entrance gates and garage doors
- Geysers
- Borehole pumps
- Alarm systems
- Lights
- Airconditioners
- Refrigerators
- Pool pumps

73.6mm

114.4mm

33mm

www.centsys.com

G-SPEAK ULTRA
ADVANCED GSM-BASED INTERCOM SYSTEM

Answer your intercom from anywhere in the world for maximum security and convenience

The **G-SPEAK ULTRA** promotes the ultimate in convenience and peace of mind by combining wireless GSM technology with CENTURION's futuristic and stylish ULTRA interface. Infused with the DNA of innovation, the **G-SPEAK ULTRA** allows wireless communication between the user and the intercom gate station, effectively turning the user's phone into the intercom handset.

MAIN FEATURES

- Answer your intercom - and open your gate - from anywhere
- Two call buttons - learn up to two numbers per call button
- Call buttons can be individually time-barred
- Easy programming via G-WEB PLUS
- LCD screen for easy access to diagnostics
- No messy and expensive wiring
- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)
- Time-barring: Supported on Access Numbers, Inputs and Outputs

USER EXAMPLES

Simple, effortless dialling to dedicated numbers - easy to use and prevents abuse. Ideal for:

- Small children to reach their parents
- Elderly persons to reach their children and care-givers
- Warehouse receiving areas
- B & Bs and guesthouses

Devices that can be monitored via the inputs House alarm: activated:

- Electric fence: alarm triggered
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- Fridge aboard your boat: On/Off
- Borehole pump status: Running/Off

- Water reservoir: Full/Empty
- Entrance gate status: Open/Pedestrian
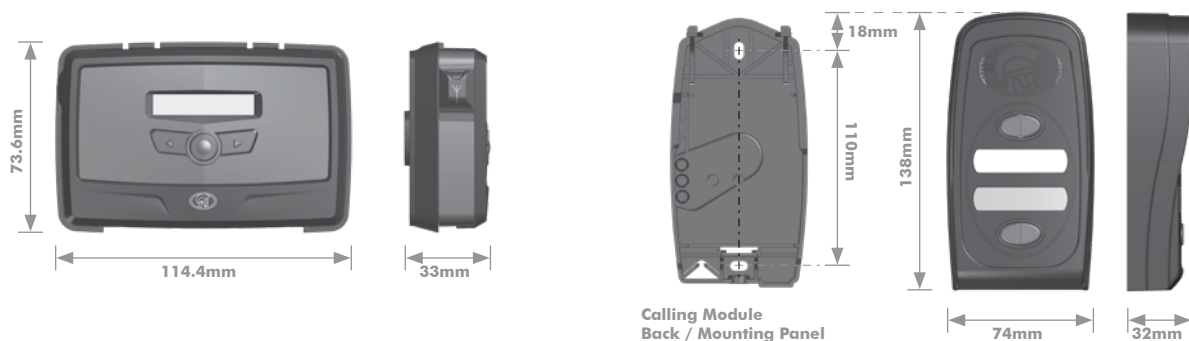- Vehicle monitoring: Ignition or alarm activated, or off or your reservoir is full or empty

Devices that can be controlled via the outputs on Automated entrance gates

- Geysers
- Appliances, e.g. the fridge aboard your boat
- Borehole pumps
- Disable vehicle ignition systems
- Lighting systems
- Irrigation and water features
- Alarm systems

TECHNICAL SPECIFICATIONS

Technical Data	G-SPEAK ULTRA
Supply voltage range	11-24V DC
Maximum current draw	300mA @ 12V DC
Input/output current rating	50mA (Open collector)
Input sense voltage range	0-24V DC (0-1.6V Low-input state, 5V-24V High-input state)
SIM Card	Micro-format, activated Vodacom SIM card supplied [1,2]
Number of configurable input/ output channels	4
Call buttons on calling module	2
Call confirmation at calling module	Yes
Speech volume	Adjustable at calling module using call buttons
Calling module illumination	Call Buttons and labels with back-lit white LEDs
Memory Capacity	• 5000 Event logs • 20 Access profiles • 1 Custom welcoming SMS message for new access numbers • 20 Custom output activation SMS messages (from user to device) • 30 Custom input notification SMS/email messages (from device to user) • 100 Visitor time-barring windows (windows are the periods between two dates) • 30 Generic time-barring windows (windows are weekly recurring) • 10 Output activation schedules (schedules are weekly recurring) • 3 Daylight saving periods • 4 Input to output mapping configurations
GSM	Quad-band: GSM850, GSM900,DCS1800, PCS1900 GPRS Class 12

1. May not be used in devices other than G-SPEAK ULTRA.

2. Remains the property of Centurion Systems (Pty) Ltd.

73.6mm
114.4mm
33mm

18mm
110mm
138mm

**Calling Module
Back / Mounting Panel**

74mm
32mm

UNLEASH THE POWER OF THE ULTRA RANGE WITH THE G-REMOTE APP

MAIN FEATURES

Experience complete convenience and control with the **G-REMOTE** mobile application, an intuitive command centre to monitor and activate your CENTURION GSM devices using only your smartphone.

- Unbelievably cost-effective monitoring and control solution – costs less than 1c per activation or notification

- Activate device outputs with a single tap

- Choose from a range of custom icons to represent the functionality associated with each button

- Personalise your **G-REMOTE** experience by customising button colours and assigning unique tones for each device linked to a profile

- **G-REMOTE** comes with built-in text-to-speech functionality

- Device monitoring via push notifications with the ability to block notifications for each individual phone

- The **G-REMOTE** app boasts a dedicated screen displaying critical system information such as airtime balances and device signal strength

- Visible IOs can be configured for each Access Profile

- Each **G-REMOTE** instance can have access to multiple devices

- Easy setup via G-WEB PLUS online interface

GEYSER

ALARM

LIGHTS

GATES

IRRIGATION

POOL PUMP

A complete solution for wireless control

- Monitor and control multiple appliances – via your phone – with a single, centralised **G-ULTRA**
- Use **WiZo-Link** modules to create a powerful, robust and expandable wireless network of connected devices
- Unleash the power of **G-ULTRA** with the **G-REMOTE** mobile application

How it works

01

Step 1: : Install one G-ULTRA in a central location. This will be your "base of operations".

02

Step 2: Install WiZo-Link devices at every appliance that your client would like to monitor and/or control, for example, a pool pump, light, geyser or gate motor. The Master WiZo will be hard-wired to the G-ULTRA, and will communicate wirelessly with the other nodes via a mesh network topology.

03

Step 3: Ask your client to download and install the **G-REMOTE** app and use their smartphone to monitor and activate linked devices from anywhere.

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NEW G-ULTRA FEATURES YOU SHOULD KNOW ABOUT

The highly-anticipated successor to CENTURION's beloved G-SWITCH-22 GSM solution made its public debut at the company's inaugural Access Automation Expo in September 2017.

Labelled the "ultimate new GSM solution", the appropriately-named **G-ULTRA** is putting a fresh new spin on mobile-based access control with a plethora of new features guaranteed to delight installers and end-users alike. According to CENTURION spokesperson Charl Mijnhardt, the **G-ULTRA** is far from a mere continuation of the G-SWITCH-22's legacy.

"It's a complete reimagining," explains Mijnhardt. "We've added the useful diagnostic screen, of course, but that's the least of what makes the **G-ULTRA** such a phenomenal product!"

Here's a breakdown of the latest features to be added to CENTURION's GSM stable:

Sleek new design

Starting with the cosmetic, the **G-ULTRA**'s remarkable intelligence is being packaged in a stylish-looking enclosure befitting such an advanced product.

Says Mijnhardt: "We are visual beings, us humans, and how something is presented, what it looks like, plays a huge role in our perception of it. We wanted to design a solution that screams intelligent, futuristic, advanced".

Internal GSM antenna

An internal GSM antenna ensures healthier, more reliable network signal strength without the frustration of trying to find the optimal location to mount the unit. If you need to fit the **G-ULTRA** in a metal enclosure, simply attach an external antenna to the onboard connector.

Easy access to diagnostics

This smart device provides intelligent feedback via a graphic user interface displaying status, system information and diagnostic messages for the complete ULTRA experience.

Intelligent monitoring of gate status

With the **G-ULTRA**, your peace of mind is not dependent on physical proximity, and the rules of physics can be bent so that it's almost like you're in two places at once.

With seamless integration with CENTURION gate motors, your **G-ULTRA** will let you know when your gate has been left open, or is in any other state specified by you through intelligent monitoring of the gate motor's status output.

Adjustable Filter settings mean that you can specify under which conditions you are notified about a particular gate status, for example, if the gate has remained open for longer than 20 seconds.

Access number profiles

The access number configuration profiles eliminates the hassle of configuring inputs and outputs and permissions every time that a new number is added.

Typical uses and applications

The **G-ULTRA** can be used in a wide variety of security and access automation applications and is fully customisable for:

- B & Bs and guesthouses – with flexible scheduling, time-barring and automatic activations

- Complexes – 1500 user memory

- Existing gate motors – open, close and intelligently monitor your gate status, all via your phone!

- Access automation – control a plethora of access control devices including gate motors, traffic barriers and garage door operators

- Miscellaneous security applications – be notified via SMS, missed call or email of alarm activations, electric fence triggers and mains power failures

The **G-ULTRA** is out now. Get yours from your nearest Centurion Systems branch or security distributor.

Unbridled. Unchained. Unmatched. Ultra.

G-WEB PLUS
ONLINE INTERFACE FOR SETTING UP AND ADMINISTERING GSM DEVICES

Use the power of the Internet to administer your CENTURION GSM device from anywhere. Whether you want to add or delete users, edit device settings, view transaction logs, load airtime or even bootload your GSM product with the latest firmware, **G-WEB PLUS** gives you the freedom to do so without having to leave your home or office.

Compatible with G-ULTRA and G-SPEAK ULTRA.

MAIN FEATURES

- Easy user interface to set up and administer CENTURION GSM devices

- Password-protected security

- Control all your CENTURION GSM devices - including the G-SPEAK intercom system - from a single user profile page

- Easy upload of multiple users' phone numbers – ideal for large residential complexes

- Quick and easy to add, edit or delete single or multiple user phone numbers

- View and export transaction logs to monitor usage

- Synchronises all settings and logs seamlessly, including detailed reports of all changes made via website

- Purchase synchronisation credits online via secure payment gateway

- Configure advanced features such as Any Number Mode, time-based access control and rising and falling edge input triggering, from the comfort of your home or office

- Support for multiple languages

Over-the-air updating of firmware

- Thanks to the G-ULTRA's over-the-air bootloading facility, you can update the device's firmware from any PC or laptop with Internet access, giving you time for life's more important things!

- Keep track of access numbers and their settings as well as names and unit numbers

- Easily upload and export access numbers using Excel

- Remotely monitor airtime, voltage and signal strength for all your devices

- Effortlessly transfer between accounts

TRANSMITTERS AND RECEIVERS

Remote control access is where security and convenience meet.
Centurion Systems has a range to comply with your site's unique security requirements, whether basic or advanced.

NOVA
CODE-HOPPING TRANSMITTERS

Your transmitter is more than a collection of electronics and buttons. It is a digital key into your home, your world, your life – and with CENTURION's award-winning **NOVA** range of transmitters and receivers, that key is completely unique.

NOVA transmitters offer code-hopping technology, meaning that each code that is transmitted is totally and randomly different to the last code transmitted. This prevents unwanted copying or cloning of the remote itself, and helps keep your home and belongings safe.

Now compatible with the ultra-secure, super-advanced HELIX range of receivers! True peace of mind is at your fingertips.

SABS
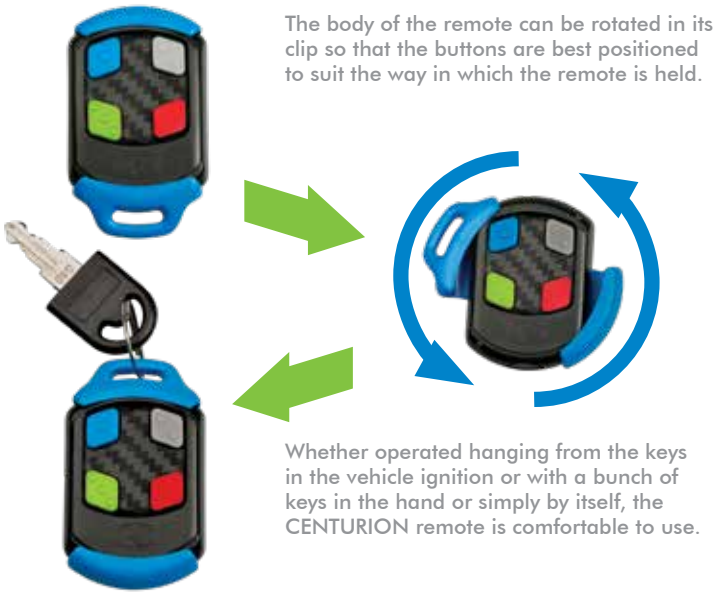**Design** Institute
AWARDS 2002
INDUSTRIAL

MAIN FEATURES

- **Security CENTURION style:** While pressing a button on a lesser transmitter might exploit your home security system's vulnerabilities, pressing a CENTURION NOVA's button is like putting an extra wall between you and would-be intruders. That's how secure it is.

- **Visible Battery-low indication:** With CENTURION transmitters, you'll never be caught off-guard. Thanks to an integral LED on the face of the transmitter, you'll be notified when it's time to change its battery, and the remote's clever, user-friendly design makes battery replacement quick and easy. To replace the battery, simply rotate the inner casing, remove from the outer clip, and use a coin to prise apart the inner casing to expose the battery. That's the kind of convenience that wins awards!

- **Functionality at your fingertips:** Whether you want to activate a single function, like opening your gate, or control your home's entire automation system, there's a CENTURION transmitter for you. CENTURION transmitters are available with one to four buttons and can even be increased to six buttons with certain CENTURION receivers – available with one, two or four channels.

- **Excellent immunity:** We don't need to send our receivers to have their shots – they're already immune! CENTURION receivers boast excellent immunity to external interference, as well as high sensitivity, which means that you get optimum range and can open your gate from a long way away. That translates into better security!

- **'The strength of many':** Our receivers and transmitters are like body-building astrophysicists: tough and durable on the outside to protect the intelligence within. Designed for outdoor use and built strong to withstand the very worst of Mother Nature's onslaughts, both the receivers and transmitters boast weatherproof and dust-proof enclosures, and their stylish, durable silicone buttons are designed to last for thousands of presses!

- **Ruler of airwaves:** CENTURION receivers won't leave you begging outside your gate like a scolded puppy. With stable narrow-band technology for improved reliability, one press of the transmitter button is all it takes. When a CENTURION transmitter speaks, the gate listens! No questions asked!

TECHNICAL SPECIFICATIONS

Technical Data	NOVA Transmitters
Operating frequency	433.92MHz
Frequency stability	0.037ppm/C2/10ppm/year
Power source	GP23 12V Alkaline battery
Operating voltage	12V DC
Minimum operating voltage	5V DC
Operating current	7mA
Operating temperature range	-15°C to 50°C
Packaged weight (including battery)	38g
Packaging dimensions	Length: 37mm x Width: 28mm x Height: 61mm

The body of the remote can be rotated in its clip so that the buttons are best positioned to suit the way in which the remote is held.

