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.

CENTURION

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	D5-Evo Low-Voltage	D10	D10 Turbo	A10 Endurance		A10 Heavyweight
Input voltage	90V - 240V AC	10V - 20V AC 10V - 28V DC	90V - 240V AC	15V - 19V AC	90V - 240V AC	90V - 240V AC	220V - 240V AC		220V - 240V AC
Mains power required at gate	√	-	√	-	√	√	√		√
Gate mass – maximum	250kg	250kg	500kg	500kg	1000kg	1000kg	Standard speed 1000kg	Sprint speed 600kg	Sprint Speed
Gate speed – maximum	24m/min	24m/min	22m/min	22m/min	26m/min	50m/min (varies with load)	Standard speed 16m/min	Sprint speed 30m/min	Sprint speed
Duty cycle – mains present	50% 1	50% 1	50% 1	20% 1	25% 1	45% 1	80%		80%
Daily operations - maximum	10 2	10 2	150 2	30 2	750 2, 3	750 2, 3	Only limited by duty cycle		Only limited by duty cycle
Interface type	Dial-based	Dial-based	LCD	LCD	LCD	LCD	LED-based		LED-based
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.
3. With a brush replacement interval of two years

D2 Turbo

Domestic Sliding Gate Operator

Product Code: **D2TB0000V2**

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 push force of 18kgf. 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.

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
- Stylish design enhances any entrance
- Modular components clip together for easy maintenance

Electronic Features

- Simple user interface makes changing setup child's play
- Ant-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)

Technical Specifications

Technical Data	D2 Turbo
Input voltage 1	90V– 240V AC ±10%, 50Hz
Motor voltage	12V DC
Motor power supply 2	Battery-driven (standard capacity - 12V 5Ah)
Battery charger 1	1A @ 14.2V (charging voltage - 13.76V)
Current consumption (mains)	70mA
Current consumption (motor at rated load)	8A
Operator push force - starting	18kgf
Operator push force - rated	9kgf
Gate mass – maximum	250kg
Gate length - maximum	20m
Gate speed (varies with load) 3	24m/min
Manual override	Lockable with key release
Life expectancy of electric motor	20 (10 year life expectancy if operated only 10 times per day)
Duty cycle – mains present 4	50%
Operations in standby with 5Ah battery	
Half day 5	30
Full day 5	15
Collision sensing	Electronic
Operating temperature range	-15°C to +50°C
Onboard receiver type	CENTURION code-hopping, multichannel output
Receiver code storage capacity	32 transmitter buttons
Receiver frequency	433MHz
Degree of protection	IP54
Mass of unit packed (with standard kit, but excluding rack and battery)	4.83kg
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 255mm x Depth: 188mm x Height: 333mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run at a slower, 16m/min , depending on the requirements of individual installations
4. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
5. Based on 4m gate with no external accessories such as infrared Safety Beams

DOMESTIC SLIDING GATE OPERATOR FOR 250KG GATES

D2 Turbo Low-Voltage

Domestic Sliding Gate Operator

Product Code: **D2TSPCLD02**

A low-voltage operator for domestic gates weighing up to 250kg, 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
- Stylish design enhances any entrance
- Modular components clip together for easy maintenance

Electronic Features

- Low-voltage AC or DC input - perfect for installations where there is no mains power at the gate
- Incredibly cost-effective solution
- Solar power-ready - energy-efficient, environmentally friendly and offering greater autonomy
- 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 two 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. 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)

