







# SLIDING GATE OPERATORS

Centurion Systems' range of technologically advanced sliding gate operators have 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
<b>Input voltage</b>	90V - 240V AC / Solar	10V - 20V AC 10V - 28V DC	90V - 240V AC / Solar
<b>Mains power required at gate</b>	√ / Solar	-	√ / Solar
<b>Gate mass – maximum</b>	250kg	250kg	500kg
<b>Gate speed – maximum</b>	24m/min	24m/min	22m/min
<b>Duty cycle – mains present</b>	Domestic use <sup>1</sup>	Domestic use <sup>1</sup>	Light-industrial <sup>1</sup>
<b>Daily operations - maximum</b>	50 <sup>2</sup>	50 <sup>2</sup>	150 <sup>2</sup>
<b>Interface type</b>	Dial-based	Dial-based	LCD
<b>Time-barring and automatic activation</b>	-	-	√
<b>Onboard multichannel receiver</b>	√	√	√

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.
3. With a brush replacement interval of two years







# SLIDING GATE OPERATOR QUICK SELECTION GUIDE



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
22m/min	26m/min	50m/min (varies with load)	Standard speed 16m/min	Sprint speed 30m/min	13.6m/min
Domestic use <sup>1</sup>	Industrial <sup>1</sup>	Industrial <sup>1</sup>	Heavy-industrial		Heavy-industrial
150 <sup>2</sup>	750 <sup>2,3</sup>	750 <sup>2,3</sup>	Only limited by duty cycle		Only limited by duty cycle
LCD	LCD	LCD	LED-based		LED-based
√	√	√	-		-
√	√	√	-		-



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## D2 TURBO AND D2 TURBO LOW-VOLTAGE DOMESTIC SLIDING GATE OPERATOR

The **D2 Turbo** is a high-speed, cost-effective operator for domestic gates weighing up to 250kg, with a maximum speed of 24 metres per minute 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 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.

### 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
- Solar power-ready - energy-efficient, environmentally friendly and offering greater autonomy



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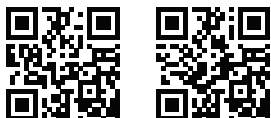
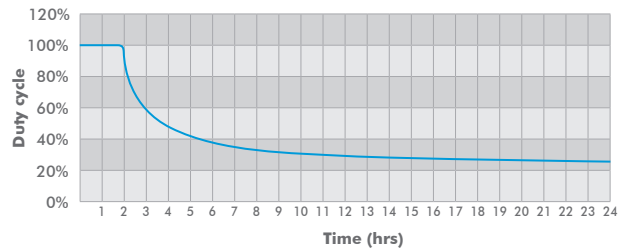


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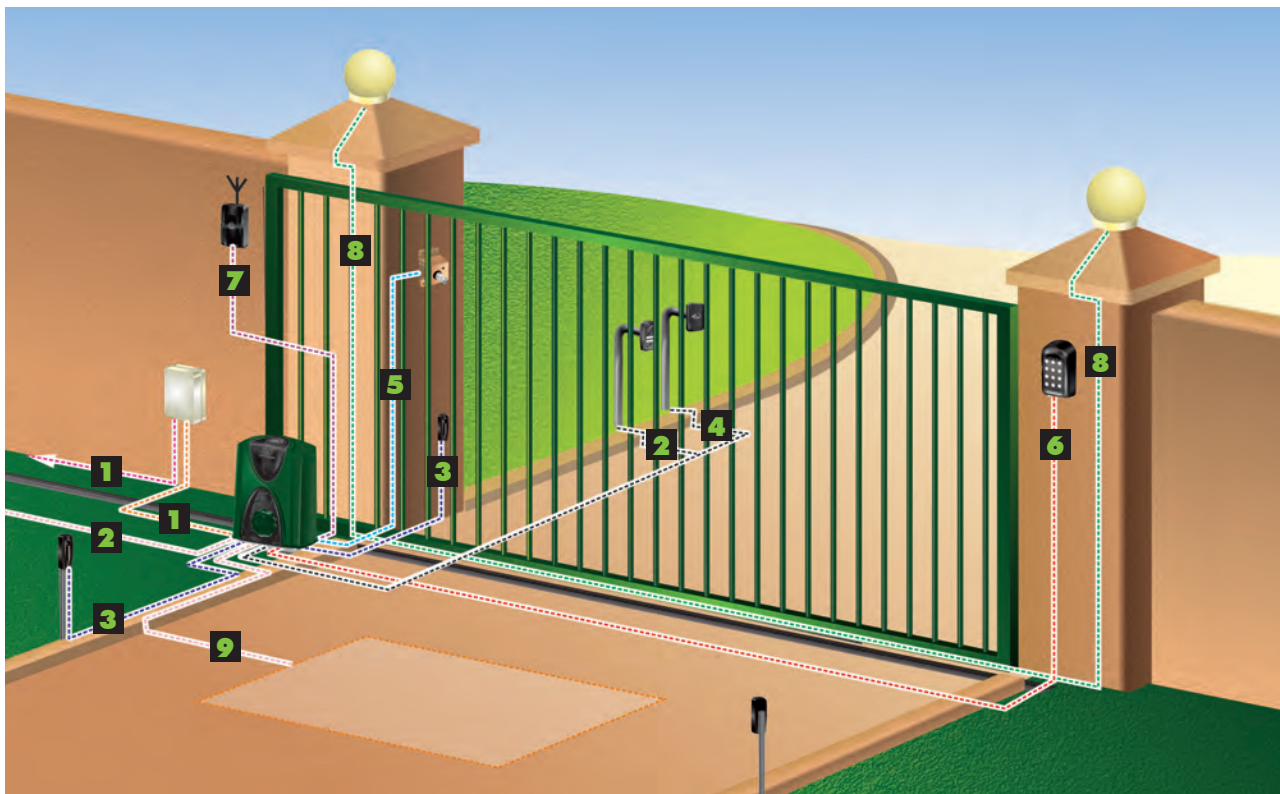
## TECHNICAL SPECIFICATIONS