Whether operated hanging from the keys in the vehicle ignition or with a bunch of keys in the hand or simply by itself, the CENTURION remote is comfortable to use.

59mm

35mm

16mm

NOVA HELIX
SINGLE- AND MULTICHANNEL RECEIVERS

The CENTURION **NOVA HELIX** system incorporates code-hopping technology to offer the ultimate security in remote control. A unique, randomly-changing code is transmitted with each operation, making it virtually impossible to duplicate the system. The receiver uses self-learning technology, making it quick and easy to set up.

Single-channel receivers: Ultra-secure code-hopping technology to ensure that criminals can't learn their own remotes into your system. **NOVA HELIX** single-channel receivers are ideal for activating a single function such as opening a gate or triggering a garage door operator.

Multichannel receivers: Up to four different activations with Centurion Systems' **NOVA HELIX** multichannel receivers. Open a gate for vehicles, for pedestrians, switch on a Pillar Light and activate Holiday Lockout Mode - all using a single receiver.

MAIN FEATURES

- Features secure code-hopping technology
- Receivers are self-learning, with either one, two or four channels
- Receivers incorporate stable narrow-band technology
- Highly robust dust-proof and weatherproof enclosures
- Excellent immunity to external interference for outstanding reliability
- High sensitivity delivers improved range
- Choose between ultra-secure Master learning and super easy Link Learning
- Learn Links can be disabled for added security
- Supports SmartSwitch II interfacing capabilities
- Convenient Autolearn feature
- Adjustable pulse time
- **Simple and secure:** Learning new remote buttons is an absolute cinch with the intuitive Link Learning Mode: it's easy enough for Mom, Dad, Gramps and the kids to master! And speaking of "master", switch to Master Learning Mode for an even more secure system that ensures that unauthorised individuals wanting to learn in their own remotes will have a very, very hard time. PLUS: all **NOVA HELIX** receivers support the ability to disable the function jumpers for even more security

- **Timed Autolearn:** The kids leave early for school, teenagers stay out late – it can be difficult to get all the remotes together in one place for programming. Unless you have a **NOVA HELIX**, that is. Simply set up the convenient timed Autolearn function, specify how long it should remain active for, and let the **NOVA HELIX** automate remote learning for you! Multichannel receivers include advanced channel mapping functionality during Autolearn
- **Sticky Latch:** No, this isn't what happens when you handle your remote after eating a PB and J sandwich. Sticky Latch functionality means that, in the event that power to the device is reset, when the power comes back on the outputs retain the state they were in prior to the power disconnect
- **A world of convenience:** All **NOVA HELIX** receivers support SmartSwitch II interfacing capability which means that, not only can outputs be safeguarded against tampering, the receiver can also be used to control up to 15 electrical devices such as gate motors, garage door motors, pool pumps, lights, etc. (SmartSwitch II devices act as the additional physical outputs)

TECHNICAL SPECIFICATIONS

Technical Data	Single-channel Receiver	Multichannel Receiver
Operating frequency	433.92MHz	
Supply voltage	12V – 24V DC	
Quiescent current @ 12V DC	11mA	
Maximum current @ 12V DC	40mA	
Operating temperature	-15°C to 50°C	
Humidity	0 – 90% (non-condensing)	
Sensitivity	-115dB	
Self-learning memory	62 buttons	250 buttons
Receiver enclosure	UV stabilised ABS	
Degree of protection	IP54	
Packaged weight	65g	145g
Packaging dimensions	Length: 78mm x Width: 58mm Height: 31mm	Length: 117mm x Width: 67mm x Height: 35mm

SUPAHELIX
PROGRAMMING CONSOLE

SupaHelix hasn't just raised the bar in multi-unit access control – it's changed the game completely. Its high-security controller with intuitive navigation interface makes for an access control system that delivers unmatched convenience, security, logging and administration. With SupaHelix, you'll enjoy a multitude of features as well as easy administration and event logging for your peace of mind.

MAIN FEATURES

Mechanical Features

- Large LCD screen and four-button navigation make setup child's play
- USB port input for backup of system memory and bootloading
- Removable connectors – for ease of setup and maintenance
- LCD screen provides instant diagnostic feedback
- Aesthetically pleasing design – sleek, stylish and modern appearance

Electronic Features

- 10 000 button capacity – perfect for high-density residential complexes
- Robust, interference-free remote control learning
- Transaction logging for ease of user activity and system diagnostics

- Easy management of individual access – users can be selectively added or deleted within groups and sub-groups
- Virtually unlimited transaction logging via onboard SD card[1]
- Three flexible input/output channels – can each be configured as timed, momentary or latched
- Inputs are configurable as rising or falling edge – includes an adjustable filter input
- SD card contains the entire system's data – makes for quick recovery and improves data security

1. Limited SD card capacity

TECHNICAL SPECIFICATIONS

Technical Data	SupaHelix Programming Console
Supply voltage	10.5V - 30V DC
Standby current	12V:100mA (110mA)
	24V: 70mA (80mA)
Maximum current	12V: 270mA (500mA)
	24V: 230mA (400mA)
Operating temperature	-20°C to +70°C
Output rating	Open collector - maximum current 50mA per channel
Display	2.4 inch 128 x 64 transflective with backlight
Housing material	ABS
Degree of protection	IP50
Weight	370g
Packaging dimensions	Length: 171mm x Width: 47mm x Height: 232mm

Functional Data	CP104 Receiver V3.1 (or later)
Supply voltage	10.5V - 30V DC (powered through the SupaHelix)
Operating frequency	433.92 MHz
Sensitivity	110dB
Degree of protection	IP54
Maximum distance between a Programming Console and receiver	250m
Packaging dimensions	Length: 78mm x Width: 58mm x Height: 31mm

Technical Data	SupaHelix
Control three channels	√
Easily add and delete remote buttons	√
Visual diagnostics	√
Transaction logging	√
System backup and restore	√
Daylight savings time feature	√
Capacious memory	10 000 remote buttons

135mm

29mm

90mm

ACCESS CONTROL

Hi-tech.

Advanced.

Multifaceted.

These are some of the terms that best describe our diverse range of access control offerings. Unlock the future of security with CENTURION's intelligent range of proximity and biometric access control devices

SOLO STANDALONE
PROXIMITY ACCESS CONTROL SYSTEM

SOLO is designed for small standalone access control applications where security, cost and simplicity are important. This reader allows for easy programming of up to 50 user tags as well as selective, easy adding and deleting of users thanks to the reader's exceptionally user-friendly LED-based interface.

MAIN FEATURES

Mechanical Features

- Optional secure link (SmartSwitch II) - additional security measure to prevent unauthorised access even if the unit is tampered with

- Weatherproof reader

- Optional anti-knock shield for reader

Electronic Features

- 50 user tag memory - ideal for basic proximity access applications

- Tags are encrypted and cannot be cloned

- Excellent read range

- 13.56MHz operating frequency

- Output is configurable as follows:

  - Pulsed output configurable from 1 - 254 seconds

  - Latched output

- Free-exit input

- Door Sense input

- Output for external alarm - alarm is generated under the following conditions:

  - Door Held Open for an extended period of time

  - Door Forced Open

TECHNICAL SPECIFICATIONS

Technical Data	SOLO
Input voltage	10V - 12V AC or 11V - 15V DC
Current draw	
Quiescent	110mA
Maximum	150mA
Tag frequency	13.56MHz
Read range	80 - 100mm
Reader dimensions	
Surface-mount	Length: 85mm x Width: 29mm x Height:129mm
Flush-mount	Length: 85mm x Width: 15mm x Height:125mm
Weight	0.1kg
Temperature range	-20°C to 50°C
Humidity	0 – 90% (non-condensing)
Degree of protection	IP55
Number of tags (including masters)	**51**
Number of master tags	2
Voltage-free relay output	√
Relay time configurable (off/1 - 254s/latching)	√
Door open timer (0 - 254s/continuous)	√
Door open pre-warn timer (0 - 254s/continuous)	√
Door open alarm (Off/1 - 254s/continuous)	√
Door forced alarm (Off/1 - 254s/continuous)	√
User interface	5 LEDs
Door sense input	√
Free-exit input	√
Onboard buzzer	√
Output for optional external alarm	√
SmartSwitch II compatible	√
Anti-tamper switch facility	√
Networkable	-
Anti passback	-
Firmware upgrade facility	√
Packaging weight	300g
Packaging dimensions	Length: 155mm x Width: 38mm x Height: 215mm

125mm
85mm
29mm
25mm
10mm

Surface-mount

Flush-mount

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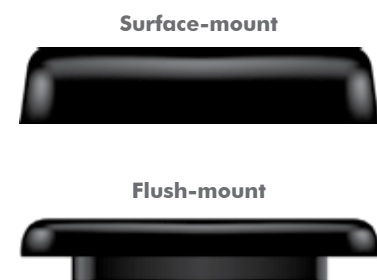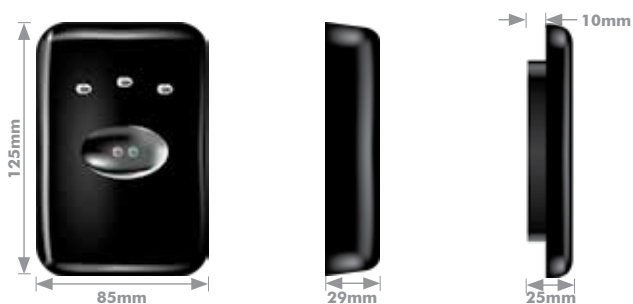
LATTICE NETWORKED
PROXIMITY ACCESS CONTROL SYSTEM

Start as a standalone proximity unit and expand into a powerful **Lattice** networked system with up to 32 readers. A handy three-digit LED display allows for easy programming of user tags and Lattice's user-friendly interface makes selective adding and deleting of tags veritable child's play. For added functionality and even simpler administration, the system can be interfaced with the LatticeWARE computer software package. Lattice allows for the addition of up to 1000 user tags.

MAIN FEATURES

Mechanical Features

- Weatherproof reader
- Optional anti-knock shield for reader
- Optional secure link (SmartSwitch II)
- Choose from either surface-mount or flush-mount fascias (included in kit)

Electronic Features

- 1000 user tag memory – perfect for larger applications with many users
- Tags are encrypted and cannot be cloned
- 13.56MHz operating frequency
- Start with a standalone controller and add up to 31 Slave Heads – great versatility
- Excellent read range

- Dual outputs on the controller and a single output on the Slave Heads – configurable as follows:
  - Pulsed output configurable from 1 - 254 seconds
  - Latched output
  - Free-exit input
  - Door Sense input
- Output for external alarm – alarm is generated under the following conditions:
  - Door Held Open for an extended period of time
  - Door Forced Open
- Anti-passback for improved security
- Limited Uses support – useful in pay-per-use and security applications
- Backup Memory Module available

TECHNICAL SPECIFICATIONS

Technical Data	L1000	LSH
Input voltage	9V - 12V AC or 12V - 15V DC	
Current draw		
Standby	110mA	110mA
Operating	170mA	150mA
Tag frequency	13.56MHz	
Read range	80 - 100mm	
Reader dimensions (mm)		
Surface-mount	Length: 85mm x Width: 29mm x Height:125mm	
Flush-mount	Length: 85mm x Width: 15mm (visible) x Height:125mm	
Weight	0.1kg	
Temperature range	-20°C to 50°C	
Humidity	0 – 90% (non-condensing)	
Degree of protection	IP55	
Standalone capability	√	-
Dipswitch configurable network address	-	√
Relay time configuration (Off/1 -254s/Latch)	√	√
Open collector output time configuration (Off/1 - 254s/latch)	√	√
Door open timer (0 - 255s)	√	√
Door open pre-warn timer (0 - 254s/infinite)	√	√
Door open alarm (Off/1 - 254s/infinite)	√	√
Door forced alarm (Off/1 - 254s/infinite)	√	√
Reduced power consumption	√	√
Functional tags in off-line situation	1000	40
Output channels	2	1
Voltage-free relay output (Potential-free)	√	√
Open collector output (SmartSwitch II enabled)	√	√
Free-exit input (Potential free normally open contact - FRX)	√	√
Door Sense input (Potential free normally closed contact - DOOR SEN)	√	√
Output for optional external alarm (Potential free normally closed contact - Optional extra)	√	√
Anti-tamper indication	√	√
User interface - 3 digit display + 3 LEDs	√	-
User interface - 5 LEDs	-	√
Hardware link to TUH (Lattice Take-up Head)	√	-
Alarm output time(s) increments	0 - 254 sec; adjustable in 1 sec increments	
Packaging weight	300g	
Packaging dimensions	Length: 155mm x Width: 38mm x Height: 215mm	
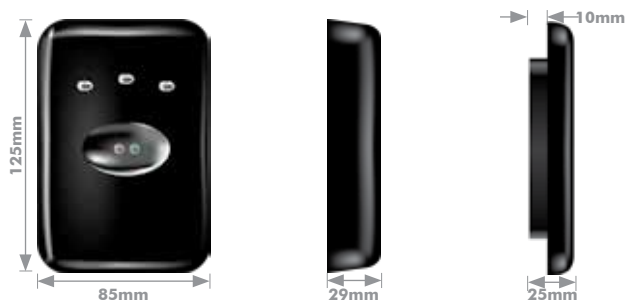
LATTICEWARE NETWORKED
PROXIMITY ACCESS CONTROL SYSTEM

The **LatticeWARE** software is intuitive, easy to use and greatly enhances the functionality of the Lattice system.

The Lattice system, whether a standalone reader or networked system, can be further scaled by adding a PC. The PC or laptop becomes the Lattice server, which will now behave as the brains of the operation. The PC links to the controller via the Lattice Take-up Head (TUH). The TUH provides the system with a convenient tag reader for initial tag take-up and administration.

The **LatticeWARE** software makes the task of modifying and managing the system even simpler.

MAIN FEATURES

Electronic Features

- Interface with the Lattice system at any stage

- Complete and easy setup

- Full management of the system

- Integrated time-barring support

- Multiple operating reports with export capability

- **LatticeWARE** is accessible from any PC in a networked system
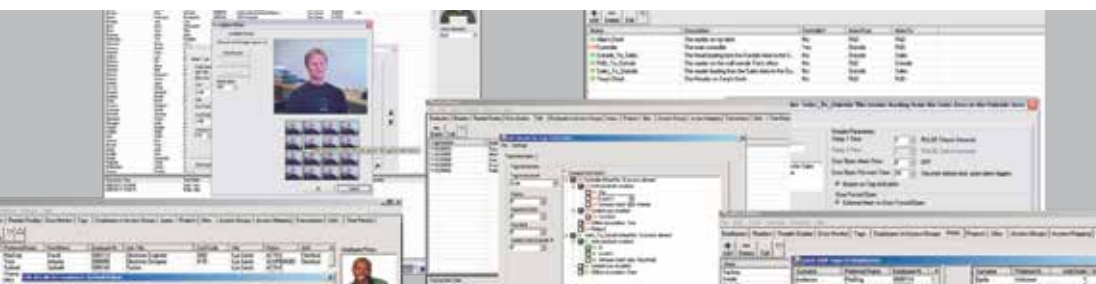
SOLO AND LATTICE ACCESSORIES

SMARTSWITCH II

The SmartSwitch II serves as an interface board that provides for an additional security measure, effectively guarding your system against any unwarranted triggers. It relies upon the receipt of a coded signal from the controller, which will then respond to the trigger.