CENTURION

Technical Specifications

Technical Data	D2 Turbo Low-Voltage	
Input voltage 1	10V - 20V AC ±10%, 50Hz; 10V - 28V DC	
Battery charger amperage output (dependent on PSU input voltage)	Voltage output: 13.76V DC	
	10V AC input	400mA output
	20V AC input	1A output
	10V DC input	200mA output
	28V DC input	1A output
Motor voltage	12V DC	
Motor power supply 2	Battery-driven (standard capacity - 12V 5Ah)	
Current consumption (motor at rated load)	8A	
Operator push force - starting	18kgf	
Operator push force - rated	9kgf	
Gate mass – maximum	250kg	
Gate length - maximum	20m	
Gate speed (varies with load) 3	24m/min	
Manual override	Lockable with key release	
Life expectancy of electric motor	20 (10 year life expectancy if operated only 10 times per day)	
Duty cycle – mains present 4	50%	
Operations in standby with 5Ah battery		
Half day 5	30	
Full day 5	15	
Collision sensing	Electronic	
Operating temperature range	-15°C to +50°C	
Onboard receiver type	CENTURION code-hopping, multichannel output	
Receiver code storage capacity	32 transmitter buttons	
Receiver frequency	433MHz	
Degree of protection	IP54	
Mass of unit packed (with standard kit, but excluding rack and battery)	4.83kg	
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 255mm x Depth: 188mm x Height: 333mm	

1. Can operate directly off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run at a slower, 16m/min , depending on the requirements of individual installations
4. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
5. Based on 4m gate with no external accessories such as infrared Safety Beams

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DOMESTIC SLIDING GATE OPERATOR FOR 250KG GATES

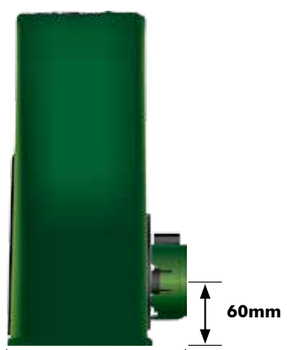
Cabling Requirements

1. **D2 Turbo:** 220V - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm2 SWA)
   D2 Turbo Low-Voltage: 10V - 20V AC or 10-28V DC cable via transformer in dwelling 1

Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1 6 + 6 core 2 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



A legacy in STEEL

We associate the word 'steel' with ruggedness, durability and longevity. In popular culture alone there are countless examples of 'steel' being a synonym for resilience. Just think about it: there's a reason that Superman is called the Man of Steel and not, say, the Man of Silk.

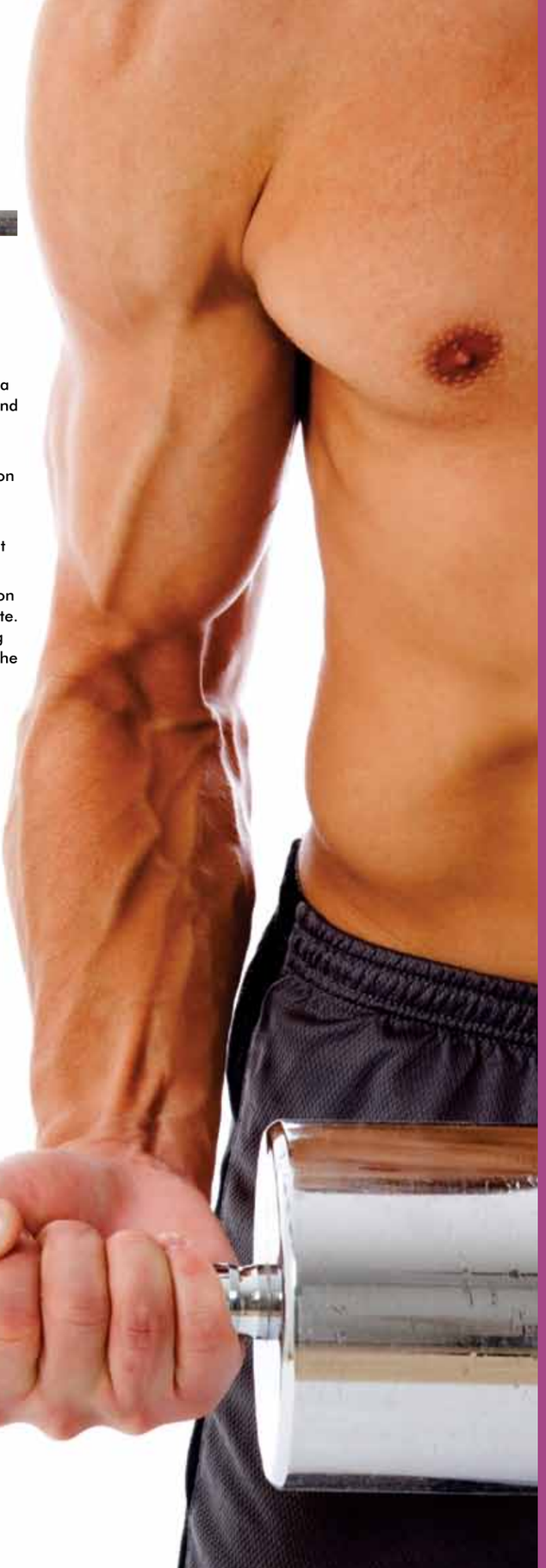
It's a simple equation: steel equals strength. Case in point, we recently replaced the nylon pinion on our domestic sliding gate motor, the D2 Turbo, with a tough-as-nails steel one.