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



## DOMESTIC SLIDING GATE OPERATOR FOR 250KG GATES



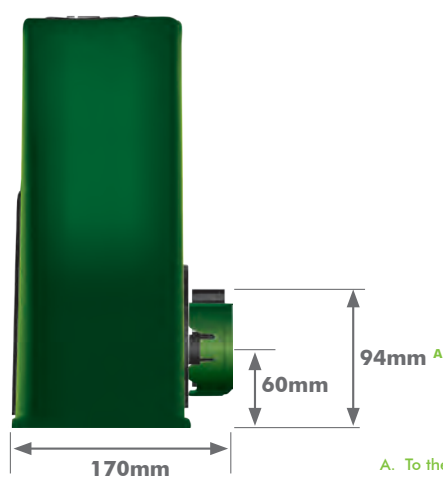
## CABLING REQUIREMENTS

- D2 Turbo:** 220V - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm<sup>2</sup> SWA)<sup>1</sup>  
**D2 Turbo Low-Voltage:** 10V - 20V AC cable via transformer in dwelling (3 core LNE 1.5mm<sup>2</sup> Surfex)

### Optional Wiring (all cable is multi-stranded):

- Intercom, cable from control box to dwelling (n1<sup>6</sup> + 6 core<sup>3</sup> 0.5mm<sup>2</sup> multi-stranded) or cable from control box to entry panel (n2<sup>6</sup> 0.5mm<sup>2</sup> multi-stranded)
- Infrared Safety Beams (3 core 0.5mm<sup>2</sup> multi-stranded)
- Access control device (3 core 0.5mm<sup>2</sup> multi-stranded<sup>4</sup>)
- Pedestrian keyswitch (2 core 0.5mm<sup>2</sup> multi-stranded) or
- Keypad (3 core 0.5mm<sup>2</sup> multi-stranded)
- External radio receiver (3 core 0.5mm<sup>2</sup> multi-stranded<sup>5</sup>)
- Pillar Lights (3 core LNE SWA<sup>2</sup>, size according to power requirements)
- Inductive loop detector for free-exit (1 core 0.5mm<sup>2</sup> multi-stranded - silicone-coated<sup>6</sup>)

- Possibly increase cable thickness if Pillar Lights are to be installed
- 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
- Allows for all features such as Pedestrian Opening, Status LED, etc. to be operated from the intercom handset inside the dwelling
- Number of cores and type of cable could vary depending on the brand of access control system being used
- For optimum range an external radio receiver can be mounted on the wall
- Number of cores required by the intercom



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 leaves, 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 OPERATOR

**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 notification
- 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 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