SOLO/LATTICE ANTI-KNOCK SHIELD

A Grade 304 stainless steel enclosure with a stylish and durable brushed finish for protecting your SOLO and lattice reader form getting knocked and damaged
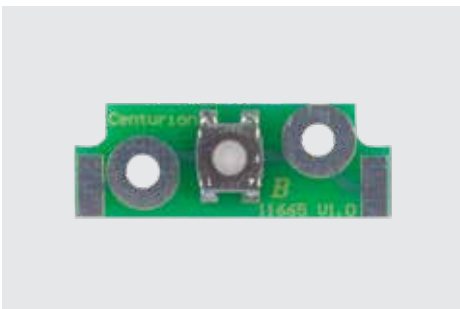
SOLO AND LATTICE TAMPER INDICATION SWITCH

A useful ancillary micro-switch that can be connected to the reader's onboard buzzer or a third party alarm system and provides an output whenever the reader is removed from its enclosure.
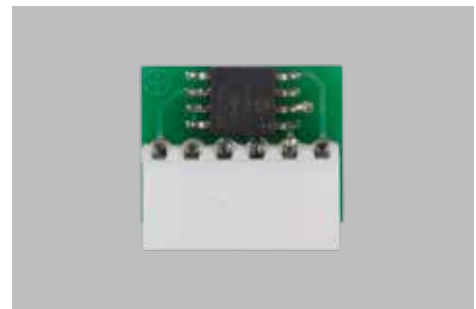
BACKUP MEMORY MODULE LATTICE CONTROLLER

Effortlessly create a backup of all tags and settings saved to a Lattice controller's memory for superior data security.

SMARTGUARD
HIGH-SECURITY KEYLESS ACCESS CONTROL

The CENTURION **SMARTGUARD** range provides efficient, secure keyless access control by enabling users to store up to 1000 unique codes comprising one to ten digits in its non-volatile memory. A variety of electrical devices can be activated (including gate operators, alarm panels, water pumps, etc.) by making use of one or more of the outputs provided.

SMARTGUARD: Multi-function, high-security, wired, keypad access control.

SMARTGUARDair: High-security, wireless keypad acceass control.

SMARTGUARD

SMARTGUARDair

MAIN FEATURES

SMARTGUARD

- **SMARTGUARD** for hard-wired installations – compatible with almost any access control device

- 1000 unique codes using one to ten digits – for greater security and versatility in a multi-user application

- Three-channel output – activate up to three devices

- Selectively add and delete user codes – convenient and secure management of the system

- Backup Memory Module – guarantees data security

- Limited Uses Counter – grant access to armed response, garden services, etc. - codes are automatically rendered invalid after pre-set number of uses

SMARTGUARD air

- Wireless for quick and easy installations

- 1000 unique codes using one to ten digits – for greater security and versatility in a multi-user application

- 15-channel output – activate up to 15 compatible devices

- Selectively add and delete user codes – convenient and secure management of the system

- Backup Memory Module – guarantees data security

- Limited-uses counter – grant access to armed response, garden services, etc. - codes are automatically rendered invalid after use

- Operates on two AA Alkaline batteries (included), or a separate 12V power supply

- Up to two years of battery life with up to 300 uses per day

- Wireless operating range of up to 30 metres (line-of-sight)

- Compatible with CENTURION's code-hopping receivers

TECHNICAL SPECIFICATIONS

Technical Data	SMARTGUARD	SMARTGUARDair
Input voltage	12V - 24V AC/DC	2 x AA Alkaline batteries (included)
Current	32mA (standby) – 180mA (max)	NA
Operating temperature	-20°C to +60°C	-18°C to +55°C
Operating humidity	0-90%[1]	
Operating range	NA	Up to 30m[4]
Battery life	-	Two to five years[2]
Operating frequency	NA	433MHz
Outputs	Three (One relay output, two open collector outputs) Up to 15 individual channels	Up to 15 individual channels[5]
Output pulse time range	1 – 255 sec (adjustable) or latched	NA
Memory	1 000 user codes	
Limited-uses codes[3]	1 - 254 activations	
Memory retention	>200 years	
Dimensions	Width:79.5mm x Depth: 38mm x Height: 131.5mm	
Housing material	Polycarbonate	
Colour	Black	
Degree of protection	IP55	
Packaging weight	215g	
Packaging dimensions	Length: 82mm x Width: 40mm x Height: 133mm	

1. Non-condensing
2. Subject to usage – refer to the Battery Low Indication section of the manual
3. A code that will be automatically deleted from the system's memory after a user-defined number of activations
4. This is specified as Line of Sight range
5. Requires CENTURION code-hopping receiver(s)

131.5mm

79.5mm

38mm

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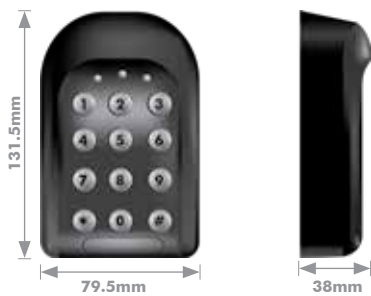
SAFLEC
COMPREHENSIVE ACCESS CONTROL SYSTEM

An excellent access control system for small, medium to large networked installations. Besides the proximity access control readers, the system can cater for many different components such as biometric readers, Time and Attendance-compliant readers, and keypad access control.
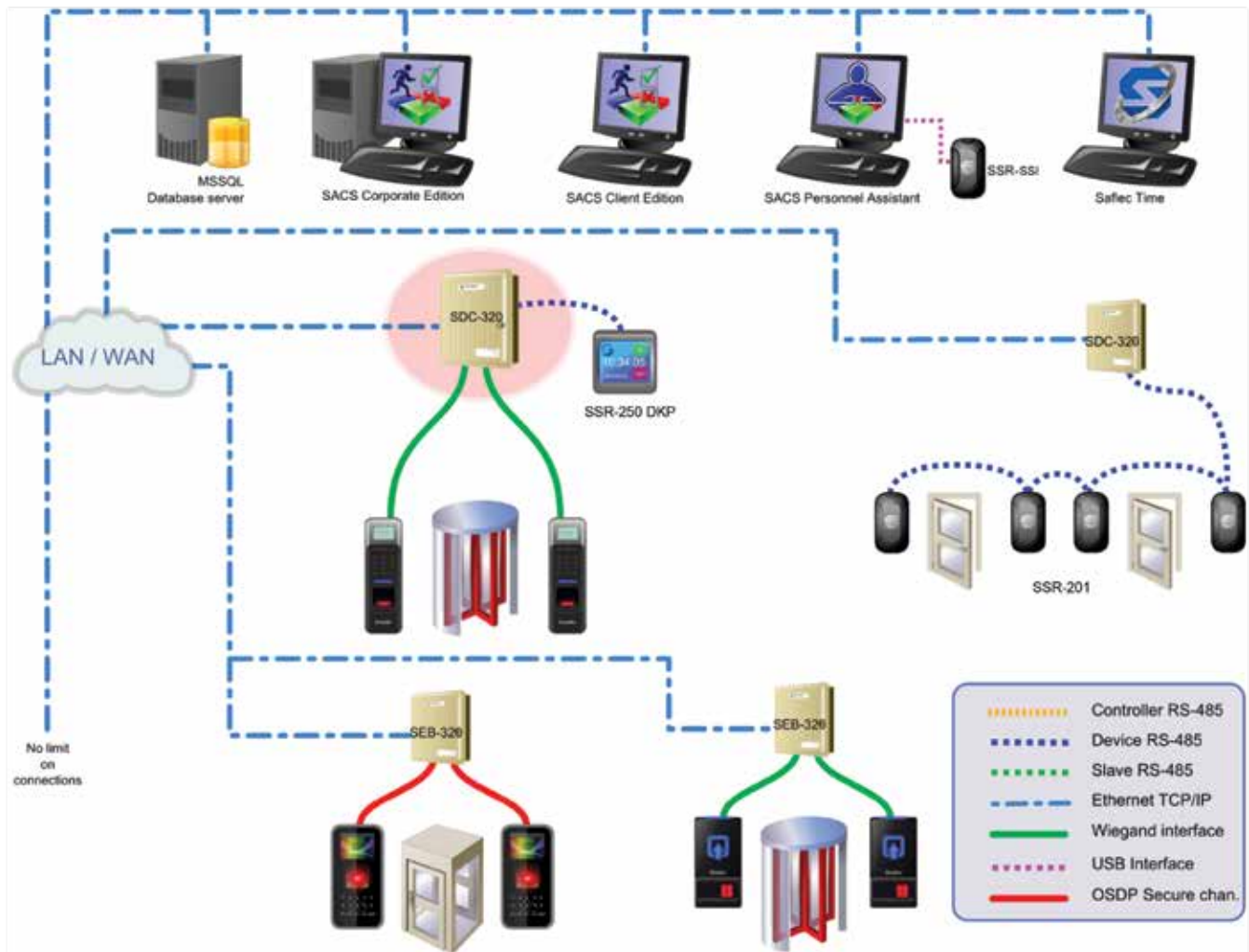
The network integrates with various protocols such as Wiegand; RS-485 and RS-232 allowing, for network flexibility.

MAIN FEATURES

- Networked, scalable access control system

- Easy user-friendly installation and administration

- Anti-passback, timed Anti-passback and Zone Control

- Flexible Time & Attendance exporting

- Site-based configuration and hardware filtering (Corporate Edition only)

- Graphical event and alert monitoring and control

- PC-based actions for controlling third party devices such as CCTV, intrusion and fire systems

- High-bright, Tri-colour LED

- Audible buzzer with different allow and deny sounds

- Industry standard 125khz operational frequency

- Reads Hitag1, Hitag2, EM4102 card technologies

- In-circuit programming for easy product updates

- Rotary coded address switch for easy addressing

- Configurable bitmasking for limiting card number length to 16, 24 or 32 bits

EXAMPLE OF A TYPICAL SYSTEM CONFIGURATION

MSSQL
Database server

SACS Corporate Edition

SACS Client Edition

SACS Personnel Assistant

SSR-SSI

Saflec Time

LAN / WAN

SDC-320

SSR-250 DKP

SDC-320

SSR-201

No limit
on
connections

SEB-320

SEB-320

	Controller RS-485
	Device RS-485
	Slave RS-485
	Ethernet TCP/IP
	Wiegand interface
	USB Interface
	OSDP Secure chan.

SAFLEC
COMPREHENSIVE ACCESS CONTROL SYSTEM

The Multiple Door Controllers can cater for, as a standard, five doors with a reader on both sides of each door for access control in both directions, and up to 1 000 000 tags. Using remote I/O boards, the system can be expanded for a further three doors, totalling eight of the same controller. A total of 16 controllers can be networked together to handle up to 256 readers or 128 doors.

However, multiple 16-controller networks can be linked together via a PC to create an ever-expanding access control mega-network.

MAIN FEATURES

SDC-320 (replacement for SDC-220)

- Offline operation; intelligence at door controller
- Onboard TCP/IP communications
- Secure enclosure designed for easy installation
- 15V DC 5A power supply + 7Ah battery backup included
- Mains monitoring with a battery-charging circuit and a low voltage cut off
- Two onboard Wiegand interface connections
- RS-485 communications for additional readers
- Four programmable digital inputs
- Two programmable relay outputs (powered or potential-free)
- 20,000+ offline transactions
- 20,000+ offline system logs
- 1,000 cardholders
- Pushbutton or egress override support
- 256 powerful offline event / action combinations
- Network-capable programming for easy product updates
- Diagnostic LEDs for easy testing
- Independent, dedicated tamper and fire inputs
.
SDC-620 (replacement for SDC-520)

- Offline operation; intelligence at the door controller
- Onboard TCP/IP and RS-232 communications
- Network-capable programming for easy product updates

- Secure enclosure designed for easy installation
- 15V DC 5A power supply + 7Ah battery backup included
- Mains monitoring with a battery charging circuit and a low voltage cut off
- Robust isolated RS-485 controller network topology
- Robust isolated RS-485 communications for up to 16 terminals
- Two Wiegand interface connections
- Four digital / analog inputs
- Two internally-powered or potential-free individually-fused relay outputs
- 6.5 Million offline transactions which are only stored for 180 days
- 3.25 Million offline system events which are only stored for 90 days
- 250,000 tag holders, with a maximum of four cards/tags per card holder. (1 000 000 tags/cards)
- Onboard OLED programmer and diagnostic display
- Expansion module header
- Dedicated / Automatic fire input
- Dedicated tamper input
- 256 powerful offline event / action combinations
- Diagnostic LEDs for easy testing

MAIN FEATURES (continued)

SDC-650 (replacement for SDC-550)

- Offline operation; intelligence at door controller
- 250 000 Tag Holders each with a maximum of our tags, thus 1 000 000 Tags
- 6 500 000 offline transactions that is kept for a maximum of 180 days
- 3 250 000 offline system logs that is kept for a maximum of 90 days
- Eight digital inputs
- Dedicated Fire and Tamper Inputs
- Five relay outputs (either powered or potential-free contacts)
- Numerous diagnostic LEDs e.g. Input status
- Robust RS-485 communications to up to 16 terminals
- Robust isolated RS-485 controller network topology
- Onboard time/date battery backup

- 15V DC 5A power supply + 7Ah battery backup included
- Mains monitoring
- Secure enclosure designed for easy installation
- Three expansion headers for expansion modules
- RS-232 and TCP/IP communications onboard
- Card capture/drop-box function available on reader
- Each door provides two pushbuttons or egress overrides
- 256 powerful offline event / action combinations
- Network-capable programming for easy product updates
- Auxiliary 12V DC output
- SD Card used for data storage

TECHNICAL SPECIFICATIONS

Technical Data	Multiple door controller SDC-650	Multiple door controller SDC-620	Multiple door controller SDC-320
Maximum door capacity (per controller) [1]	8	8	2
Tag holder capacity	1 000 000	1 000 000	1 000 000
Robust RS-485 reader connection [2]	16	16	4 (isolated)
Relay outputs - can be potential-free or powered	5	2	2
Digital inputs	8	4	4
Wiegand interface connections	-	2	2
Events and actions on controller	√	√	-
Controller offline transaction buffer capacity	6 000 000	6 000 000	20 000
Robust isolated RS-485 bus between controllers with high stability and surge protection [3]	√	√	-
Onboard communication port	TCP/IP	TCP/IP	TCP/IP
Weatherproof enclosure with lockable hinged access door	√	√	√
Integrated power supply [4]	5A	5A	5A
Battery backup	7Ah	7Ah	7Ah
Mains monitoring with a battery charging circuit and a low-voltage cut off	√	√	√
Rotary coded address switch for easy addressing	√	√	-
Onboard OLED programmer diagnostic LEDs for easy testing	√	√	√

1. Additional expansion modules required
2. Either isolated or networked topology

3. Maximum 16 controllers per device network (unlimited device networks)
4. Maximum controller output 3A

PROXIMITY READERS

SAFLEC readers cover the majority of proximity access control needs, with the Wiegand Reader SSR-202 connecting to Wiegand-compatible controllers.