The benefits sprouting forth from this improvement are two-fold:

Firstly, the D2 Turbo can now be easily retrofitted on sites where steel rack has been attached to the gate. Historically, this would have necessitated replacing the original rack with a nylon or RAZ variant, but the steel pinion does not discriminate against rack based on what material it is constructed from. It's open-minded like that.

The second, and perhaps more obvious, improvement is to the longevity of the pinion itself. One must remember that the pinion spends a considerable amount of time in mechanical liaison with the rack – a liaison which involves movement – and over time lesser materials will invariably start wearing the scars of this automated waltz. Steel, however, by its very nature is intended to take a beating and will retain its shape and splendour after thousands and thousands of cycles.

For more evidence that dynamite comes in small packages, check out the D2 Turbo page on our website.



D5-Evo

Light-industrial Sliding Gate Operator

Product Code: **D5RB0000V6**

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.

Main Features

Mechanical Features

- Battery backup
- Lockable, easy manual override
- Custom-engineered gearbox molded from durable engineering polymer

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
- 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 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 the beams are always working correctly

Technical Specifications

Technical Data	D5-Evo	
Input voltage 1	90V - 240V AC ±10%, 50Hz	
Current consumption (mains)	170mA	
Battery charger amperage output (dependent on PSU input voltage)	90V AC input	1A output
	240V AC input	2.2A output
Motor voltage	12V DC	
Motor power supply 2	Battery-driven (standard capacity - 7Ah)	
Battery charger 1	CP84SM - 2A @ 13.8V	
Current consumption (mains)	170mA	
Current consumption (motor at rated load)	10A	
Operator push force - starting	30kgf	
Operator push force - rated	17kgf	
Gate mass – maximum	500kg	
Gate length - maximum	100m	
Gate speed (varies with load) 3	18 - 22m/min	
Manual override	Thumbwheel behind locked door with key release	
Maximum numbers of operations per day	150	
Duty cycle – mains present 4	50%	
Operations in standby with 7Ah battery		
Half day 5	44	
Full day 5	35	
Collision sensing	Electronic	
Operating temperature range	-15°C to +50°C	
Onboard receiver type	CENTURION code-hopping, multichannel output	
Receiver code storage capacity	500 transmitter buttons	
Receiver frequency	433MHz	
Degree of protection	IP54	
Mass of unit packed (with standard kit, but excluding rack and battery)	10kg	
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 303mm x Depth: 231mm x Height: 432mm	

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run slower, depending on the requirements of individual installations
4. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
5. Based on 4m gate excluding infrared Safety Beams

LIGHT-INDUSTRIAL SLIDING GATE OPERATOR FOR 500KG GATES

D5-Evo Low-Voltage

Domestic Sliding Gate Operator

Product Code: **D5RSPCLD06**

This cost-effective sliding gate operator for gates weighing up to 500kg 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

