

Catalogue 2018



Barriers | Bollards | Automation | Solar Access

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SECURITY IN YOUR CONTROL

SAFETY AND STYLE COMBINED

AFFORDABLE PEACE OF MIND

The boundary of your property is where security starts.

At **Green Gate**, we only supply and instal well-engineered security and traffic control solutions to approved safety standards from top European manufacturers.

From a simple automated parking barrier to the most advanced and secure systems for schools, public buildings and retail centres. Our focus is to supply safe, secure and cost-effective solutions.

With over a decade of experience in the industry, our UK-wide network of installers will provide you with a security assessment, project design and management, bespoke product manufacturing, installation, service and support. You may rest assured we are taking your security seriously.



Established in 1968 by Orlando Mantovani and Orville Turci, **O&O** has become one of the best-known international specialists in automatic vehicular access, traffic bollards and professional automatic barriers.

By adopting increasingly avant-garde technologies and by investing in new specialised personnel, **O&O** have established their credentials with high quality, advanced technology and top service.

Their outstanding range and **five-year warranties** mean you may rest assured they deliver excellent products to your clients.



The **Cardin** story started in 1974, producing systems for automation and access control using high-quality materials and catalysing competence with experienced product design engineers recognising the need for excellence.

Cardin works with a passion for progress with the utmost respect for laws, standards and the environment. The company is entirely geared to designing and developing complete automation systems for access control.

Confirmation of their absolute confidence is shown in the unique **five-year product warranty**.

* 2 year standard replacement warranty (subject to correct use) followed by an additional 3 year return to base repair or replace with 70% discount on parts required.

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Xtreme 3 Phase

Latest design, intensive-use barriers with three-phase motors modulated from a standard single phase supply.

O&O Barrier Kits

Based on over 30 years of engineering enhancement, the **Xtreme** range of barriers was launched to provide a **high intensity**, cost-effective, electromechanical barrier with market-leading technology and ability. An inverter-controlled **three-phase motor** coupled with an oil-bath lubricated gearbox operates from a **standard single-phase supply** via the new CSB control panel.

Internal limit switches and the unique software-based 'reverser' system provides highly **sensitive obstacle detection**. The standard door switch and pop out control panel make maintenance and service safe and simple.

The Xtreme barriers come in two types covering boom lengths from 2–8m and an amazing opening time as low as **0.7 seconds** (2m boom) up to 6 seconds (8m boom). The intelligent inverter software and magnetic encoder allows the booms to move fast with excellent **slow-down** and

sensitivity to contact. The three phase motors provide **near-silent** and continuous operation.

The Xtreme range also features extras such as integrated Red/Green LED boom lights, full length drop skirt, TCP/IP integration, centrally balanced boom for 6m or 8m version and internal heaters.



Each Barrier Kit is supplied as standard with Xtreme barrier, boom with **soft bump strip and reflective warnings**, recessed infrared beam, rest post, mounting plate and two radio fobs. For accessory options, see pages 6 and 7.

Xtreme 35

3m Kit
£2870

5m Kit
£2985

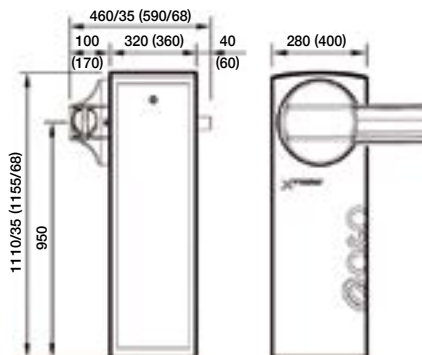
Xtreme 68

6m Kit
£3735

8m Kit
£3905

Technical Specifications

Supply voltage	230 Vac +/- 10% 50Hz
Opening time	0.7s (2m)–6.0s (8m)
Max manoeuvres a day	10,000 Xtreme 35
Working temperature	-15°C +60°C
Internal control unit	CSB (with separate inverter)
Colour	RAL 7022 or stainless
Protection level	IP67
Locking	Mechanical with key release
Soft Start/Stop	Yes (inverter)
Contact Reverse	Yes (encoder)



24Vdc, heavy use, commercial barriers with an open time of 2.5 seconds and contact reverse. Solar option.

Up & Down 24V



O&O Barrier Kits

The Up & Down barrier from O&O is the best in its class of low voltage, high use barriers. The newly reinforced case has a stylish look and features a locked metal door and pop out control panel for ease of maintenance. The 24Vdc motor and gearbox is controlled by the upgraded LOG-BR control panel with **single press set up** and simple **master/slave** configuration for double barriers. An internal magnetic encoder and unique software-based 'reverser' system provides highly sensitive obstacle detection.