Technical Data	Wiegand Reader SSR-250 DKP	Wiegand Reader SSR-202	Proximity Reader SSR-201	USB Take-on Reader SSR-221
High-bright, tri-colour LED	8	8	2	2
Audible buzzer with different sounds for allowing and denying access	1 000 000	1 000 000	1 000 000	1 000 000
Industry standard 125khz operational frequency	16	16	4 (isolated)	4 (isolated)
Reads Hitag1, Hitag 2, EM4102 card technologies	5	2	2	2
Rotary-coded address switch for easy addressing	8	4	4	4
Configurable bitmasking for limiting card number length from 16 to 40 bits	-	2	2	2
Events and actions on controller	√	√	-	-
Controller offline transaction buffer capacity	6 000 000	6 000 000	20 000	20 000
Wiegand standard connection	√	√	-	-
USB Connectivity	TCP/IP	TCP/IP	TCP/IP	TCP/IP

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SAFLEC SOFTWARE

COMPREHENSIVE ACCESS CONTROL SYSTEM

SAFLEC Software is available in three different levels to suit the needs of any installation, no matter how large and sophisticated, or small and simple.

The Corporate Edition is the most comprehensive package, followed closely by the Professional Edition.

The Standard Edition is a good solution for smaller installations where the full functionality of the SAFLEC system is not required.

MAIN FEATURES

SDC-320 (replacement for SDC-220)

- Easy, user-friendly installation and administration
- Anti-passback, Timed Anti-passback and Zone Control for greater security
- Flexible Time & Accumulation exporting
- Site-based configuration and hardware filtering [1]
- Graphical event and alert monitoring and control [1]
- PC-based actions for controlling third party devices such as CCTV, intrusion and fire systems [1]
- Tag-holder sequencing tasks (enforcing Time & Attendance clockings) [1]
- Quick search filters, low bandwidth setting and on-the-fly configuration [1]
- Random search and tag-holder counters for scripting [1]

1. Corporate edition only

Technical Data	Corporate Edition SSS-110	Professional Edition SSS-130	Standard Edition SSS-100
Flexible time & accumulation exporting	√	√	√
Multiple companies and departments	√	√	√
Mantrap (booth) and turnstile operation supported	√	√	√
16 powerful schedules per controller	√	√	√
32 public holidays integrated into schedules	√	√	√
Maximum number of doors supported	Unlimited	12	8
Timed anti-passback, anti-passback and zone control	√	√	√
Card capture/drop-box function available	√	√	√
Biometric reader integration	√	√	-
Supports personal assistant software SSS-120	√	√	-
Supports remote client software SSS-101	√	√	-
64 event controlled counters or timers per controller	√	-	-
Configurable extra data fields with automatic lists, dropdown lists, photographs or notes fields	√	-	-
Tag-holder sequencing tasks (enforcing Time & attendance clockings)	√	-	-
Site-based configuration and hardware filtering	√	-	-
Graphical event and alert monitoring and control	√	-	-
PC-based actions for controlling third party devices	√	-	-
Quick search filters, low bandwidth setting and on-the-fly configuration	√	-	-
Random search and tag holder counters for scripting	√	-	-

1. Personal Assistant Software SSS-120 is a visitor management, data capture solution which is ideal for picture capturing, card design and biometric reader take-on. Includes card printer capability - supports Windows drivers

2. Remote Client Software SSS-101 provides additional administrators full use of the master software from remote computer terminals

SAFLEC EXPANSION BOARDS
COMPREHENSIVE ACCESS CONTROL SYSTEM

Expansion boards offer a seemingly never-ending list of additional functionality to the **SAFLEC** system. From adding additional inputs and outputs and increasing memory to converting the interface protocol, virtually all potential user requirements are catered for.

SEB-722 REMOTE I/O EXPANSION BOARD

Product Code: **SFSSEB72200**

- 2 x Outputs (potential-free/powered)
- 4 x Digital/analogue inputs
- Support for 2 x Wiegand device or 4 x RS-485 readers
- Connects to SDC-550 and SDC-520/620/650 on reader network
- Lockable enclosure
- Power supply
- Battery

SEB 721 REMOTE I/O EXPANSION BOARD WITH ONBOARD RECEIVER

Product Code: **SFSSEB72100**

- 4 x receiver channels; each receiver can control up to four buttons
- Each transmitter will have a unique number that will be linked as a card holder
- Connects to SDC-550 SDC-520/620/650 and SDC-520 on reader network

SEB710 I/O EXPANSION BOARD

Product Code: **SFSEB71000**

- Extends the I/O capabilities of the SDC-520/620/650 Multiple Door Controller
- 8 x Relay outputs (configure as either powered or potential-free contacts)
- 8 x Programmable digital inputs
- 8 x Multi-purpose I/O points (set as either inputs or outputs)

SSI-301-W WIEGAND TO RS-485 CONVERTER BOARD

Product Code: **SFSSI300WO**

- Converts Wiegand data into the RS-485 used by the SDC-550 Multiple Door Controller, the SDC-520/620/650 Ethernet Controller and the SEB-720 remote I/O board
- Small, space-saving board for unobtrusive installation behind a device, or within the controller cabinet
- In-circuit programming for easy product updates
- Rotary-coded address switch for easy addressing
- Requires 12V DC power source

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BIOMETRIC COMPONENTS
BIOMETRIC FINGERPRINT READERS

Adding a biometric reader significantly increases the security of any access control installation by providing a formidable biometric identification system that is very difficult to circumvent.

Centurion Systems is a proud stockist of the award-winning **ViRDI** range of biometric access control devices.

VIRDI AC2100 AND AC2100H RF READER - BIOMETRIC READER

The **ViRDI** AC2100 is a practical and affordable fingerprint reader with Fake Fingerprint Detection technology. **ViRDI**'s patented fingerprint authentication technology is taken to the next level with network compatibility and an even larger user template capacity on the AC2100H.

VIRDI AC2200 AND AC2200H RF BIOMETRIC READER

The AC2200 is a mid-range Biometric Terminal complete with a 125KHz card reader. The terminal is utilised in exterior or harsh environments.

MAIN FEATURES

- 100 user and 200 fingerprint template capacity (VIRDA2100)
- 1500 user and 1500 fingerprint template capacity (VIRDA2500)
- Patented **ViRDI** Fake Fingerprint Detection – can detect fingerprints made from paper, silicone, wax, etc.
- IPX3 rating – IPX is an international waterproofing standard; it can be installed in virtually any environment
- Built-in RF card module for added security or to facilitate 1:1 searches
- Auto-sensing – saving energy and reducing battery usage during power failures
- Voice prompting – easy operation for first-time users
- High-performance processor – fast operating and processing speeds
- Can operate in Standalone Mode or on a TCP/IP network
- OSDP compatible (Firmware Upgrader required)

MAIN FEATURES

- Highest Ranked Algorithm (FVC Ongoing)
- Patented Live & Fake Fingerprint Detection
- Patented Fingerprint Sensors
- Patented Communication Protocol
- IP65 Ingress Protection Rated
- 44.9 x 44.96 mm Colour LCD
- 1 000 Card users / 2000 finger print capacity (AC2200)
- 1 000 Fingerprint users (1:N) / 5000 finger print capacity (AC2200H)
- **ViRDI** Mobile Card capable
- UNIS-B PLUS via Bluetooth (Android and IOS only)
- 100 000 Event Log
- Identification 1:1000 > 1 sec
- Bluetooth Low Energy (BLE)
- Standalone or Network• OSDP compatible (Firmware Upgrader required)

VIRDI AC5000 READER
BIOMETRIC READER

The **ViRDI** AC5000 RF Fingerprint Reader incorporates state-of-the-art design, elegant looks and a robust IP65-rated housing, designed to withstand any weather conditions. It has a customisable colour LCD screen, with an LED touch keypad (i.e. - plastic/rubber buttons which can wear out).

VIRDI USB ENROLMENT DEVICE
BIOMETRIC READER

The FOH02 is a USB take-on reader for enrolling large amounts of users on a **ViRDI** Access Control System.

MAIN FEATURES

- IP65-rated Outdoor Fingerprint Reader – use in any environment
- 20 000 card user and 15 000 fingerprint template storage capacity
- Patented **ViRDI** Fake Fingerprint Detection – can detect fingerprints made from silicone, wax, etc.
- High-performance processor/CPU – fast operating and processing speeds
- Can operate in Standalone Mode or on a TCP/IP
- Built-in RF card module for added security and to facilitate 1:1 searches
- Auto-sensing – saving energy and reducing battery usage during power failures
- OSDP compatible (Firmware Upgrader required)

MAIN FEATURES

- 125KHz Proximity Card and Fingerprint Enrolment Support
- Detecting fake fingerprint materials such as paper, file, silicon, rubber, etc.
- 500DPI optical sensors
- Insert into PC's USB port for easy recognition and installation

SMARTGUARD AND SMARTGUARDair ACCESSORIES
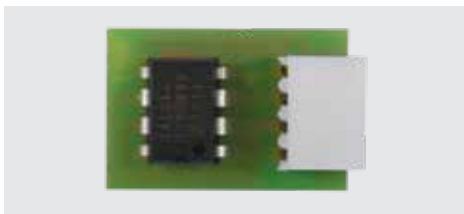
MEMORY MODULE

Create a backup of all users and settings stored in your keypad's memory using this compact and useful memory module.

ANTI-TAMPER SWITCH

An optional independent tamper switch can be fitted to provide a contact indicating if the unit has been forced open, or removed from its mountings.

ANTI-KNOCK SHIELD

An anti-knock shield constructed from brushed Grade 304 stainless steel.

NOVA AND NOVA HELIX SINGLE- AND MULTICHANNEL RECEIVERS

SMARTGUARDair interfaces with the high-security NOVA / NOVA HELIX code-hopping receivers.

RELAY SWITCH

This optional controller interfaces with the open collector output of the SMARTGUARD hard-wired keypad to provide a potential-free contact (normally-open/normally-closed). It can be used to operate a door lock, gate operator, roller-shutter operator, traffic barrier, etc.

SMARTSWITCH II

An interface board that provides additional security. It will only respond to a coded signal from the SMARTGUARD keypad. This ensures that an unauthorised person cannot operate the device by simply opening the keypad and shorting wires to trigger the device.

ACCESS CONTROL KITS

SOLO STANDALONE SYSTEM KIT

Product Code: **SOLO0001V1**
- 1 x SOLO reader – Surface or Flush-Mount **A**
- Order tags as needed **F**

LATTICE CONTROLLER KIT

Product Code: **LATC0003V1**
- 1 x Lattice controller – Surface or Flush-Mount **B**
- Order tags as needed **F**

LATTICE SLAVE KIT

Product Code: **LATS0001V1**
- 1 x Lattice Slave Head – Surface or Flush-Mount **C**

LATTICE TAKE-UP HEAD KIT

Product Code: **LATTUH01V2**
- 1 x Lattice Take-up Head, USB-type **C**
- 1 x Software package **C**

SAFLEC SDC-320 DOOR CONTROLLER KIT

Product Code: **SFSDC32000**
- 1 x Lockable enclosure including **E**
  - 1 x Controller **E**
  - 1 x Power supply **E**
  - 1 x Battery **E**
- Order tags as needed **I**

SAFLEC SDC-620 DOOR CONTROLLER KIT

Product Code: **SFSDC62000**
- 1 x Lockable enclosure including **E**
  - 1 x Controller **E**
  - 1 x Power supply **E**
  - 1 x Battery **E**
- Order tags as needed **I**

SAFLEC SDC-650 DOOR CONTROLLER KIT

Product Code: **SFSDC65000**
- 1 x Lockable enclosure including **E**
  - 1 x Controller **E**
  - 1 x Power supply **E**
  - 1 x Battery **E**
- Order tags as needed **I**

SMARTGUARDAIR KIT

Product Code: **SK/AIR_R1B**
- 1 x SMARTGUARDair keypad including **D**
  - 2 x AA Alkaline batteries **G**
- 1 x NOVA Single-channel **CENTURION** receiver **H**

A

SOLO reader

B

Lattice reader

C

Lattice Take-up head and software

D

SMARTGUARD and SMARTGUARDair keypad

E

SAFLEC SDC-320; SDC-620; SDC-650

F1

Access tag

G

AA Alkaline batteries

H

Single-channel NOVA / NOVA HELIX receiver

I

Access tag

INFRARED SAFETY BEAMS

Safety is paramount in any automated system, and adding a pair of Safety Beams to your installation goes a long way towards preventing injury or property damage.
Centurion Systems' infrared gate Safety Beams are reliable, easy to install and extremely cost-effective.

i5
INFRARED GATE SAFETY BEAMS

i5 is a cost-effective detection device for applications from safety beams to simple perimeter protection. CENTURION's **i5** beams have a range of 40 metres, are self-aligning and are unaffected by the sun. They have wide 12V – 24V AC/DC voltage supply range.

MAIN FEATURES

- Wide infrared beam makes for supremely easy beam alignment – no more battling onsite
- Highly cost-effective detection solution
- Easy commissioning thanks to LED indicators
- 40 metre range - suitable for even the widest of entrances
- Compatible with Intruder-detection Alarm functionality (a world first) - greatly improves security[1]
- Wide input voltage range Door Sense input

1. Requires this feature to be present on the operator's controller

TECHNICAL SPECIFICATIONS

Technical Data	i5
Power supply	12V – 24V DC/AC
Power consumption	Transmitter: 21mA, Receiver: 43mA @ 12V
Maximum distance	40m
Alignment [1]	Automatic - 9m² @ 10m
Output contact rating	5A @ 220V AC (non-inductive)
Operating temperature	-15°C to +55°C
Operating humidity	0% - 90% (non-condensing)
Degree of protection	IP54
Packaging weight	260g
Packaging dimensions	Length: 65mm x Width: 58mm x Height: 109mm

1. Circular area, assuming parallel surfaces

I5 ANTI-KNOCK SHIELD
Product Code: I5/AKSV2

A protective shield constructed from tough epoxy-coated mild steel to help prevent your **i5** infrared safety beams from being knocked and damaged.

105mm   58mm   30mm
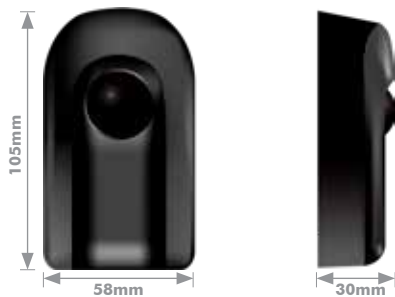
PHOTON II INFRARED GATE SAFETY BEAMS WITH WIRELESS TECHNOLOGY

Photon II infrared gate safety beams with a wireless transmitter, for a quick and easy, safe gate automation installation.

With **Photon II** infrared gate safety beams, there is no need to dig or tunnel under the driveway, amassing high installation bills and defacing your property – the wireless transmitter can be effortlessly mounted onto a wall or surface and the innovative Installer Mode will aid you in the alignment process via an onboard buzzer. Automated gate safety has never been so quick and easy.