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

Electronic Features

- LCD interface – exceptionally easy setup with visual and audible diagnostics and notification
- 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
- 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 Auto-activation features for switching on Pillar Lights, deactivation of 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	D5-Evo Low-Voltage	
Input voltage 1	15V - 19V AC	
Battery charger amperage output (dependent on PSU input voltage)	15V AC input	400mA output
	19V AC input	1A output
Motor voltage	12V DC	
Motor power supply 2	Battery-driven (standard capacity - 7Ah)	
Battery charger 1	CP84XTE - 1A @ 13.8V	
Current consumption (mains)	170mA	
Current consumption (motor at rated load)	10A	
Operator push force - starting	30kgf	
Operator push force - rated	17kgf	
Gate mass – maximum	500kg	
Gate length - maximum	100m	
Gate speed (varies with load) 3	18 - 22m/min	
Manual override	Thumbwheel behind locked door with key release	
Maximum numbers of operations per day	55	
Duty cycle – mains present 4	20%	
Operations in standby with 7Ah battery		
Half day 5	55	
Full day 5	35	
Collision sensing	Electronic	
Operating temperature range	-15°C to +50°C	
Onboard receiver type	CENTURION code-hopping, multichannel output	
Receiver code storage capacity	500 transmitter buttons	
Receiver frequency	433MHz	
Degree of protection	IP54	
Mass of unit packed (with standard kit, but excluding rack and battery)	10kg	
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 303mm x Depth: 231mm x Height: 432mm	

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run slower, depending on the requirements of individual installations
4. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
5. Based on 4m gate excluding infrared Safety Beams

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DOMESTIC SLIDING GATE OPERATOR FOR 500KG GATES

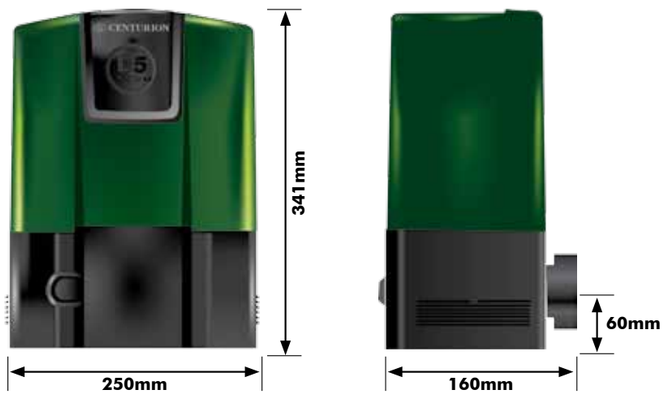
Cabling Requirements

1. **D5-Evo:** 220V - 240V AC mains cable via double mains isolator switch (3 core LNE 1.5mm2 SWA)
   D5-Evo Low-Voltage: 15V - 19V AC cable via transformer in dwelling 1

Optional Wiring (all cable is multi-stranded):

2. Intercom, cable from control box to dwelling (n1 6 + 6 core 2 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



CENTURION

Solar-powerful gate motors!

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 CentSys!
- CentSys supplies solar panels, brackets, regulators, deep-cycle batteries and battery enclosures - meeting your every solar need

Call 0860 236 887
Technical support line: 0861 003 123 (Monday - Friday: 07h00 - 18h00)
www.CentSys.com

D10
Industrial Sliding Gate Operator
Product Code: **D10RB000V3**

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.