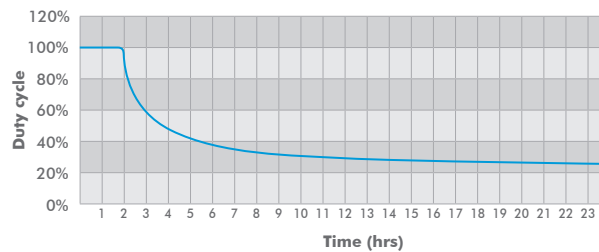


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## TECHNICAL SPECIFICATIONS

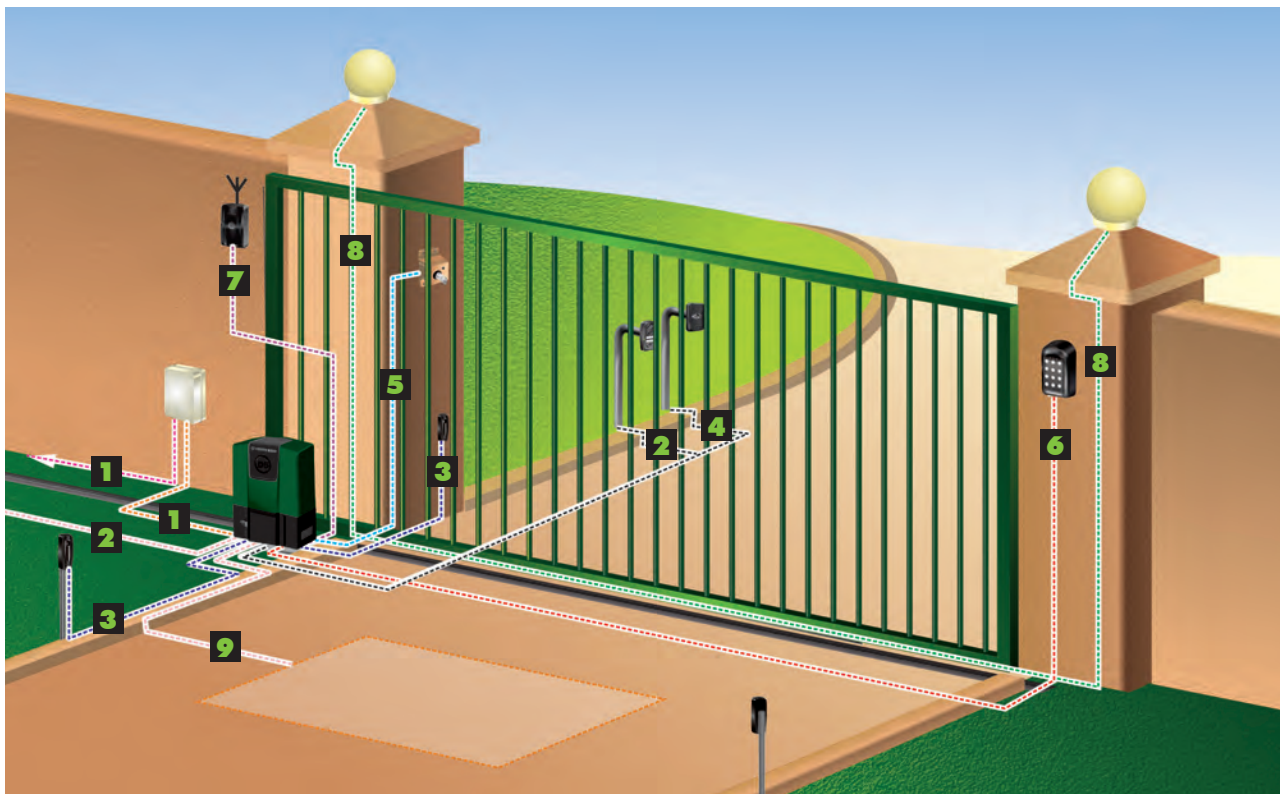
Technical Data	D5-Evo	D5-Evo Low-voltage
<b>Input voltage</b>	220V AC +/-10% @ 50Hz <sup>1</sup>	15V - 19V AC <sup>2,3</sup>
<b>Motor voltage</b>	12V DC	12V DC
<b>Motor power supply <sup>4</sup></b>	Battery-driven (standard capacity - 12V 7Ah)	Battery-driven (standard capacity - 12V 7Ah)
<b>Battery charger</b>	CP84SM - 1.8A @ 13.7 +/-1%	CP84XTE - 800mA @ 13.7 +/- 1%
<b>Current consumption (mains supply)</b>	60mA	60mA
<b>Current consumption (motor rated / peak load)</b>	8/15A	8/15A
<b>Current consumption (quiescent load)</b>	75mA	75mA
<b>Operator push force</b>		
<b>Starting</b>	30kgf	30kgf
<b>Rated</b>	17kgf	17kgf
<b>Gate mass - maximum</b>	500kg	500kg
<b>Gate length - maximum</b>	100m	100m
<b>Gate speed - m/min <sup>6</sup></b>	18 - 22m/min	18 - 22m/min
<b>Gate speed - mm/sec</b>	300 - 367mm/sec	300 - 367mm/sec
<b>Drive Pinion</b>	17T Module 4	17T Module 4
<b>Maximum daily cycle</b>	150 cycles/day	150 cycles/day
<b>Design life</b>	150 000 cycles	150 000 cycles
<b>Operations in standby with standard battery <sup>4,5</sup></b>		
<b>Half day</b>	70 cycles	70 cycles
<b>Full day</b>	60 cycles	60 cycles
<b>Collision sensing</b>	Electronic	Electronic
<b>Operating temperature</b>	-15°C to +50°C	-15°C to +50°C
<b>Degree of protection</b>	IP54	IP54
<b>Controller incorporated</b>	D-Series_12	D-Series_12
<b>Onboard receiver type</b>	NOVA rolling code (Keelog™ encryption) onboard, multichannel	NOVA rolling code (Keelog™ encryption) onboard, multichannel
<b>Receiver frequency</b>	433.92MHz	433.92MHz
<b>Receiver code storage capacity</b>	125 transmitter buttons	125 transmitter buttons
<b>Mass of unit packed</b>	10kg	10kg
<b>Packaging dimensions</b>	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



## LIGHT-INDUSTRIAL SLIDING GATE OPERATOR FOR 500KG GATES





## CABLING REQUIREMENTS

- D5-Evo: 220V - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm<sup>2</sup> SWA)<sup>1</sup>**  
**D5-Evo Low-Voltage: 15V - 19V AC cable via transformer in dwelling (3 core LNE 1.5mm<sup>2</sup> Surfex)**

### Optional Wiring (all cable is multi-stranded):

- Intercom, cable from control box to dwelling (n1<sup>6</sup> + 6 core<sup>3</sup> 0.5mm<sup>2</sup> multi-stranded) or cable from control box to entry panel (n2<sup>6</sup> 0.5mm<sup>2</sup> multi-stranded)
- Infrared Safety Beams (3 core 0.5mm<sup>2</sup> multi-stranded)
- Access control device (3 core 0.5mm<sup>2</sup> multi-stranded<sup>4</sup>)
- Pedestrian keyswitch (2 core 0.5mm<sup>2</sup> multi-stranded) or
- Keypad (3 core 0.5mm<sup>2</sup> multi-stranded)
- External radio receiver (3 core 0.5mm<sup>2</sup> multi-stranded<sup>5</sup>)
- Pillar Lights (3 core LNE SWA<sup>2</sup>, size according to power requirements)
- Inductive loop detector for free-exit (1 core 0.5mm<sup>2</sup> multi-stranded - silicone-coated<sup>6</sup>)