MAIN FEATURES

- Transmitter is wireless - battery-operated saving on cabling costs
- Minimum two year battery life (2 x AA batteries included)
- Low power consumption throughout the system for greater efficiency
- 30 metre operating range – ideal for the majority of entrance gates
- Compatible with Intruder-detection Alarms for enhanced perimeter security [1]
- Transmitter provides audible battery-low indication via onboard buzzer
- Elegant slimline construction – only 50mm wide

[1] Requires this feature to be present on the operator's controller

TECHNICAL SPECIFICATIONS

Technival Data	PHOTON II
Power supply [1]	Transmitter: 2 x AA Alkaline batteries (supplied) Receiver: 12V – 24V DC/AC
Power consumption	Receiver: 30mA @ 12V DC
Transmitter battery life	Min 2 years
Battery-low indication	Audible beep
Maximum operating distance	30m
Alignment [2]	Automatic – 1m² @ 10m
Output contact	Fail-safe, N/C and N/O, (potential-free contact)
Output contact rating	3A @ 30V DC (non-inductive)
Operating temperature	-15°C - +65°C
Operating humidity	0 - 90° (non-condensing)
Housing material	ABS
Degree of protection	IP54
Packaging weight	200g
Packaging dimensions	Length: 69mm x Width: 52mm x Height: 133mm

1. Only replace with AA Alkaline batteries; do not use rechargeable batteries with this product

2. Circular area - assuming parallel surfaces
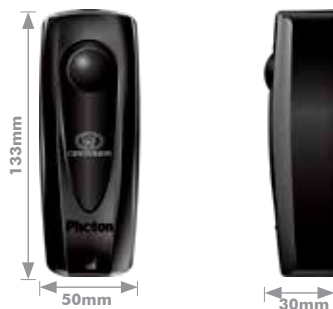
INDUCTIVE LOOP DETECTORS

Centurion Systems has taken all the hassle out of installing ground loops with our range of highly-sensitive inductive loop detectors for vehicle access applications.

Centurion Systems' loop detectors are extremely easy to install and commission and provide useful feedback for on-the-go diagnostics.

FLUX
INDUCTIVE LOOP DETECTORS

Centurion Systems has taken all the hassle out of installing ground loops with our range of highly-sensitive inductive loop detectors for vehicle access applications. CENTURION **FLUX** loop detectors are extremely easy to install and commission and provide useful feedback for on-the-go diagnostics.

FLUX SA: Fast, intelligent and reliable standalone inductive vehicle loop detector. Very fast detection speed, audio and visual diagnostics and removable terminals make for a unit that is easy to install, commission and maintain.

FLUX 11: 11-pin loop detector available in two models to suit a wide variety of vehicle access applications. A convenient 11-pin plug-in adaptor allows the **FLUX 11** to interface seamlessly with the standard loop detector 11-pin bases found in the majority of vehicle access applications.

MAIN FEATURES

Mechanical Features

- Easy to install and commission, saving you time and money
- Audible and visual diagnostics for ease of setup and maintenance
- Removable terminals for quick and easy maintenance (**FLUX SA** only)
- Standardised size allows the **FLUX 11** to be incorporated into any existing 11-pin base
- Dedicated reset button to assist with quick maintenance procedures

Electronic Features

- Very fast detection speed for quick response times – greater security
- Wide, adaptive self-tuning range for outstanding reliability
- Excellent, strong loop field strength for reliable operation

- Automatic Sensitivity Boost feature which automatically increases the sensitivity for the reliable detection of variable height vehicles
- Excellent immunity to external interference for improved reliability

TECHNICAL SPECIFICATIONS

Technical Data	Flux SA	Flux 11 DC Model	Flux 11 AC Model
Input voltage	10V - 40V DC or 7V - 28V AC		220V - 240V AC ±10%, 50Hz (single-phase)
Standby current	50mA		<10mA
Output relay rating	1A @ 125V AC)		
Detection time	4ms @ 100kHz loop frequency 10ms @ 40kHz loop frequency		
Indicators			
Visual	LED indicators showing power, loop fault, 5 LEDs to indicate Loop detection level and detect		
Audible	Buzzer with indication of loop detection level and loop fault		
Detector tuning range	15 - 1500µH		
Protection	Isolation transformer with 10kA lightning protection		
Connectors	Removable connectors for easy maintenance		11-pin base
Outputs provided	1 (Configurable as either pulse or presence)		2 (Both pulse and presence)
Mass of unit packed	85g	92g	92g
Packaging dimensions	Length: 63mm x Width: 31mm x Height: 111mm	Length: 45mm x Width: 96mm x Height: 81mm	Length: 45mm x Width: 96mm x Height: 81mm
Degree of protection	IP50		
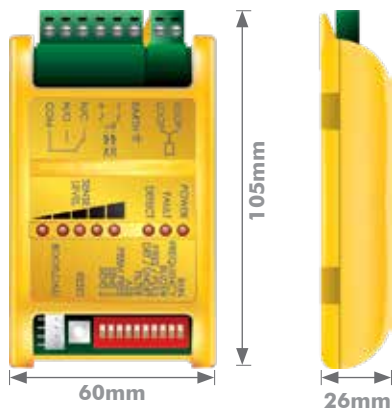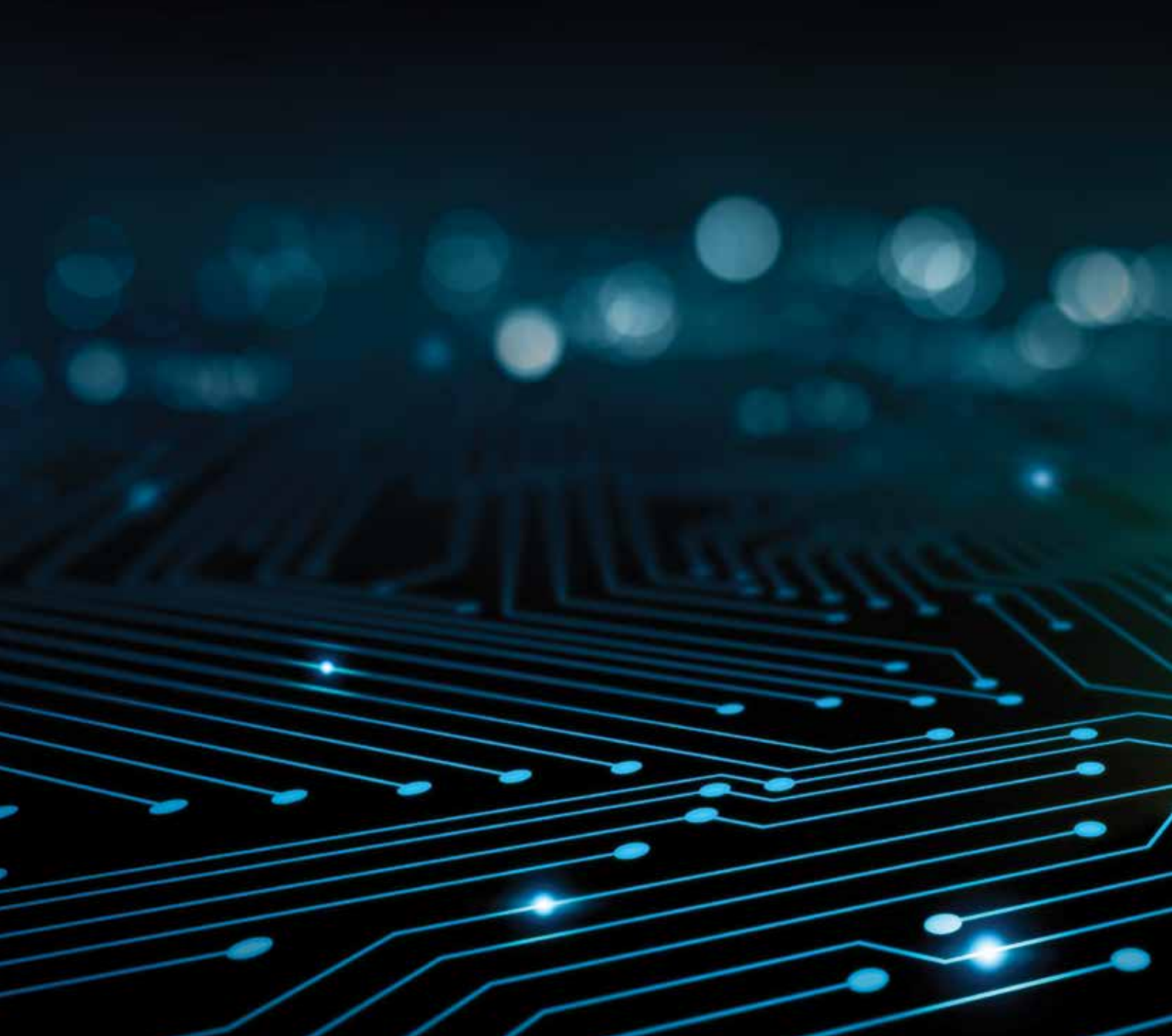
# CONTROLLERS AND ANCILLARY ELECTRONICS

Not only do we stock a range of intelligent controllers for our own operators, but we even offer high-quality universal controllers that can be used for a wide variety of applications. In addition, our ancillary solutions are tailor-made to help you get the most out of your installation. All our controllers incorporate advanced onboard lightning protection and diagnostics.

CP75 - DC MOTOR CONTROLLER
Product Code: **CP75V2**

Electronic controller for use with the **R3** and **R5** range of rotary swing gate operators.
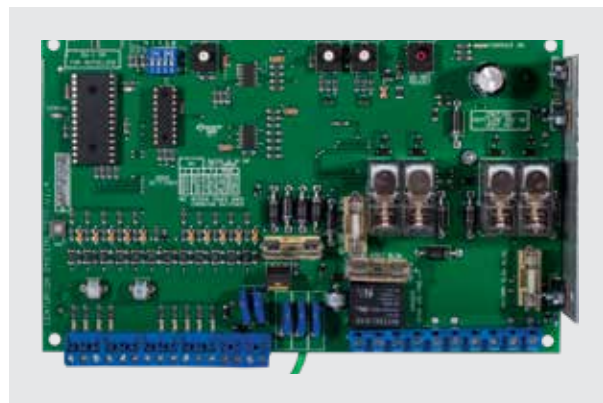
CP77 - DC MOTOR CONTROLLER
Product Code: **CP77 / CP7724V**

An incredibly versatile DC controller that can be used with a wide variety of swing and sliding gate operators, including **Beninca**, **FAAC**, **SupaSlida** and **AutoMate**.

MAIN FEATURES

- Adjustable Autoclose timer – gate is never left open unnecessarily
- Diagnostic LEDs for easy programming
- Dedicated Pillar Light Relay
- The following onboard inputs and outputs are provided:
  - Free-exit input
  - Trigger input
  - Solenoid lock connection
  - 12V DC output for auxiliary devices such as external receivers, gate safety beams, etc.
  - Input for infrared safety beams
  - Pedestrian Opening input
  - Dedicated Holiday Lockout input
- Fuse-protected

MAIN FEATURES

- Proven lightning protection
- High immunity to noise – not affected by external interference
- Micro-controller platform allows customisation – improved versatility
- Trigger input with local test button – useful for testing the operation of the device when a transmitter is not available
- Pedestrian Opening input - prevents unauthorised vehicle access
- Safety beam input – connecting infrared safety beams dramatically increases the safety of the automated system
- Local and remote multi-function Gate Status LED
- Free-exit input (only opens gate) – ideal for fitting free-exit ground loops or pushbuttons in townhouse and high-volume vehicle access applications
- Holiday Lockout input – ensures that gate cannot be opened when homeowners are away
- Timed potential-free contact (e.g. Courtesy Lights)
- Low-voltage switching of potential-free contact
- Selectable/adjustable Autoclose timer (5 – 45 seconds)
- Override of Autoclose timer via trigger input
- Local diagnostic LEDs for easy programming
- Available in 12V and 24V DC variants

CP75A - SLAVE MOTOR TERMINATION BOARD
Product Code: **CP75B**

An electronic interface for communicating with the master controller when a second **R3/R5** rotary swing gate operator is installed.

CP80 - DC MOTOR CONTROLLER
Product Code: CP80D3 / D5

Electronic controller for use with the **D3** and **D5** range of sliding gate operators.

CP87 - DC MOTOR CONTROLLER
Product Code: CP87

A basic single-channel DC controller for use with certain sliding and swing gate operators.

MAIN FEATURES

- Proven lightning protection

- Trigger input with local test button– useful for testing the operation of the device when a transmitter is not available

- Pedestrian Opening input - prevents unauthorised vehicle access

- Safety Beam input – connecting infrared safety beams dramatically increases the safety of the automated system

- Local and remote multi-function Gate Status LED

- Free-exit input (only opens gate) – ideal for fitting free-exit ground loops or pushbuttons in townhouse and high-volume vehicle access applications

- Holiday Lockout input - ensures that gate cannot be opened when home owners are away

- Timed potential-free contact (e.g. Courtesy Lights)

- Low-voltage switching of potential-free contact

- Selectable/adjustable Autoclose timer (1 – 255 seconds)

- Override of Autoclose timer via trigger input

- Local diagnostic LEDs for easy programming

MAIN FEATURES

- Proven lightning protection

- Reliable position control via limit switches

- Pedestrian Opening input - prevents unauthorised vehicle access

- 12V DC output for auxiliary equipment such as an external radio receiver

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CP88 - DC MOTOR CONTROLLER
Product Code: **CP88**

Electronic controller for use with the **CENTRY** DC-operated traffic barrier.

CP91 - AC MOTOR CONTROLLER
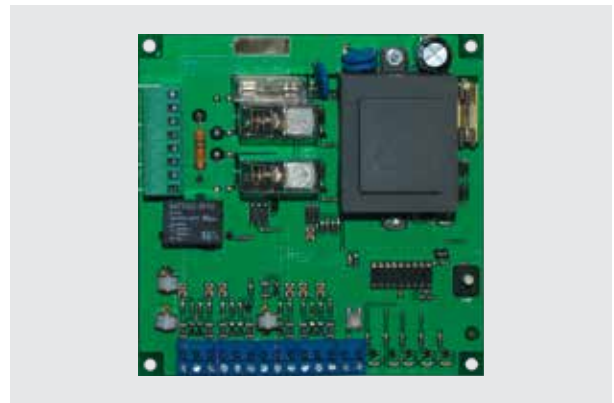Product Code: **CP91**

The **CP91** AC controller is a versatile controller designed to drive single-phase 220V AC motor systems. Reliability is enhanced through comprehensive surge and lightning protection, high noise-immunity and zero cross-switching.

MAIN FEATURES

- Onboard sensitivity adjustment
- Inductive Loop Detector input
- Safety Beam input for fitting additional safety devices
- Selectable Autoclose – ensures that the barrier is never left open unnecessarily
- Local diagnostic LEDs for easy programming

MAIN FEATURES

- Proven lightning protection
- High immunity to noise – not affected by external interference
- Micro-controller platform allows customisation – improved versatility
- Trigger input with local test button – useful for testing the operation of the device when a transmitter is not available
- Pedestrian Opening input - prevents unauthorised vehicle access
- Safety Beam input – connecting infrared safety beams dramatically increases the safety of the automated system
- Local and remote multi-function Gate Status LED
- Free-exit input (only opens gate) – ideal for fitting free-exit ground loops or pushbuttons in townhouse and high-volume vehicle access applications
- Timed potential-free contact (e.g. Courtesy Lights)
- Low-voltage switching of potential-free contact
- Selectable/adjustable Autoclose timer (5 - 40 seconds)
- Override of Autoclose timer via trigger input
- Local diagnostic LEDs for easy programming
- 12V DC auxiliary supply at 150mA

CP200 - INVERTER MODULE
Product Code: **CP200EV3**

The Inverter rectifies the 230V AC input into 310V DC while also changing the single-phase input into the three-phase supply needed to operate the **A10** electric motor.