Main Features

Mechanical Features

- Battery backup
- Lockable, easy manual override with anti-jamming
- Strong die-cast aluminium gearbox

Electronic Features

- LCD interface – Exceptionally easy setup with visual and audible diagnostics and notification
- 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
- High duty cycle capability - for greater reliability in high-volume applications
- 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:
  - Battery-low
  - 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

CENTURION

Technical Specifications

Technical Data	D10
Input voltage 1	90V - 240V AC ±10%, 50Hz
Motor voltage	24V DC
Motor power supply 2	Battery-driven (standard capacity - 2 x 7Ah)
Battery charger 1	2A @ 27.5V
Current consumption (mains)	170mA
Current consumption (motor at rated load)	4A
Operator push force - starting	40kgf
Operator push force - rated	30kgf
Gate mass – maximum	1000kg
Gate length - maximum	100m
Gate speed (varies with load) 3	22 - 26m/min
Manual override	Lockable lever with key release
Maximum numbers of operations per day	750
Duty cycle – mains present 4	45%
Operations in standby with 5Ah battery	
Half day 5	87
Full day 5	69
Collision sensing	Electronic
Operating temperature range	-15°C to +50°C
Onboard receiver type	CENTURION code-hopping, multichannel output
Receiver code storage capacity	500 transmitter buttons
Receiver frequency	433MHz
Degree of protection	IP54
Mass of unit packed (with standard kit, but excluding rack and battery)	13kg
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 355mm x Depth: 288mm x Height: 485mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run slower, depending on the requirements of individual installations
4. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
5. Based on 4m gate excluding infrared Safety Beams

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INDUSTRIAL SLIDING GATE OPERATOR FOR 1000KG GATES

D10 Turbo

Industrial Sliding Gate Operator

Product Code: **D10TB000V1**

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

Electronic Features

- Turbo speed for greater security and convenience
- LCD interface – exceptionally easy setup with visual and audible diagnostics and notification
- 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
- High duty cycle capability - for greater reliability in high-volume applications
- 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:
  - Battery-low
  - 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

CENTURION

Technical Specifications

Technical Data	D10 Turbo
Input voltage 1	90V - 240V AC ±10%, 50Hz
Motor voltage	24V DC
Motor power supply 2	Battery-driven (standard capacity - 2 x 7Ah)
Battery charger 1	2A @ 27.5V
Current consumption (mains)	170mA
Current consumption (motor at rated load)	8A
Operator push force - starting	20kgf
Operator push force - rated	15kgf
Gate mass – maximum 3	Varies with speed
Gate length - maximum	50m
Gate speed (varies with load) 4	40 - 50m/min
Manual override	Lockable lever with key release
Maximum numbers of operations per day	750
Duty cycle – mains present 5	25%
Operations in standby with 5Ah battery	
Half day 6	58
Full day 6	37
Collision sensing	Electronic
Operating temperature range	-15°C to +50°C
Onboard receiver type	CENTURION code-hopping, multichannel output
Receiver code storage capacity	500 transmitter buttons
Receiver frequency	433MHz
Degree of protection	IP54
Mass of unit packed (with standard kit, but excluding rack and battery)	13kg
Packaging dimensions (with standard kit, but excluding rack and battery)	Width: 355mm x Depth: 288mm x Height: 485mm

1. Can operate off a solar supply, consult Centurion Systems for assistance
2. Can increase battery capacity for longer standby times
3. Gate operating speed can be configured to run slower, depending on the requirements of individual installations
4. Varies with speed setting - see table
5. Based on 25°C ambient temperature and unit not in direct sunlight; based on an operator push force of less than 50% of rated
6. Based on 4m gate excluding infrared Safety Beams

Maximum Operating Speed for Corresponding Gate Mass

Gate Mass	Operator 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

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INDUSTRIAL SLIDING GATE OPERATOR FOR 1000KG GATES

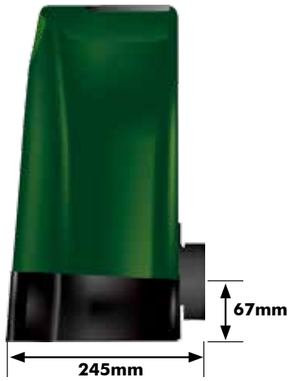
Cabling Requirements

1. 220V - 240V AC mains cable via double pole mains isolator switch (3 core LNE 1.5mm2 1 SWA 2)

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. Ground loop 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



CENTURION

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CENTURION

Join the SupaHelix revolution!