The Up & Down barriers cover boom lengths from 4 – 6m with variable opening speed from **2.5–9 seconds**. The intelligent software and encoder allows high speed, excellent slow down and sensitivity to contact. The barrier has an integrated rolling code radio card and is supplied with two fobs.

Perfectly suited for **solar applications**, the Up & Down has proved its worth in remote locations or shared power situations. The solar panel upgrade options up to 950



operations per winter day are shown on page 6. In normal mains configuration the optional battery allows the barrier to operate up to 50 times in a power-cut.

The Up & Down range also features options such as integrated Red LED boom lights, folding boom for low head height areas and internal heaters.

Each Barrier Kit is supplied as standard with **Up & Down barrier, boom with soft bump strip and reflective warnings, recessed infrared beam, rest post, mounting plate and two radio fobs.**
For solar and accessory options, see pages 6 and 7.

Up & Down

4m Kit
£1670

5m Kit
£1785

6m Kit
£1840

Up & Down Solar

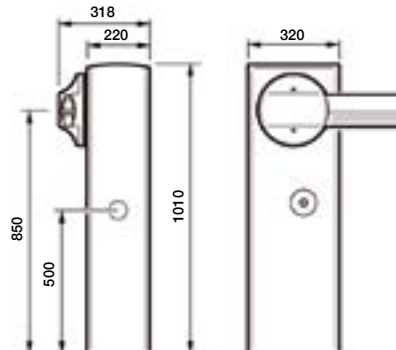
4m Kit
£2475

5m Kit
£2600

6m Kit
£2645

Technical Specifications

Supply voltage	230 Vac +/- 10% 50Hz
Opening time	2.5s (4m)–9.0s (6m)
Power cut protection	With Kit-Batt
Max manoeuvres a day	2,000
Working temperature	-15°C +60°C
Internal control unit	LOG-BR
Colour	RAL 7022 or stainless
Protection level	IP67
Locking	Mechanical with key release
Soft Start/Stop	Yes
Contact Reverse	Yes (encoder)





Solar Barriers and Accessories

No power, no problem.
24Vdc solar systems for
barrier automation.

O&O Barriers

The O&O Up & Down barriers are perfect for operation from solar power where a green solution is required or a mains supply is not available. Often providing power is the most expensive part of fitting a barrier, the solar option allows security to be fitted to the most remote locations.

The standard kit has been rated to operate the barrier **100 times a day** in a **British winter** with a **VIDEX GSM intercom** and **exit loop** as standard. For busier systems, simply

upgrade the solar panel kit using the table to the right.

With years of experience of solar powered security installations, the system has been developed in the UK to **work in the UK – all year round.**



Each Solar Kit is supplied as standard with **solar panel and frame for mounting to 100mm post, battery store, steel cabinet and charge controller.** Based on London location with **GSM intercom** and **exit loop.**

Standard **100 x per day
£included**

Upgrade 1 **400 x per day
+ £575**

Upgrade 2 **950 x per day
+ £1495**

Barrier Accessories



Drop skirt,
3m section

£225



Adjustable swing leg
rest post

£100



Twin channel induction
loop controller with LCD

£260



Red/Green internal LED boom
lights, 5m for Extreme barrier

£225



Snap-out boom adaptor
for impact break away

£360



90° folding boom kit
with bump strip, 5m

£460



Two button remote with rolling
code for built-in receiver

£35



Battery backup
for Up & Down

£230



Custom colour in any RAL paint
finish (free with over ten units)