CP93 - DUAL AC MOTOR CONTROLLER
Product Code: CP93

The **CP93** Dual AC controller is a controller card designed to control a pair of gates driven by AC induction motors in various configurations.

CP201 - AC MOTOR CONTROLLER
Product Code: CP201V3

Electronic controller for use with the **A10** industrial sliding gate operator.

MAIN FEATURES

- Designed to allow full control of a set of double swing gates that interleave, irrespective of the operator, and with or without the use of limit switches

- Installer User Interface allows full customisation of the various programming features

- Adjustable relay switching time to prevent relay contact arcing

- Trigger input with local test button – useful for testing the operation of the device when a transmitter is not available

- Pedestrian Opening input - prevents unauthorised vehicle access

- Safety Beam input – connecting infrared safety beams dramatically increases the safety of the automated system

- Local and remote multi-function Gate Status LED

- Free-exit input (only opens gate) – ideal for fitting free-exit ground loops or push-buttons in townhouse and high-volume vehicle access applications

- Timed potential-free contact (e.g. Courtesy Lights)

- Low-voltage switching of potential-free contact

- Selectable/adjustable Autoclose timer (1 - 255 seconds)

- Override of Autoclose timer via trigger input

- Three-digit display for easy programming

- 12V DC auxiliary supply for connecting safety beams, external receivers, keypads, etc.

MAIN FEATURES

- Proven lightning protection

- High immunity to noise – not affected by external interference

- Trigger input with local test button – useful for testing the operation of the device when a transmitter is not available

- Pedestrian Opening input – prevents unauthorised vehicle access

- Safety Beam input – connecting infrared safety beams dramatically increases the safety of the automated system

- Local and remote multi-function Gate Status LED

- Free-exit input (only opens gate)

- Timed potential-free contact (e.g. Courtesy Lights)

- Low-voltage switching of potential-free contact

- Selectable/adjustable Autoclose timer (1 - 255 seconds)

- Override of Autoclose timer via trigger input

- Local diagnostic LEDs for easy programming and diagnostics

- 12V DC auxiliary supply connecting safety beams, external receivers, keypads, etc.

D2 TURBO & D2 TURBO LOW-VOLTAGE - DC MOTOR CONTROLLERS

The exceptionally user-friendly interface used to configure the D2 Turbo domestic sliding gate operator, complete with charger and onboard CENTURION code-hopping multichannel receiver. The twin dial-system makes setting up and commissioning veritable child's play.

The D2 Turbo Low-Voltage controller has an input voltage range of 10V - 20V AC/10V - 28V DC, which means that it can be powered using a step-down transformer mounted in the house and fed via inexpensive low-voltage cables.

MAIN FEATURES

- Fully-sealed plastic housing to prevent ingress of dirt and insects
- Easy setup using the Function and Setting Dials and the pushbutton
- Removable connectors for easy maintenance
- Watchdog IC ensures full and safe operation of the controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Opening and Closing Safety Beam inputs with Beam Circuit functional test
- High-security cleared beam Autoclose, in conjunction with Safety Beams (PIRAC)
- Multiple Modes of Operation: Standard Mode, Open Only Mode, Reversing Mode, and with operator Pre-flashing Modes
- Automatic closing with adjustable time delay, and pushbutton override
- Remote Gate-status Indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Pedestrian Opening
- Holiday Lockout
- Courtesy/Pillar Light (Fixed duration), with pre-delays and two Pre-flashing Modes

- Selectable gate speed modes – Low Speed/High Speed (High Speed is the default)
- Positive Close Mode (e.g. ensure activation of electric fence contact switch)
- Onboard multichannel CENTURION code-hopping receiver with the ability to learn remote control buttons to specific functions (e.g. Gate trigger, Pedestrian Opening, Holiday Lockout)
- Low-voltage AC or DC input – ideal for sites with no mains power at the gate [1]
- No need to fit costly isolators [1]

1. Applies to D2 Turbo Low-Voltage only

D5-EVO & D5-EVO LOW-VOLTAGE - DC MOTOR CONTROLLERS

The intelligence behind the tried, trusted and perfected D5-Evo domestic and light-industrial sliding gate operator. This intelligent controller allows for truly intuitive programming of the operator, with a Setup Wizard guiding the user through the entire commissioning procedure.

The D5-Evo Low-Voltage controller has an input voltage range of 15V - 19V AC, which means that it can be powered using a step-down transformer mounted in the house and fed via inexpensive low-voltage cables.

MAIN FEATURES

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Opening and Closing Safety Beam inputs with Beam Circuit functional test
- High-security cleared beam Autoclose, in conjunction with Safety Beams (PIRAC)
- Break-in and Ambush Alarm (a world first) with configurable outputs via onboard buzzer, Pillar Light Relay, etc.
- Multiple Modes of Operation: Standard Mode, Condominium Mode (multi-user), Reversing Mode, PLC and Deadman Control Mode
- Automatic closing with adjustable time delay, and pushbutton override
- Remote Gate-status Indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Pedestrian Opening
- Free-exit facility
- Holiday Lockout – configurable as Emergency Stop
- Courtesy/Pillar Light (adjustable), with pre-delays and two Pre-flashing Modes

- Multiple Operating Profiles to suit region of installation- select between ZA, CE, etc.
- Full configuration of gate operating parameters, including independent gate opening and closing speeds, ramp-up and ramp-down distances and crawl speed
- Positive Close Mode (e.g. ensure activation of electric fence contact switch)
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Gate trigger, Pedestrian Opening, Free-exit, Pillar Light Control, Holiday Lockout)
  - Selectively delete specific transmitters that have been lost or stolen
  - Automatically learn transmitters into the system (Autolearn)
  - Automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Integrated ChronoGuard (a world first) with Real Time Clock and Calendar timer offering multichannel time-activated and time-barring functionality
- Auxiliary output can be configured via the ChronoGuard timer to provide timer functionality to external devices, such as security lights, entrance fountain, etc.
- Low-voltage AC or DC input – ideal for sites with no mains power at the gate [1]
- No need to fit costly isolators [1]

1. Applies to D-Evo Low-Voltage only

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D10 AND D10 TURBO - DC MOTOR CONTROLLER

The "brains" part of the winning "Brains and Brawn" combination that makes the D10 and D10 Turbo the automatic choice for industrial applications. The CENTURION's proven 24V DC technology with an intelligent LCD controller with multiple Modes of Operation makes setup and diagnostics veritable child's play.

MAIN FEATURES

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Opening and Closing Safety Beam inputs with beam circuit functional test
- High-security cleared beam Autoclose, in conjunction with Safety Beams (PIRAC)
- Break-in and Ambush Alarm (a world first) with configurable outputs via onboard buzzer, Pillar Light Relay, etc.
- Multiple Modes of Operation: Standard Mode, Condominium Mode (multi-user), Reversing Mode, PLC and Deadman Control Mode
- Automatic closing with adjustable time delay, and pushbutton override
- Remote gate-status indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Pedestrian Opening
- Free-exit facility
- Holiday Lockout – configurable as Emergency Stop
- Courtesy/Pillar Light (adjustable), with pre-delays and two Pre-flashing Modes

- Multiple Operating Profiles to suit region of installation – select between ZA, CE, etc.
- Full configuration of gate operating parameters, including independent gate opening and closing speeds, ramp-up and ramp-down distances and crawl speed
- Positive Close Mode (e.g. ensure activation of electric fence contact switch)
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
    - Learn transmitter buttons to specific functions (e.g. Gate trigger, Pedestrian Opening, Free-exit, Pillar Light Control, Holiday Lockout)
    - Selectively delete specific transmitters that have been lost or stolen
    - Automatically learn transmitters into the system (Autolearn)
    - Automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Integrated ChronoGuard (a world first) with Real Time Clock and Calendar timer offering multichannel time-activated and time-barring functionality
- Auxiliary output can be configured via the ChronoGuard timer to provide timer functionality to external devices, such as security lights, entrance fountain, etc.

RSO - DC MOTOR CONTROLLER

The RSO5DC utilises the same super-intelligent D-Series controller made famous by the D10 sliding gate motor. Incorporating precision position control, easy setup courtesy of an LCD interface and a plethora of advanced features, the RSO5DC controller provides a sophisticated roller-shutter automation solution.

MAIN FEATURES

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Opening and Closing Safety Beam inputs with beam circuit functional test
- High-security cleared beam Autoclose, in conjunction with Safety Beams (PIRAC)
- Break-in and Ambush Alarm (a world first) with configurable outputs via onboard buzzer, Pillar Light Relay, etc.
- Multiple Modes of Operation: Standard Mode, Condominium Mode (multi-user), Reversing Mode, PLC and Deadman Control Mode
- Automatic closing with adjustable time delay, and pushbutton override
- Remote shutter-status indicator (door position, power failure, low battery, multiple collision detection and Pillar Light Status indication)
- Free-exit facility
- Holiday Lockout – configurable as Emergency Stop
- Courtesy/Pillar Light (adjustable), with pre-delays and two Pre-flashing Modes

- Multiple Operating Profiles to suit region of installation – select between ZA, CE, etc.
- Full configuration of shutter operating parameters, including independent shutter opening and closing speeds, ramp-up and ramp-down distances and crawl speed
- Positive Close Mode
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Shutter trigger, Pedestrian Opening, Free-exit, Pillar Light Control, Holiday Lockout)
  - Selectively delete specific transmitters that have been lost or stolen
  - Automatically learn transmitters into the system (Autolearn)
  - Automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Integrated ChronoGuard (a world first) with Real Time Clock and Calendar timer offering multichannel time-activated and time-barring functionality
- Auxiliary output can be configured via the ChronoGuard timer to provide timer functionality to external devices, such as security lights, entrance fountain, etc.

V-SERIES CONTROLLER - DC MOTOR CONTROLLER

There is virtually no limit to the capabilities of our swing gate operators; combining industry-leading functionality, world-class reliability and ease of installation, CENTURION swing gate operators truly are in a league of their own, with an intelligent logic controller.

MAIN FEATURES

- Separate weatherproof housing for dual-channel controller, battery and charger
- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD user interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Gate trigger, Pedestrian Opening, Free-exit, Pillar Light Control, Holiday Lockout)
  - Selectively delete specific transmitters that have been lost or stolen
- Multiple Modes of Operation, including Standard Mode and Condominium Mode (multi-user)
- Full configuration of gate opening parameters, including independent gate opening and closing speeds, ramp-up and ramp-down distances and end-of-travel crawl distance
- Automatic Closing with adjustable time, pushbutton override and selectable according to gate status
- Selectable leaf delay on either gate leaf
- Advanced Positive Close Mode ensuring the gate remains closed in a secure, rigid position
- Multiple Operating Profiles to suit region of installation – select between ZA, CE, etc.

- Pedestrian Opening (adjustable opening and Autoclose time)
- Remote Gate Status Indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light status indication)
- Courtesy/Pillar Light Timer with adjustable time
- Fully configurable pre-delays with Pre-flashing Modes
- Opening and Closing Safety Beam inputs with beam circuit functional test
- High-security cleared-beam Autoclose in conjunction with Safety Beams (PIRAC)
- Break-in and Ambush Alarms (a world first) with configurable outputs via onboard buzzer, Pillar Light Relay, etc.
- Free-exit facility
- Advanced solenoid or magnetic gate-lock release pulse

SECTOR II / CLAWS - Controller

page 163

Traffic barriers offer a formidable means of controlling vehicular access, and we have gone to great lengths to ensure that, with the intelligent LCD controller, CENTURION barriers are easy to set up and can handle the heaviest of traffic volumes while simultaneously offering superior security and a myriad features.

MAIN FEATURES

- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller
- Optional Backup Memory Module allows backing up of all the information that has been set up in the system
- Standard plug-in bases pre-configured for approved 12V DC closing and free-exit inductive loop detectors
- Adjustable and removable controller mounting tray for easy wiring and commissioning
- Barrier Raise and Lower inputs
- Memory and non-memory barrier activation
- Onboard multichannel CENTURION code-hopping receiver with the ability to:
  - Learn transmitter buttons to specific functions (e.g. Memory Input, Non-memory Input, Barrier Raise, Barrier Lower, Holiday Lockout)
  - Selectively delete specific transmitters that have been lost or stolen
  - Automatically learn transmitters into the system (Autolearn)
  - Automatically delete transmitters that are no longer in use (Delete-Not-Present)
- Full configuration of barrier operating parameters including independent pole raise and lowering speeds, ramp-up and ramp-down angles
- Automatic lowering
- Multiple Operating Profiles to suit region – select between ZA, CE, etc.
- Multichannel controller with integrated ChronoGuard timer technology (a world first):
- Free-exit facility
- Remote boom pole status indicator (pole position, power failure, low battery, multiple collision detection and security light status indication)
- Courtesy/Pillar Light Timer with adjustable duration
- Fully configurable pre-delays with Pre-flashing Modes
- Safety/Closing Beam input with Beam Circuit function test
- Lock/Emergency Stop input
- Ticket Vend Interlock which enables connectivity to a ticket vending machine
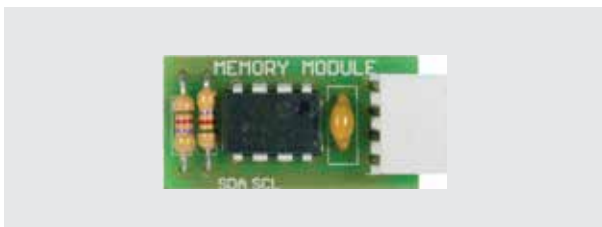
MEMORY MODULE - BACKUP MEMORY MODULE
Product Code: **PCA12201V1.0 (for D-Series Controllers); CP108 (for SMART-GUARD and SMARTGUARDair keypad); PCA11667V1 (for Lattice Controller)**

Available in three variants, the Memory Module is used to create a backup of the onboard memory of all D-Series and SECTOR II / CLAWS controllers (except V-Series), **SMARTGUARD** and **SMARTGUARDair** keypads, and the Lattice controller. During a backup, the entire memory of the controller is backed up, including all settings and remote controls. In the case of the D-Series controllers equipped with ChronoGuard, all Time-periods that have been set, will also be backed up. This backup can then be used to restore the memory contents in the event that the controller has to be replaced.

CP78 - MULTI-LED DRIVER PCB
Product Code: **CP78**

The **CP78** can be used to power multiple LEDs connected in parallel, and can also be employed for interlocking two operators. Most controllers provide only 4.5V on the LED output and can therefore power a maximum of three LEDs; however, the **CP78** uses 12V DC to switch a relay via a transistor input and can provide power to an unlimited number of LEDs. This is especially useful in multi-user intercom applications comprising numerous handsets, where each handset requires a gate status LED.
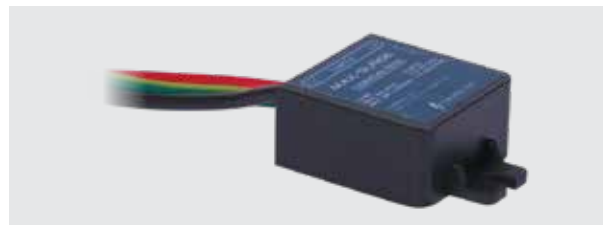

CP76 - RELAY RECTIFIER PCB
Product Code: **CP76**

A useful and versatile card which can be used in many access control applications. Its purpose is to convert a 12V AC or DC voltage signal to a potential-free (voltage-free) contact.