10 000 remote buttons,
10 000 mobile numbers[1],
10 000 reasons to install a SupaHelix!

SupaHelix hasn't just raised the bar in multi-unit access control - it's changed the game completely!

Main Features:

- Perfect for high-volume residential, commercial and government installations
- Store up to 10 000 remote control buttons and 10 000 mobile numbers[1] for multi-unit access control

- Add, delete and edit thousands of users, in groups and sub-groups, quickly and easily on the unit or over-the-air via SMS or through the secure, online G-WEB portal
- Advanced logging - record up to one million transactions on the included micro SD card
- Three individually-configurable input/output channels to monitor and control electrical devices[2]. This can also be done remotely[1].

1. With the optional GSM module attached

2. Certain functionality may require additional interface devices such as relays, isolators, etc.

SupaHelix™

Call 0860 236 887
Technical support line: 0861 003 123 (Monday - Friday: 07h00 - 18h00)
www.CentSys.com

A10

Industrial Sliding Gate Operator

A10 Endurance Product Code: **A10RE000V4** A10 Heavyweight Product Code: **A10RG0004** DC Converter: **DC_CON10V2**

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.

CENTURION

Technical Specifications

Technical Data	A10 Endurance	A10 Heavyweight
Input voltage 1	220V - 240V AC ±10%, 50Hz (single phase)	
Motor voltage	220V AC three-phase	
Maximum absorbed current	6A	
Output pinion	20 tooth mod 4	17 tooth mod 4
Gate speed at rated push force	Lockable lever with key release	
Standard speed	16m/min	13.6m.min
Sprint speed 2	30m/min	NA
Maximum gate mass		
Standard speed	1000kg	2000kg
Sprint speed	600kg	NA
Maximum gate length	20m	
Operator push force - rated		
Standard speed	30kgf	35kgf
Sprint speed	22.5kgf	NA
Manual override	Lockable lever with key release	
Duty cycle	80%	
Operating temperature range	-20°C to +50°C	
Anti-crushing sensing method	Electronic	
Motor thermal protection	Electronic	
Degree of protection	IP54	
Optional battery backup	√	
Onboard receiver	Receiver not included	
Mass of unit packed (with standard kit, but excluding rack)	15kg	
Packaging dimensions (with standard kit, but excluding rack and receiver)	Width: 355mm x Depth: 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 1	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	Width: 269mm x Depth: 145mm x Height: 365mm

1. Can operate directly 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 LNE 1.5mm2 1 SWA 2)

Optional Wiring (all cable is multi-stranded):

2. Intercom cable from control box to dwelling (n1 6 + 6 core 2 0.5mm² multi-stranded) or cable from control box to entry panel (n2 6 0.5mm² multi-stranded. Infrared Safety Beams (3 core 0.5mm² multi-stranded)
3. Access control device (3 core 0.5mm² multi-stranded 4)
4. Pedestrian keyswitch (2 core 0.5mm² multi-stranded) or
5. Keypad (3 core 0.5mm² multi-stranded)
6. External radio receiver (3 core 0.5mm² 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 0.5mm² 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

Choosing the RIGHT gate motor

Let's say, 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.4

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.