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

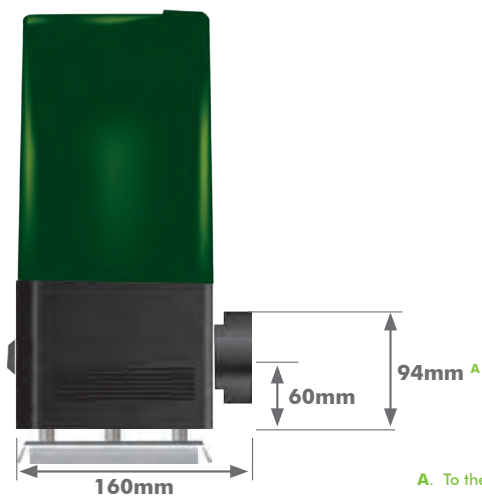
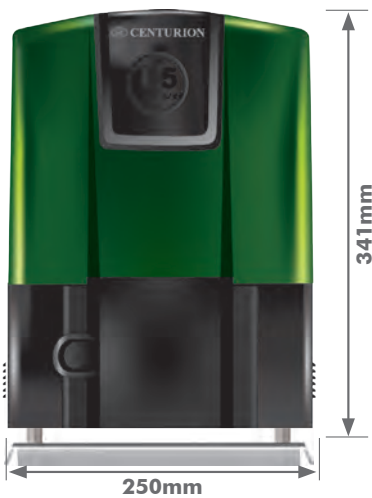
2. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

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



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



# SOLAR-POWERED GATE MOTOR



**Use the power of the sun to keep your gate motor going on and on and on and on and on and on and on!**

- Powerful low-voltage motors and solar power are a perfect combination!
- Cost-effective automation solution - save on installation and electricity costs
- Complete power failure autonomy with solar power: off-the-grid and on-charge!
- Environmentally-friendly - save the world, get a CENTURION!
- CENTURION supplies solar panels, brackets, regulators, deep-cycle batteries and battery enclosures - meeting your every solar need

**DURABILITY**

**SECURITY**

**RELIABILITY**

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## D10 AND D10 TURBO INDUSTRIAL SLIDING GATE OPERATOR

**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 50 metres per minute 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.

### 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 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 time 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



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## TECHNICAL SPECIFICATIONS

Technical Data	D10	D10 Turbo
<b>Input voltage</b> <sup>1</sup>	220V AC +/-10% @ 50Hz	220V AC +/-10% @ 50Hz
<b>Motor voltage</b>	24V DC	24V DC
<b>Motor power supply</b> <sup>2</sup>	Battery-driven (standard capacity - 2 x 7Ah)	Battery-driven (standard capacity - 2 x 7Ah)
<b>Battery charger</b>	D10CHGRV02 - 1.8A @ 27.4V +/- 1%	D10CHGRV02 - 1.8A @ 27.4V +/- 1%
<b>Current consumption</b> (mains supply)	250mA	250mA
<b>Current consumption</b> (motor rated / peak load)	6/15A	8/15A
<b>Current consumption</b> (quiescent load)	80mA	80mA
<b>Operator push force</b>		
<b>Starting</b>	40kgf	20kgf
<b>Rated</b>	30kgf	15kgf
<b>Gate mass - maximum</b>	1000kg	240kg
<b>Gate length - maximum</b>	100m	50m
<b>Gate speed - m/min</b>	22 - 26m/min	43 - 51m/min
<b>Gate speed - mm/sec</b>	367 - 433mm/sec	717 - 850mm/sec
<b>Drive Pinion</b>	17T Module 4	20T Module 4
<b>Maximum daily cycle</b>	750 cycles/day	750 cycles/day
<b>Design life</b>	250 000 cycles	250 000 cycles
<b>Operations in standby with standard battery</b> <sup>4, 5</sup>		
<b>Half day</b>	120 cycles	120 cycles
<b>Full day</b>	100 cycles	100 cycles
<b>Collision sensing</b>	Electronic	Electronic
<b>Operating temperature</b>	-15°C to +50°C	-15°C to +50°C
<b>Degree of protection</b>	IP54	IP54
<b>Controller incorporated</b>	D-Series_24	D-Series_24
<b>Onboard receiver type</b>	NOVA rolling code (Keelog™ encryption) onboard, multichannel	NOVA rolling code (Keelog™ encryption) onboard, multichannel
<b>Receiver frequency</b>	433.92MHz	433.92MHz
<b>Receiver code storage capacity</b>	125 transmitter buttons	125 transmitter buttons
<b>Mass of unit packed</b>	13kg	13kg
<b>Packaging dimensions</b>	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

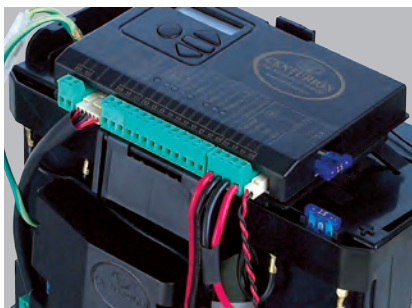
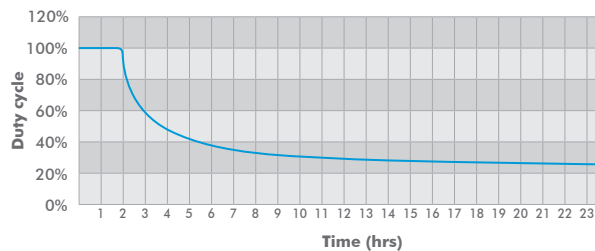
3. Solar panel