Typical applications include:

*   Converting the 12V AC output signal from an intercom (that is normally used for powering a strike lock), into a voltage-free contact that can be used to trigger a gate operator, a garage door operator, etc.

*   Converting the open-collector outputs found on the CENTURION SupaSMART, SupaNOVA, SMARTGUARDair keypad, SOLO or Lattice proximity tag reader to a potential-free contact

CP79V2 - UNIVERSAL TIMER BOARD/PULSE-STRETCHER
Product Code: **CP79V2**

This is a handy timer card, which can be used in many access control applications. A trigger input will latch the output for a variable time.

Typical applications include:

*   Activating a continuous door strike

*   Releasing a magnetic lock

*   Driving a cooling fan

*   Pillar Lights

*   Alarms

CP107 - BATTERY SAVER MODULE
Product Code: **CP107**

The **CP107** is designed to prevent your 12V lead-acid battery from going below 10.6V during a mains power failure. Should the battery voltage drop to 10.6V during a mains power failure, the **CP107** automatically disconnects the battery from the load circuitry. Once mains power is restored the battery saver automatically resets, allowing your battery to recharge to full capacity.

The **CP107** is supplied with colour-coded wiring and pre-attached lugs, making it quick and easy to connect to any 12V system. Once connected, the **CP107** is small enough to be tucked away inside the various CENTURION enclosures.

CL12 - MAINS SUPPLY SURGE LIMITER
Product Code: **CL12-00370**

Protect your gate motor's electronics by fitting a mains supply surge limiter upstream. The **CL12** 'clamps' high voltages and offers effective protection against lightning and power surges.

PLAYTIME IS OVER

When you need **real** intelligence and **real** reliability, trust the leaders in access automation, now part of the biggest industry brand in the world, FAAC S.p.A.

Introducing the latest CENTURION range for sophisticated access control.

G·ULTRA)))

THE ULTIMATE GSM SOLUTION

- Monitor up to four electrical devices by receiving SMS/email/ Missed Call/Push notifications
- Use the outputs to control up to six devices from your phone (two additional onboard relays)
- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)
- Suitable for a wide variety of access automation applications
- Time-barring and visitor control – ideal for B & Bs and guesthouses
- LCD screen for easy access to diagnostics
- Activation via Missed Call, phone keypad, SMS, Please Call Me or email
- Easy setup via G-WEB PLUS online interface

## G·SPEAK ULTRA)))

ADVANCED 2G GSM-BASED INTERCOM SYSTEM

- Answer your intercom - and open your gate - from anywhere
- Two call buttons - learn up to two numbers per call button
- Call buttons can be individually time-barred
- Easy programming via G-WEB PLUS
- LCD screen for easy access to diagnostics
- No messy and expensive wiring
- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)
- Time Barring: Supported on Access Numbers, Inputs and Outputs

SDO4

SDO4 GARAGE DOOR OPERATOR

- LED display for easy programming and diagnostics
- Navigational buttons with separate learn and confirm
- Energy-efficient LED courtesy light
- Whisper-quiet operation
- Quick and easy assembly
- Reinforced rail
- On-board CENTURION code-hopping multichannel receiver:
  - Open/close garage door
  - Switch Courtesy Light on and off
  - Override automatic closing
  - Electronically lock the system for added security
- Revolutionary door service monitor

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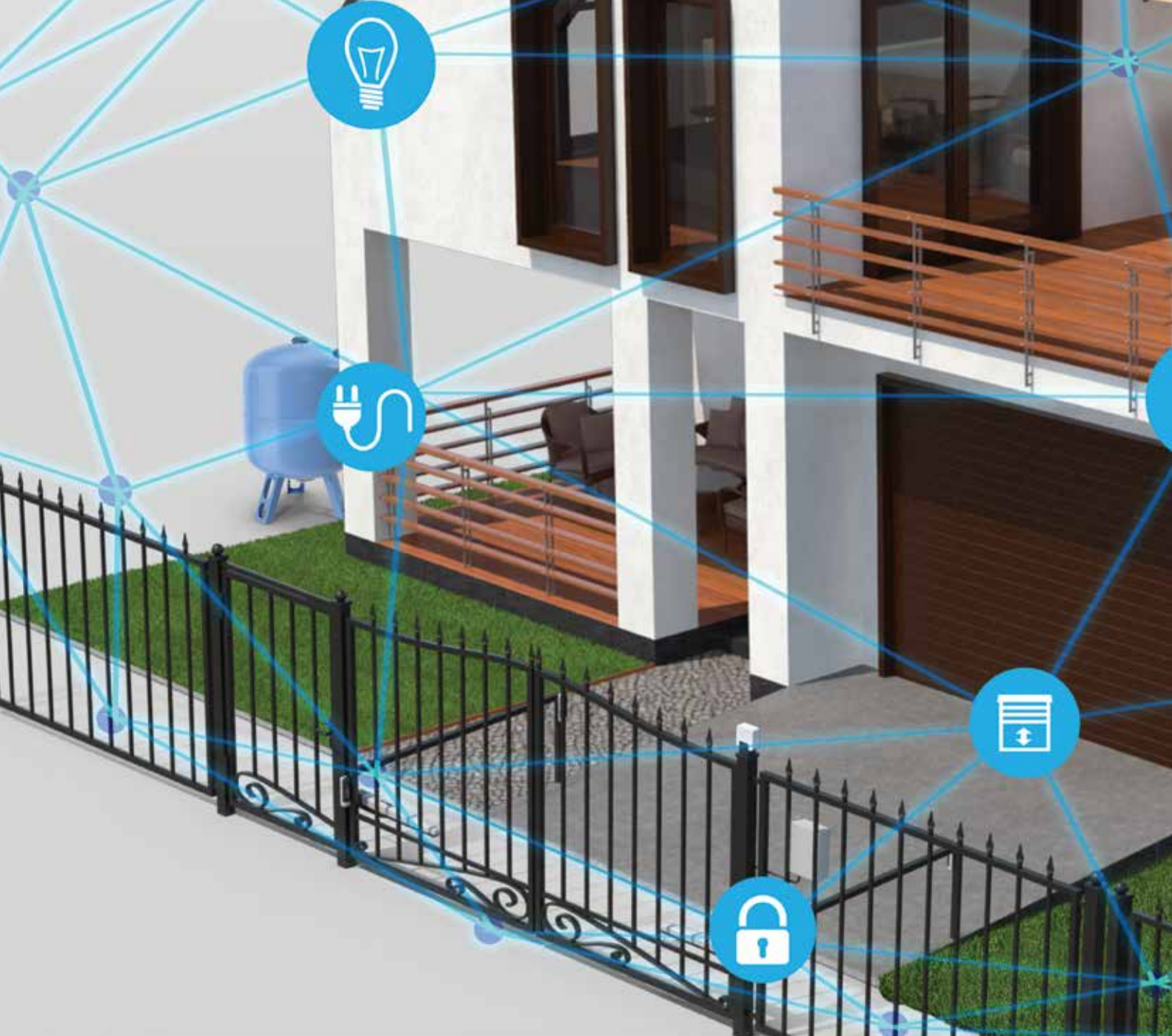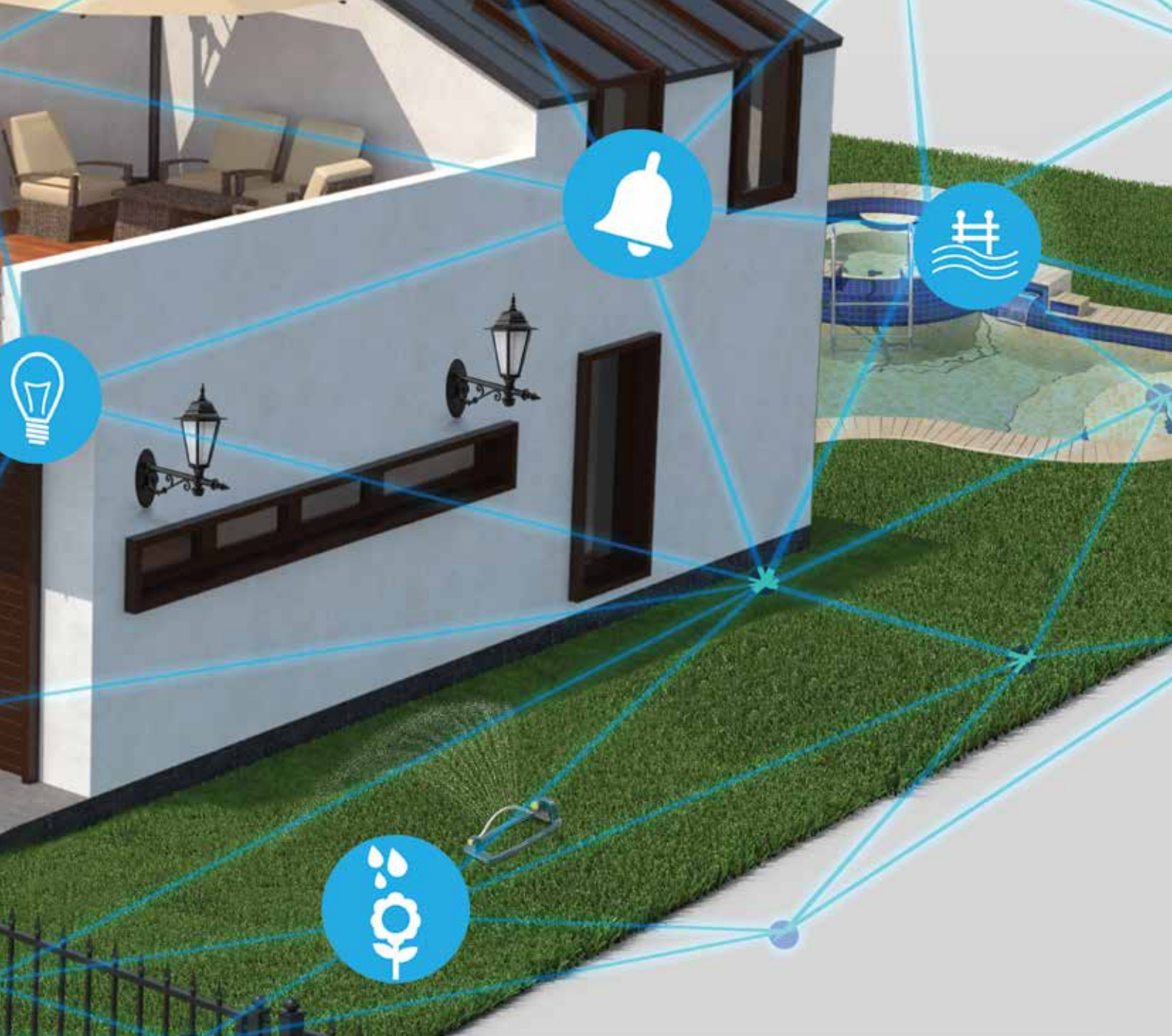
WIZO WIRELESS CONNECTION

The WiZo-Link wireless input-output module is your gateway to a wireless future. Using mesh network technology, the WiZo creates fully-wireless connections between your appliances, adapting to the environment for the ultimate in flexibility.

WiZo-Link
WIRELESS INPUT/OUTPUT MODULE

WiZo-Link uses radio technology to create what is known as a mesh network. This may be described as a layer of radio communications (think of these as roads) where every device (**WiZo-Link**) is continually acting as a repeater for all the signals (the "traffic" or "vehicles" travelling on the "road") in the network, even if these devices are not associated with that **WiZo-Link**

MAIN FEATURES

- Make anything wireless thanks to mesh network technology
- Range is no longer an issue – extendable range with redundancy
- Not reliant on line-of-sight
- Control a wide variety of appliances with a centralised entry point GSM device
- Eliminates wired civils – no need to deface your property and spend large amounts of money
- Bidirectional communication
- A virtually unlimited list of possible applications - it's home automation made simple, and wireless!
- Direct distances between **WiZo-Link** devices can be as far as 4km (line-of-sight), but as with all RF devices reduces inside buildings and through walls to around 100m to 200m

- **WiZo** networks can be grown to almost any size. One could, for example, start by switching on just one outside light and gradually add to your network until there is a considerable number of 'nodes' in your network, performing a wide variety of functions

TECHNICAL SPECIFICATIONS

Technical Data	WiZo-Link
Supply voltage range	11.5V – 24V DC
Average current consumption	30mA
Peak current consumption	50mA
Operating temperature range	-15°C - 50°C
Maximum number of WiZo-Links in a network	50
Number of outputs to which a single input can link	10
Number of inputs that can be linked to a single output	10
Weight	65g
Dimensions	78mm W x 58mm D x 31mm H
Humidity	0 – 90% (non-condensing)

We believe in creating products that **make your life easier**. Whether through graphic interfaces for easy setup and diagnostics, modular components for simplified installation and maintenance, or wireless technology for the ultimate in convenience and control, each **CENTURION** solution is engineered to save you time onsite.

It is this philosophy, and our dedication to **changing the world through the power of technology**, that informs every aspect of this **complete solution for wireless control**.

How our solution makes your life easier:

- Minimal wiring required – quick and easy to install

- Effortless online setup of GSM component(s)

- Network redundancy ("self-healing") means zero downtime, even if a device in the network fails[1] – robust and reliable

  1. Assumes more than two nodes in a network

You're only three steps away from being transported to the world of tomorrow; a world without wires, and without limits, made possible by the convergence of three powerful technological innovations. Only from **CENTURION**.

Step 1: Enter the Ultraverse

With the **G-ULTRA**, your entire world fits into the palm of your hand, giving you complete control at your fingertips. This is the evolution of GSM technology, designed to offer you the ultimate flexible, mobile-based access control and monitoring solution and allowing you to transcend archaic notions of what GSM can achieve. Unbridled. Unchained. Unmatched. Ultra.

Customisable for:

- B & Bs and guesthouses – with flexible scheduling, time-barring and automatic activations

- Complexes – 1500 user memory

- Existing gate motors – open, close and intelligently monitor your gate status, all via your phone!

- Access automation – control a plethora of access control devices including gate motors, traffic barriers and garage door operators

- Miscellaneous security applications – be notified via push notification (**G-REMOTE** mobile app), SMS, Missed Call or email of alarm activations, electric fence triggers and mains power failures

Main features

- Monitor up to four electrical devices by receiving push notifications to your phone (via **G-REMOTE** app)

- Use the inputs to control up to six devices from your phone (two additional onboard relays)

- Intelligent monitoring of CENTURION gate motors' status outputs (for example gate opening, gate left open, etc.)

- Suitable for a wide variety of access automation applications

- Time-barring and visitor control – ideal for B & Bs and guesthouses

- LCD screen for easy access to diagnostics

- Activation via **G-REMOTE** mobile app, Missed Call, phone keypad, Please Call Me or email

- Easy setup via **G-WEB PLUS** online interface

Step 2: Go wireless with WiZo

WiZo-Link uses radio technology to create what is known as a mesh network. This may be described as a layer of radio communications (think of these as roads) where every device (**WiZo-Link**) is continually acting as a repeater for all the signals (the "traffic" or "vehicles" travelling on the "road") in the network, even if these devices are not associated with that **WiZo-Link.**

Bring your **WiZo** network to life by adding a CENTURION G-ULTRA GSM unit. All you'll need is a single, centralised GSM unit to monitor and control all your **WiZo-Linked** appliances via your mobile phone[1]. This is a far more cost-effective solution than installing a GSM unit at every appliance that you'd like to monitor and/or control, and you'll save a wad of cash on cabling and installation costs, not to mention the convenience of controlling your home from your phone.