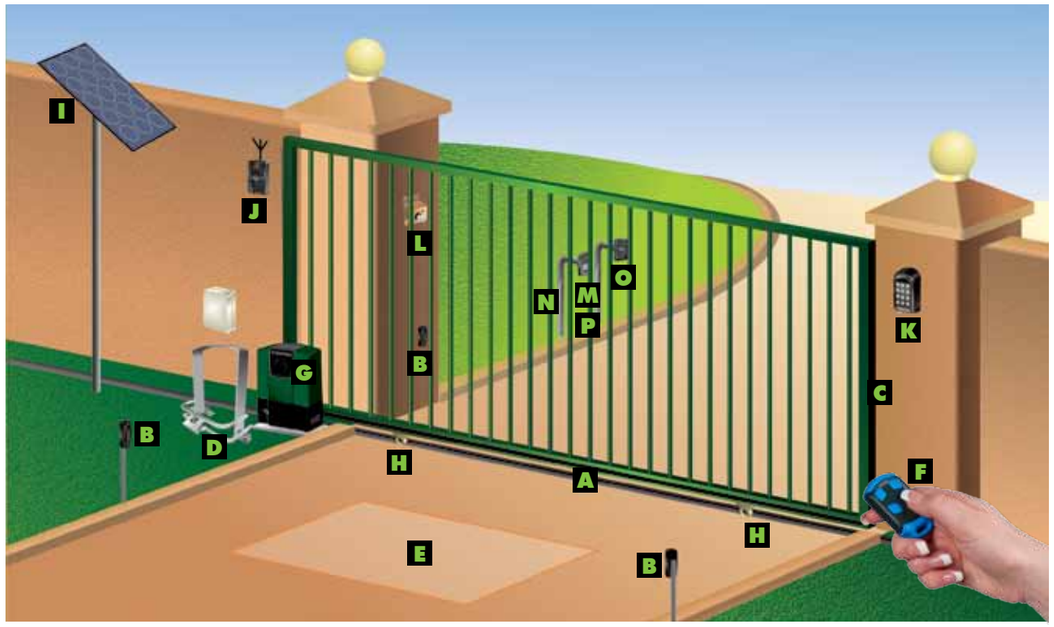
But that doesn't mean it should be unrealistically loaded. Subjecting it to that kind of abuse will invariably lead to problems down the line, so first get an approximation of what your gate weighs before selecting a motor. The good news is that gates are usually much, much lighter than we think.

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.

CENTURION

Sliding Gate Operator Accessories



A. Steel, Nylon RAZ or Nylon Angle Rack
Product Code: **CP20G, RAZKITSPCL, CP20N1**

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

B. CENTURION Infrared Beams
Product Code: Photon wireless beams: **PHOTON1V1;** i5 wired beams: **I5V3**

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

C. P36 Passive Sensitive Edge
Product Code: **1010M52220**

Passive sensitive edge provides additional protection against crushing.

D. Theft-resistant Cage
Product Code: **1195ACC001 / 113001V5PL / 11400101PL**

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

E. FLUX SA Loop Detector
Product Code: **FLUXSA00V1**

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

F. CENTURION Transmitter
Product Code: One-button: **TX1NV2433;** Two-button: **TX2NV433;** Three-button: **TX3NV2433;** Four-button: **TX4NV2433**

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

G. Backup Memory Module
Product Code: **PCA12201V1.0**

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

H. Wheel Kits
Product Code: **CP52GSHXK3**

A variety of wheel kits are available from Centurion Systems.

I. Solar Supply
Product Code: **ESOLAR20WA/ESOLAR40WA**

Alternative means of powering the system with a 20 Watt or 40 Watt panel.

J. G-SWITCH-22 GSM Device
Product Code: **GSWITCH0V3**

Allows for monitoring and activating the operator, via your phone, from anywhere in the world with GSM coverage.

K. SMARTGUARD or SMARTGUARDair Keypad
Product Code: **SK/1BLK, SK/AIRBLK**

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

L. A10 DC Converter
Product Code: **DC_CONKITL**

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

M. POLOphone Intercom
Product Code: **POLOE2GOV3/POLOH00WV1**

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

N. Gooseneck
Product Code: **XGSN-60000 or XSGN-6GLV0**

Steel pole for mounting intercom gate station or access control.

O. SOLO/LATTICE Proximity Access Control
Product Code: **SOLO0001V1 / LATC0003V1**

Proximity reader for allowing access for both pedestrians and vehicles.