4. Can increase battery capacity for longer standby times

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

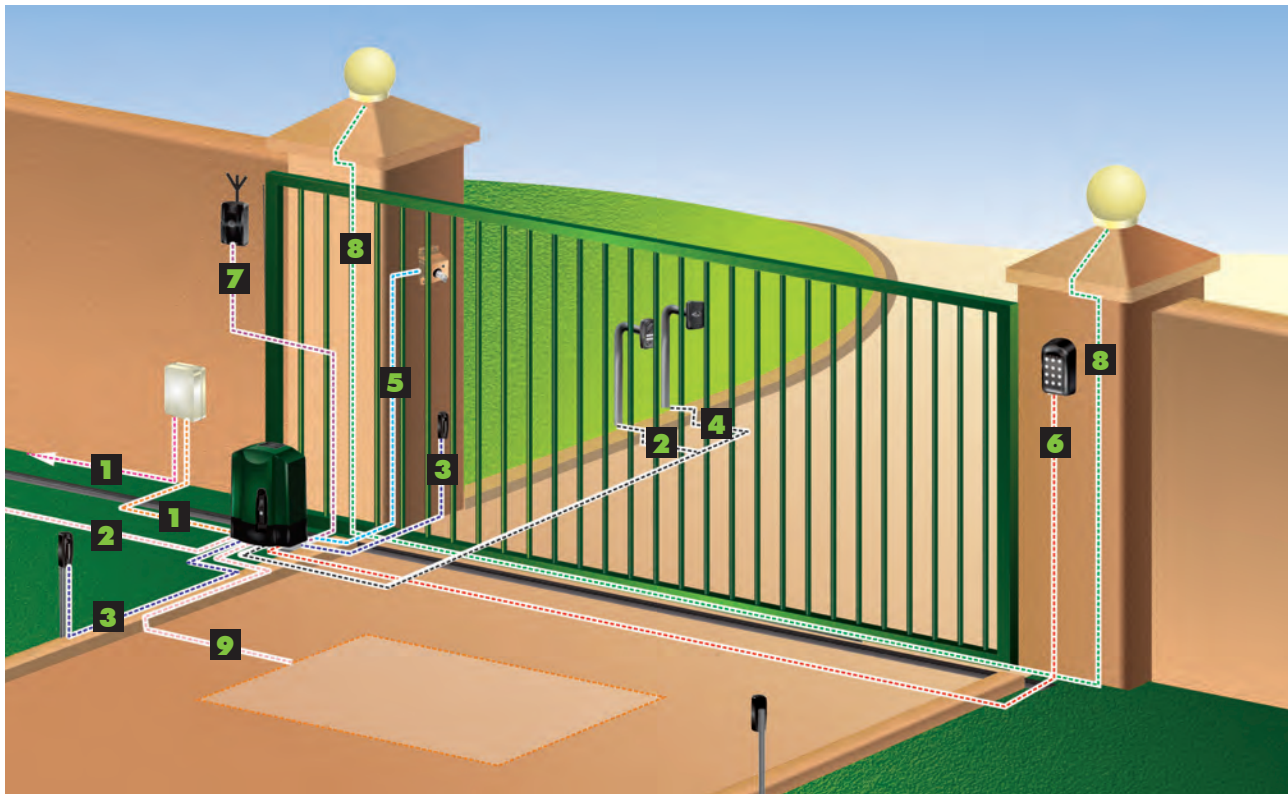
D10 Turbo maximum operating speed for corresponding gate mass

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



## INDUSTRIAL SLIDING GATE OPERATOR FOR 1000KG GATES





## CABLING REQUIREMENTS

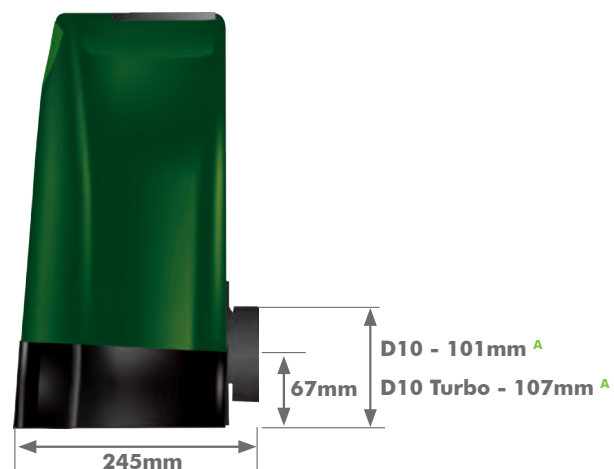
1. 220V - 240V AC mains cable via double pole mains isolator switch (3 core<sup>1</sup> LNE 1.5mm<sup>2</sup> SWA<sup>2</sup>)

### Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1<sup>6</sup> + 6 core<sup>3</sup> 0.5mm<sup>2</sup> multi-stranded) or cable from control box to entry panel (n2<sup>6</sup> 0.5mm<sup>2</sup> multi-stranded)
3. Infrared Safety Beams (3 core 0.5mm<sup>2</sup> multi-stranded)
4. Access control device (3 core 0.5mm<sup>2</sup> multi-stranded<sup>4</sup>)
5. Pedestrian keyswitch (2 core 0.5mm<sup>2</sup> multi-stranded) or
6. Keypad (3 core 0.5mm<sup>2</sup> multi-stranded)
7. External radio receiver (3 core 0.5mm<sup>2</sup> multi-stranded<sup>5</sup>)
8. Pillar Lights (3 core LNE SWA<sup>2</sup>, size according to power requirements)
9. Ground loop for free-exit (1 core 0.5mm<sup>2</sup> multi-stranded - silicone-coated<sup>6</sup>)

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



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





## IT'S ROCKET SCIENCE

Well-known star of action movies and bona fide Scandinavian Dolph Lundgren is a bit of a rarity in the world of action cinema. The Swedish muscle man is perhaps best-known for his role as Ivan Drago in *Rocky IV*, and he's had starring roles in pretty much every movie featuring explosions and rogue spies from obscure countries since time immemorial. But what makes this Nordic beefcake such an enigma is the fact that, in addition to being a prolific actor and holder of a third dan black belt in Kyokushin karate, Lundgren also holds a master's degree in chemical engineering from the University of Sydney. Dolph Lundgren is truly the epitome of someone possessing both brains and brawn.