1. Each device that is to be monitored and/or controlled requires a Master Node in order to facilitate the input/output functionality of the Slave Node(s)

Main features

- Make anything wireless thanks to mesh network technology
- Range is no longer an issue – extendable range with redundancy
- Control a wide variety of appliances with a centralised entry point GSM device
- Eliminates wired civils – no need to deface your property and spend large amounts of money
- Bidirectional communication
- A virtually unlimited list of possible applications – it's home automation made simple, and wireless!
- **WiZo** networks can be grown to virtually any size. One could, for example, start by switching on just one outside light and gradually add to your network until there is a considerable number of 'nodes', performing a wide variety of functions

Step 3: Bring it all together with the G-REMOTE mobile application

Experience complete convenience and control with the **G-REMOTE** mobile application; an intuitive command centre to monitor and activate your CENTURION GSM devices using only your smartphone.

Main features

- Unbelievably cost-effective monitoring and control solution – costs less than 1c per activation or notification
- Activate device outputs with a single tap
- Choose from a range of custom icons to represent the functionality associated with each button
- Personalise your **G-REMOTE** experience by customising button colours and assigning unique tones for each device linked to a profile
- **G-REMOTE** comes with built-in text-to-speech functionality
- Device monitoring via push notifications with the ability to block notifications for each individual phone
- The **G-REMOTE** app boasts a dedicated screen displaying critical system information such as airtime balances and device signal strength
- Visible IOs can be configured for each Access Profile
- Each **G-REMOTE** instance can have access to multiple devices
- Activation via **G-REMOTE** mobile app, Missed Call, phone keypad, Please Call Me or email
- Easy setup via **G-WEB PLUS** online interface

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Centurion Systems turns 30 this year, and we thought it might be fun to take a leisurely stroll down Memory Lane and reflect on some of the crowning achievements and benchmark moments that line the path of our almost three decade-long story.

1986 A company is born. But not just any company, one that would go on to embody the very essence of the proud Roman warrior from which it borrows its name. With their sails to the wind, the journey is begun by Pat and Anne Dickens. Pat's main order of business during these early days is the sale and service of UPSs, with gate automation being done part-time with another great Roman warrior – Richard Rohman, that is.

1987 As the old adage states, 'You just can't keep a good man down', and the same proves to be true about a good idea because, in 1987, Centurion Systems starts the manufacture of gate automation, with Richard Rohman joining full-time as Marketing Director. The first gate controller, the CP3-111 is sold with a ground-mounted rotary swing gate operator.

1988 The first pedestal-mounted rotary swing gate operator – the AUTO MATE – is released.

1989 The first sliding gate operator – SUPA SLIDA - is released. Pat and Co. start spreading their wings and prove to the world that they are truly the Automatic Choice by starting to sell to other markets in South Africa.

1990 A new decade heralds a new premises, with Centurion Systems renting a 200m² factory and 60m² office. 1990 also sees the launch of the AUTO MATE's big brother – the MAXI MATE – a rotary swing gate operator for light industrial applications.

1991 A new addition to the Centurion Systems family comes in the form of Ian Tingle, who is tasked with developing the production facility. He is now the Production Director. Not satisfied with just one new addition, Centurion Systems also introduces the entry level sliding gate operator known as the MINI SLIDA.

1992 With innovation and technological advancement being the names of the game, Ian 'Roz' Rozowsky – now the R&D Director - joins Centurion Systems to head up product development. He proves to be invaluable as the first microprocessor-based controller for AC motors – the CP90 – is introduced.

1993 The very first branch is opened in Pinetown, Kwazulu Natal. The first microprocessor-based controller for DC motors - the CP77 – as well as Centurion Systems' very own DC traffic barrier – the CENTRY – is also released during this particularly fruitful year.

| 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |

2002 A unique data logging and time-barring module for keypads and remotes – the ChronoLog – is developed as well as the R3 rotary swing gate operator.

2003 A further 4500m² is added to the North Riding factory and the mighty A10 industrial sliding gate operator, unique for its use of a custom-made inverter to drive a single-phase operator, is released. It remains a favourite for its ability to carry massive loads and work tirelessly without a limited duty cycle.

2004 A battery backup module DC converter is developed for the A10, keeping it fully operational during those pesky brownouts.

The upgraded rotary swing gate operator for light-industrial applications, the R5, is launched.

2005 Blending simplicity, style and functionality has been a Centurion Systems trademark from the very beginning, and nowhere is this more evident than in the POLOphone two-wire intercom system, first unveiled in 2005. The D3 and D5 are upgraded, and a Bootloader Interface Device is added.

2006 Technology is an ever-changing, ever-evolving field and Centurion Systems encapsulated this basic truth with the introduction of the SOLO and Lattice proximity access control systems. This was, however, only a fraction of the mammoth achievements yielded in 2006, with another branch opening in Observatory, Cape Town and the release of the CP93 dual AC controller.

2007 The VECTOR is added to our swing gate motor range. Its revolutionary design earns the DISA prototype excellence award.

2008 Centurion Systems develops a new controller utilising a user-friendly LCD interface to facilitate easy setup and diagnostics, and upgrades the VECTOR operator. Ergo, the VECTOR2 **is born.**

2009 Another busy year for Centurion Systems with a sixth branch opening in Bloemfontein and new sliding gate operators are released - D5-Evo and D10, which boast onboard LCD interfaces. The SECTOR high-volume traffic barrier with onboard LCD controller and ChronoGuard (a world first) timer technology is released. Even the colossal factory at 148 Epsom drive couldn't contain the constantly-growing Centurion Systems family for long, and we move to 15700m² premises.

2010 The D2 Turbo, an affordable sliding gate operator for light gates, is launched and Centurion Systems is named as an IFSEC UK finalist for the D10

Once again, the competition is blown out of the water with the introduction of the G-SWITCH-22 and its associated web interface, G-WEB. A new branch is opened in the windy city, Port Elizabeth.

2011 Innovation, innovation, innovation sums up 2011 perfectly, with Centurion Systems further raising the bar in the world of access control and gate automation.

The speedy D2 Turbo is launched and summarily becomes a finalist at the IFSEC UK security exposition in Birmingham, England. We also give traffic barriers CLAWS (our own range of barrier spikes), develop a barrier fence - called TRAPEX – for the SECTOR barrier, and answer the prayers of installers with the SMARTGUARDair - a completely wireless keypad. And, finally, we took all the pain out of installing ground loops with our own range of loop detectors.

2012 Centurion Systems takes automated gate safety to the next level with the introduction of

| 1999 2000 | 2001 2003 | 2004 2006 | 2007 | 2008 | 2011 |

AND HERE WE ARE TODAY

1994 Like any healthy 8-year old, Centurion Systems soon grows too big for its confines and we start building our own 800m² factory and 400m² office in Kya Sands. The cost-effective motor controller for gate operators, known as the CP87, is developed proving that Centurion Systems has the client's best interests – and bank accounts – at heart.

1995 1995 sees Centurion Systems opening a branch in the Far East (well, Johannesburg's Far East, anyway). This is the year that the Bokke take home the World Cup and Team Centurion Systems aren't resting on their laurels, either, with the advanced single motor controller for AC motors – the CP91 – being released.

1996 The sliding gate operator that is still a Centurion Systems staple even today – the revolutionary D5 – is launched and is the first motor in the world to use a polymer injection-

moulded gearbox. Barely a year after opening the Jet Park branch, a third branch is opened in Menlyn, Pretoria.

1997 We develop our own set of remote controls – the aptly-titled SMART range – which is unique for its self-learning technology, as well as the CP79 generic timer board.

1998 Safety – specifically when it comes to gate automation – has always been one of Centurion Systems' main priorities and we live this philosophy by developing our own infrared safety beams, the i5. We introduce a sliding gate operator for lighter gates, known as the D3.

1999 Three innovative new products is launched in 1999, namely the CENTOR high-volume automatic traffic barrier, the CENTINEL manual traffic barrier and the SupaSMART multi-user receiver.

2000 The new millennium – sees Centurion Systems outgrowing its bounds and this time building a new 1800m² factory and 1400m² office in North Riding

One of our brilliant engineers develops the CP107 battery-saving module.

2001 The Lowveld is the site of Centurion Systems' latest branch, with the fourth branch being opened in Nelspruit. A plethora of new products see the light during the course of this year, including the SMARTGUARD access control keypad and a brand new range of remote controls – the Classic, SMART2 and NOVA, the latter of which uses revolutionary code-hopping technology. Centurion Systems receives the coveted SABS Design Institute award for design excellence.

| 1992 | 1993 | 1994 | 1995 | 1996 | 1997 1998 |
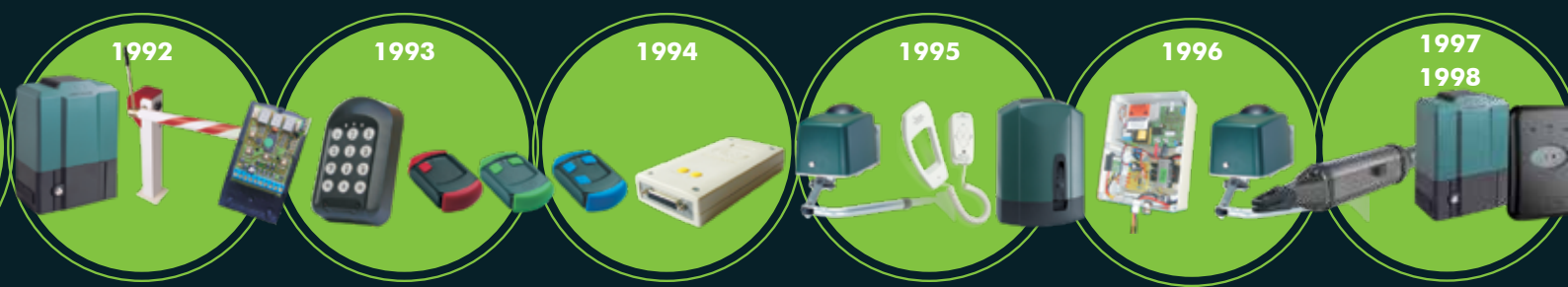
Photon photocells. Featuring a wireless transmitter for easy installation and effortless alignment, Photon has become the installer's best friend and has made gate safety achievable and affordable for homeowners.

2013 We expand our GSM range to include two brand new GSM devices. For the very first time, we introduce low-voltage variants of our popular D2 Turbo and D5-Evo sliding gate motors for the DIY market.

A growing team and increased operational capabilities necessitate the moving of the Nelson Mandela Bay branch to bigger headquarters.

2014 We are into the Year of the Horse and there is a palpable sense of excitement around the office. The electricity in the air, the twinkle in the eyes of our engineers, it can only mean one thing:

Something big is coming...
Watch. This. Space!
With 28 years of innovation, company growth and more than a few fond memories behind us, we feel rather confident that Centurion Systems will continue to be the Automatic Choice for generations to come!

2015 Ushers in a new era in multi-user access control with the release of the revolutionary SupaHelix access control and monitoring system. Stylish, robust and with a nod to the home automation devices that inspired its design, the SupaHelix is a complete visitor management toolkit and the vanguard of the sexy technology trend that CENTURION would follow with the release of products like VERT-X and VANTAGE, released the same year.

2016 The crowning of the heir to the throne of access automation marks 2016. A direct descendant of its predecessor, and yet superior in so many ways, the SECTOR II is sleeker, harder, better, and has been adorned with a crown as is befitting a king. In addition, its improved structural rigidity means that the SECTOR II will always stand firm and tall, the very picture of access automation royalty.

Later in the year, the NOVA remote – loved and trusted the world over – gets a makeover and now sports a sexy carbon look and durable silicone buttons built to withstand a life time of pressing.

History is made as global access automation powerhouse FAAC S.p.A. acquires Centurion Systems

2017 Centurion Systems hosts the inaugural Access Automation Expo, bringing together distributors and installers from across Gauteng for an event unlike any other the security industry has ever seen. The event is used as a springboard to launch CENTURION's innovative ULTRA range of GSM solutions to massive acclaim from the market.

2018 A versatile wireless solution marks CENTURION's first bold step into the world of home automation. The full solution is composed of three unique CENTURION offerings, namely the G-ULTRA GSM device, the G-REMOTE mobile app and the brand new WiZo-Link wireless input/output module. The convergence of these three powerful technologies enable users to create a highly robust and ultra-secure wireless network that can be used to monitor and control virtually anything - wirelessly!

| 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |

OUR DIGITAL AND ONLINE BRAND PRESENCE AND SUPPORT

WEBSITE

- Landing pages in French, Spanish, Portuguese and Thai
- Access to product documentation, comparison charts and diagnostic guides
- Device software
- G-WEB PLUS interface for administering CENTURION GSM devices
- Massive library of useful articles
- http://www.centsys.com

SUPPORT

- Dedicated technicians, unrivalled backup support and friendly and efficient sales personnel
- Technical support in all official languages, as well as French, Spanish and Portuguese
- Call centre operates 7am to 6pm (GMT +2), Monday to Friday and 8am to 4:30pm (GMT +2) on Saturdays

SOCIAL MEDIA

- "Like" our Facebook page (www.facebook.com/centurionsystems) and follow us on Twitter (@askCenturion) for all the exciting company news, launches, roadshows, competitions as well as technical and sales support
- Subscribe to our YouTube channel for access to an extensive library of how-to videos and tutorials
- Interesting and innovative installations from around the world, including unusual uses of CENTURION products
- Are you on our YouTube channel? Showcase your installations!

NEWSLETTER

- Fantastic way of staying abreast of company news, developments, events and functions, new products and enhancements to existing range

INDUSTRY-LEADING PRODUCT TECHNOLOGIES

TECHNOLOGY

CENTURION products feature a host of industry-leading technologies, all conducive to greater security, greater convenience and superior functionality. Just some of the advanced technologies found in our products are:

- **ChronoGuard** – a world-first timer technology that allows the user to set a myriad Auto-activation and Time-barring functions using the onboard Real Time Clock and Calendar, which tracks the date up to the year 2099

- **Intruder-detection Alarms** – The novel feature-set – consisting of the Beam Alarm and Ambush Alarm - ups the security ante even further by providing an audible output when the infrared gate safety beams are obstructed, or remain interrupted for a pre-defined period of time

- **Code-hopping technology** – CENTURION remote controls are equipped with code-hopping encoders which process the outgoing transmission through a sophisticated encryption engine, making copying and cloning virtually impossible. No two transmitted codes will ever be alike

- **Onboard diagnostics** – Our D-Series range provides both audible and visual feedback of the gate status at any given time. In addition, a designated diagnostic screen makes fault-finding a breeze

- **High-volume capability** – CENTURION operators are designed to work hard, and work hard they do – with some operators such as the SECTOR II traffic barrier being capable of performing in excess of 3000 operations every single day

www.centsys.com

CENTURION

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