P. G-SPEAK Intercom
Product Code: **GSC0K020V0,GSC1K020V0**

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

Product Code: **D2TFULLKIT_RAZ1 / D2TFULLKIT_ NYLON1**

- 1 x Operator **1**
- 1 x Foundation plate **P**
- 1 x Controller **B**
- 1 x Integral 1A charger **J**
- 1 x 5Ah battery **N**
- 4m x RAZ rack/Nylon angle rack **S/U**
- 2 x 4 button CENTURION transmitter **F**

D2 Turbo Low-Voltage Full Kit

Product Code: **D2TSPCLD02_RAZ1 / D2TSPCLD02_ NYLON1**

- 1 x Operator **1**
- 1 x Foundation plate **P**
- 1 x Controller **A**
- 1 x Integral 1A charger **J**
- 1 x 5Ah battery **N**
- 4m x RAZ rack/Nylon angle rack **S/U**
- 2 x 4 button CENTURION transmitter **F**

D5-Evo Full Kit

Product Code: **D5EVOFK_RAZ1 / D5EVOFK_STEEL2 / D5EVOFK_NYLON2**

- 1 x Operator **2**
- 1 x Foundation plate **Q**
- 1 x Controller **C**
- 1 x 2A charger **K**
- 1 x 7Ah Battery **N**
- 4m x RAZ rack/Steel rack/Nylon angle rack **S/T/U**
- 2 x 4 button CENTURION transmitter **F**

D5-Evo Low-Voltage Full Kit

Product Code: **D5RSPCLD06_RAZ1 / D5RSPCLD06_STEEL2 / D5RSPCLD06_NYLON2**

- 1 x Operator **2**
- 1 x Foundation Plate **Q**
- 1 x Controller **C**
- 1 x 2A charger **K**
- 1 x 7Ah battery **N**
- 4m x RAZ rack/Steel rack/Nylon angle rack **S/T/U**
- 2 x 4 button CENTURION transmitter **F**

D10 Full Kit

Product Code: **D101R**

- 1 x Operator **3**
- 1 x Foundation Plate **R**
- 1 x Controller **D**
- 1 x 2A 24V charger **K**
- 2 x 7Ah Battery **N**
- 4m x Steel rack **T**

D10 Turbo Full Kit

Product Code: **D101T_FULL KIT**

- 1 x Operator **3**
- 1 x Foundation Plate **R**
- 1 x Controller **D**
- 1 x 2A 24V charger **K**
- 2 x 7Ah Battery **N**
- 4m x Steel rack **T**
- 2 x Sets i5 Safety Beams **G**
- 2m x Passive sensitive edge **H**

D10 Turbo Partial Kit

Product Code: **D101T_PART KIT**

- 1 x Operator **3**
- 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

Product Code: **A10ER**

- 1 x Operator (20T Pinion) **4**
- 1 x Foundation Plate **R**
- 1 x CP201 Controller **E**
- 1 x CP200 Inverter **M**
- 4m x Steel rack **T**

A10 Heavyweight Kit

Product Code: **A10GR**

- 1 x Operator (17T Pinion) **4**
- 1 x Foundation Plate **R**
- 1 x CP201 controller **E**
- 1 x CP200 Inverter **M**
- 4m x Steel rack **T**

CENTURION

1
D2 Turbo/D2 Turbo Low-Voltage

2
D5-Evo/D5-Evo Low-Voltage

3
D10/D10 Turbo

4
A10

A
D2 Turbo Low-Voltage Controller

B
D2 Turbo Controller

C
D5-Evo Controller

D
D10 Controller

E
CP201 A10 Controller

F
CENTURION Transmitter

G
i5 Infrared Beams

H
Passive Sensitive Edge

I
CENTURION Receiver

J
800mA Charger

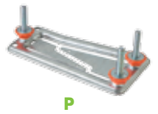
K
2A Switch Mode Charger

L
2A 24V Charger

M
CP200 Inverter

N
5Ah Battery

O
7Ah Battery



P
D2 Turbo/D2 Turbo Low-Voltage Foundation Plate

Q
D5-Evo/D5-Evo Low-Voltage Foundation Plate

R
D10/D10 Turbo/A10 Foundation Plate

S
RAZ Rack

T
Steel Rack

U
Nylon Angle Rack