Similarly, **CENTURION's D10 Turbo** industrial sliding gate motor is an ode to the marriage of strength and intelligence. Add blistering speed to the mix, and what you have is a true legend of access automation.

The **D10 Turbo** first sped onto the scene in 2011 – initially a concept design created by using the D10 motor with an A10 gearbox – and today, five years later, this expeditious beast is showing no signs of slowing down.

### The fastest intelligent gate motor around

Capable of operating at a rollercoaster-shaming 830cm/sec, the **D10 Turbo** is the perfect gate motor for the security conscious wanting to get into and out of their properties as quickly as possible. A disconcerting number

of hijackings and robberies occur while victims are idle in their driveways, waiting for their gates to open, which makes it all the more important that one doesn't become a sitting duck. The operator lends itself perfectly to full control, with individually configurable opening and closing speeds.

### Intelligence in motion

The **D10 Turbo** has around 80 features onboard – all housed within a neat, intuitive and user-friendly LCD interface – including a built-in receiver with 500 remote button memory, Intruder-detection Alarms and, of course, the novel ChronoGuard timer technology.

### Gentle giant

Of course, despite being known for playing tough guy roles in high-octane blockbusters such as *The Expendables*, Dolph Lundgren is also a loving father of two girls, and probably loves kittens. Probably. Likewise, the **D10 Turbo** – while being a powerful titan capable of moving a 4m gate in approximately 5 seconds – also has a softer, more tempered side. Boasting built-in sensitive collision detection and sophisticated anti-crushing technology, the **D10 Turbo** is designed to reverse at the first sign of a collision, which means that it plays nice with kiddies, pets and, of course, your precious Beemer. Additionally, the intelligent controller provides inputs for both opening and closing safety beams.



# A10 ENDURANCE AND A10 HEAVYWEIGHT INDUSTRIAL SLIDING GATE OPERATOR

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.

## AVAILABLE MODELS

**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.



[www.centsys.com](http://www.centsys.com)

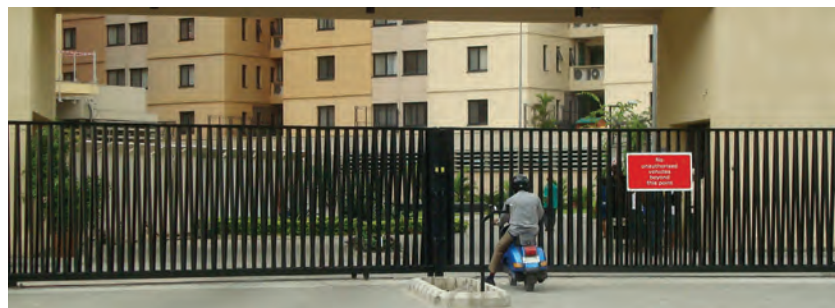
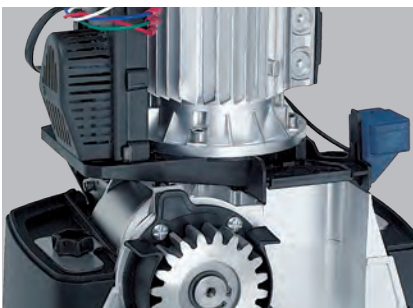
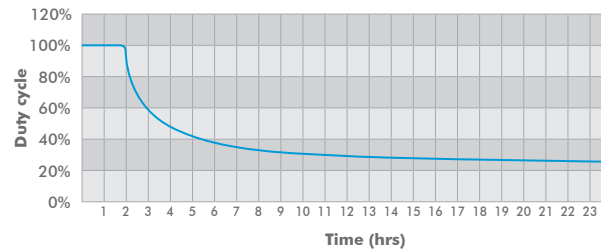


## TECHNICAL SPECIFICATIONS

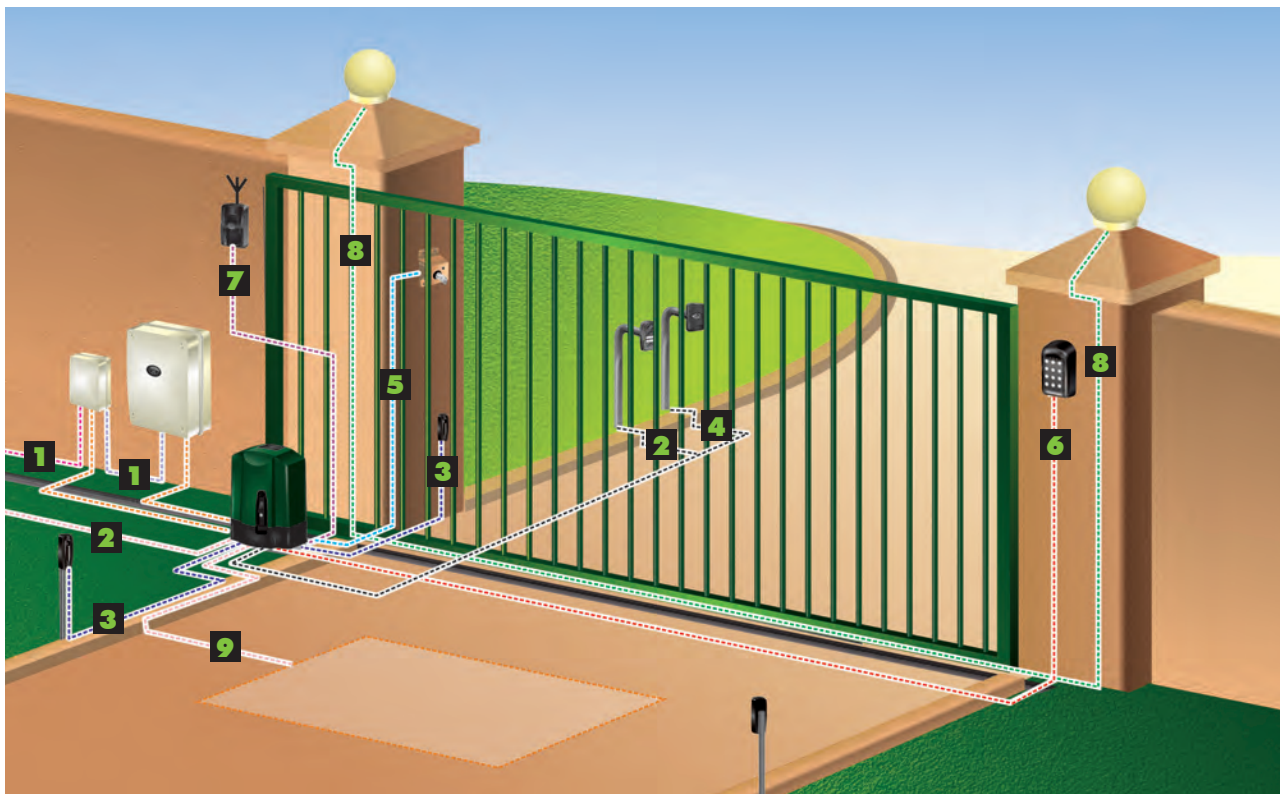
Technical Data	A10 Endurance	A10 Heavyweight
<b>Input voltage</b> <sup>1</sup>	220V AC +/-10% @ 50Hz	220V AC +/-10% @ 50Hz
<b>Motor voltage</b>	220V AC 3 phase	220V AC 3 phase
<b>Motor power supply</b> <sup>2</sup>	Frequency inverter	Frequency inverter
<b>Current consumption</b> (mains supply)	6A	6A
<b>Operator push force</b> <sup>2</sup>		
<b>Starting</b>	40kgf	25kgf
<b>Rated</b>	30kgf	22.5kgf
<b>Gate mass - maximum</b>	1000kg	600kg
<b>Gate length - maximum</b>	20m	50m
<b>Gate speed - m/min</b>	16m/min	30m/min
<b>Gate speed - mm/sec</b>	267mm/sec	500mm/sec
<b>Drive Pinion</b>	20T Module 4	20T Module 4
<b>Maximum daily cycle</b>	Lockable lever with key release	750 cycles/day
<b>Design life</b>	1 000 000 cycles	250 000 cycles
<b>Collision sensing</b>	Electronic	Electronic
<b>Operating temperature</b>	-20°C to +50°C	-15°C to +50°C
<b>Degree of protection</b>	IP54	IP54
<b>Controller incorporated</b>	CP200E / CP201	D-Series_24
<b>Mass of unit packed</b>	15.5kg	13kg
<b>Packaging dimensions</b>	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 <sup>2</sup>	20%
Thermal protection	Electronic
Degree of protection	IP65
Battery capacity <sup>3</sup>	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



## INDUSTRIAL SLIDING GATE OPERATOR FOR HEAVY GATES



## CABLING REQUIREMENTS

1. 220V - 240V AC mains cable via double pole mains isolator switch (3 core<sup>1</sup> LNE 1.5mm<sup>2</sup> SWA<sup>2</sup>)

### Optional Wiring (all cable is multi-stranded):

2. Intercom cable from control box to dwelling (n1<sup>6</sup> + 6 core<sup>2</sup> 0.5mm<sup>2</sup> multi-stranded) or cable from control box to entry panel (n2<sup>6</sup> 0.5mm<sup>2</sup> multi-stranded. Infrared Safety Beams (3 core 0.5mm<sup>2</sup> multi-stranded)
3. Access control device (3 core 0.5mm<sup>2</sup> multi-stranded<sup>4</sup>)
4. Pedestrian keyswitch (2 core 0.5mm<sup>2</sup> multi-stranded) or
5. Keypad (3 core 0.5mm<sup>2</sup> multi-stranded)
6. External radio receiver (3 core 0.5mm<sup>2</sup> multi-stranded<sup>5</sup>)
7. Pillar Lights (3 core LNE SWA<sup>2</sup>, size according to power requirements)
8. Inductive loop detector for free-exit (1 core 0.5mm<sup>2</sup> multi-stranded - silicone-coated<sup>6</sup>)

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

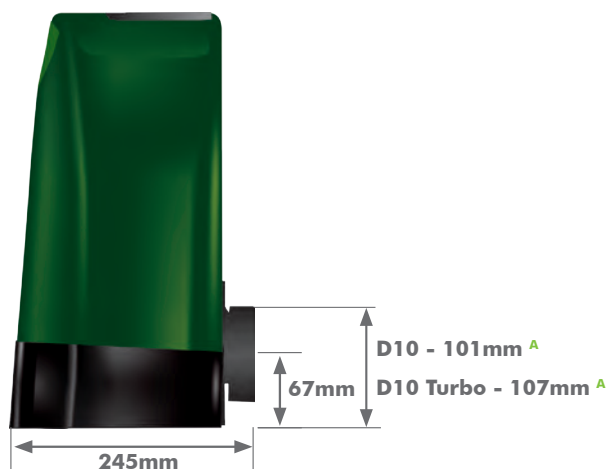
2. SWA - steel wire armoured. Type of cable must adhere to municipal bylaws and preferably be screened. Screening provides better protection against lightning - earth one end of the screening

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



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





# The *fastest* intelligent gate motor on the planet!

## SLIDING GATE OPERATORS



### The D10 Turbo - for the ultimate in security and convenience

- Turbo speed - up to 50m/min (833mm/sec).
- High volume capability - 750 operations per day
- Multiple operating features, modes and functionality, including Intruder-detection Alarm Modes - a world first
- Reliable battery backup

#### DURABILITY

[facebook.com/CenturionSystems](https://www.facebook.com/CenturionSystems)

#### SECURITY

[YouTube YouTube.com/CenturionSystems](https://www.youtube.com/CenturionSystems)

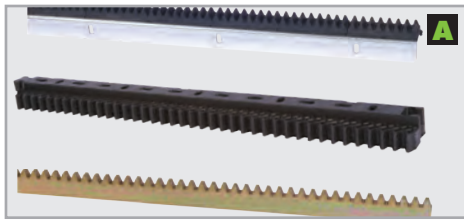
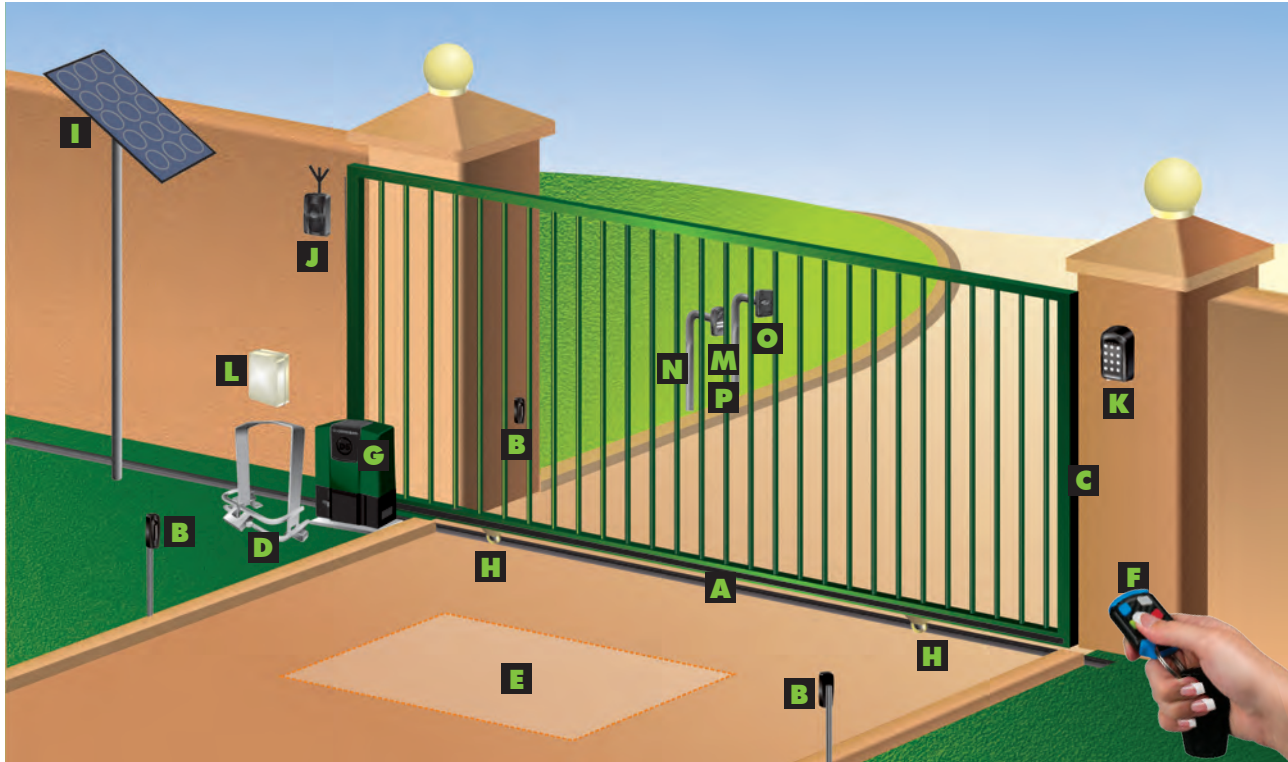
#### RELIABILITY

[Twitter@askCenturion](https://twitter.com/askCenturion)





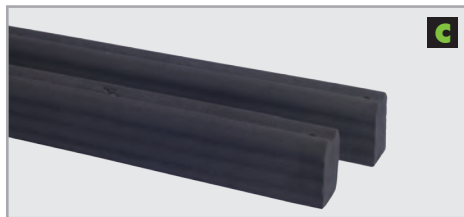
## SLIDING GATE OPERATOR ACCESSORIES



**STEEL, NYLON RAZ OR NYLON ANGLE RACK**  
A variety of rack available in different lengths, for different strengths.



**CENTURION INFRARED 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.



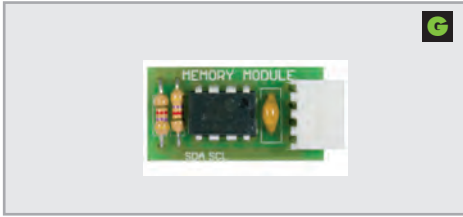
**THEFT-RESISTANT CAGE**  
Retro-installable steel cage that increases the resistance of the operator against theft.



**FLUX SA LOOP DETECTOR**  
Allows free-exit of vehicles from the property (requires ground loop to be fitted)



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



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



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



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



**G-SWITCH-22 GSM DEVICE**  
Allows for monitoring and activating the operator, via your phone, from anywhere in the world with GSM coverage.



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



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



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



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



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



**G-SPEAK GSM Intercom**  
Mobile-based intercom system - answer your intercom from anywhere in the world for maximum security and convenience.



## 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**





# SLIDING GATE OPERATORS