£205

Barrier Selector

O&O Model	Xtreme 3m Kit	Xtreme 5m Kit	Xtreme 6m Kit	Xtreme 8m Kit	Up & Down 4m Kit	Up & Down 5m Kit	Up & Down 6m Kit
Light weight 6m boom BT 85-60							✓
3m standard boom BL-SMALL 30	✓				✓		
4m standard boom BL-SMALL 40		✓			✓	✓	
5m standard boom BL-SMALL 50		✓				✓	
Right angle boom kit, 3m BL-SMALL/SN 90° 3m	✓				✓		
Right angle kit and lights, 3m FULL BL-SMALL/SN 90° R/G	✓						
Right angle boom kit, 5m BL-SMALL/SN 90° 5m		✓			✓	✓	
Right angle boom and lights, 5m FULL BL-SMALL/SN 90° R/G		✓					
Folding boom kit and lights, 3m FULL BL-SMALL/SN 180° 3m R/G	✓						
Folding boom kit, 5m BL-SMALL/SN 180° 5m		✓					
Folding boom kit and lights, 5m FULL BL-SMALL/SN 180° 5m R/G		✓					
Super carbon speed boom BL-CARBON 275	✓						
Heavy duty 6m boom BL-LARGE 60			✓	✓			
Heavy duty 8m boom extra EXT BL-LARGE 2				✓			
Drop skirt, 3m RS/A-3M	✓	✓	✓	✓	✓		
Adjustable Boom Swing rest PP		✓	✓	✓	✓	✓	✓
Red/Green light kit, 3m LIGHT 3 R/G	✓						
Red/Green light kit, 5m LIGHT 5 R/G		✓					
Red/Green light kit, 8m LIGHT 8 R/G			✓	✓			
Red bump strip, 3m KIT-GOM 3	✓						
Red bump strip, 5m KIT-GOM 5		✓			✓	✓	
Black bump strip, 8m KIT-GOM 8			✓	✓			
Fixed rest post FORCEL-REG		✓	✓	✓	✓	✓	✓
PS LIGHT XTREME	✓	✓	✓	✓			
Battery backup for power-cut operation					✓	✓	✓



Easy

High deterrent electromechanical bollard with contact reverse protection. 500mm or 700mm high and suitable for up to 500 operations per day.

O&O Bollards

The Easy bollard combines economy and quality. Born out of careful market research, thorough design techniques and detailed craftsmanship, O&O have created a simple deterrent bollard which both responds to customer needs and incorporates the qualities that have always distinguished O&O products.

The Easy is available in two models: the Easy 115-500 extends a 115mm diameter bollard up 500mm and the Easy 200-700 extends a 200mm diameter bollard up 700mm. Supplied as standard in RAL 7022 painted finish with a reflective strip, the Easy 700 also has an integrated LED cap ensuring maximum visibility.

A fast lift time of 6–9 seconds is complemented with amperometric detection of the electromechanical motor allowing the bollard to stop and reverse on obstacle detection.

Operating from the new CDS control panel, the Easy bollard has auto set-up, digital display and two programmable outputs allowing simple integration of the bollard into any security system. Up to four bollards can operate in unison from a single controller and the optional battery backup holds the bollards in the locked position during a power-cut.



For accessory options, see page 11

Easy 115-500

Standard
£1525

Stainless
£2120

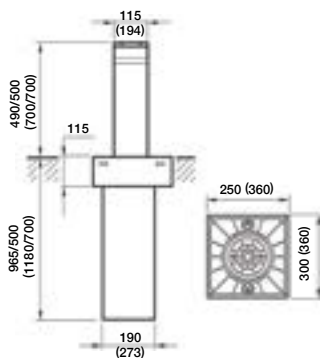
Easy 200-700

Standard
£2040

Stainless
£2860

Technical Specifications

Supply voltage	230 Vac +/- 10% 50Hz
Opening time	6s H:500mm and 9s H:700mm
Max manoeuvres a day	500
Working temperature	-15°C +60°C
External control unit	CDS (max four bollards each)
Break resistance	60,000J (500), 110,000J (700)
Colour	RAL 7022 or stainless
Protection level	IP67
Locking	With battery backup
Reed limit switch	Open only



Heavy duty electromechanical bollard with contact reverse protection. 500mm or 700mm high and suitable for up to 1500 operations per day.



O&O Bollards

The Dakota bollard has over 20 years of design history proving its worth as a high quality, reliable and cost effective rising bollard worthy of the most demanding applications.

The new Dakota range features all the reliability of past designs and incorporates user feedback in a host of improvements. Available in either 500mm or 700mm height, each with a 220mm diameter. A new conical crown with EPDM seal reduces debris ingress by up to 80% and houses the 12 LED lights and motion siren. Supplied as standard in RAL 7022 painted finish with a reflective strip, the Dakota is also available in a high-quality stainless steel finish.

A fast lift time of 6–9 seconds is complemented with amperometric detection of the electromechanical motor, allowing the bollard to stop and reverse on obstacle detection. An integrated heating circuit allows the bollards to operate at temperatures as low as -40°C. Ease of installation and maintenance is core to the design with a single multi-core cable and fully separate motor from the housing.

Operating from the new CDS control panel, the Dakota bollard has auto set-up, digital display and two programmable outputs allowing simple integration of the bollard into any security system.

Up to four bollards can operate in unison from a single controller, and the optional battery backup holds the bollards in the locked position during a power-cut.



For accessory options, see page 11

Dakota 220-500 Light

Standard
£3030

Stainless
£4025

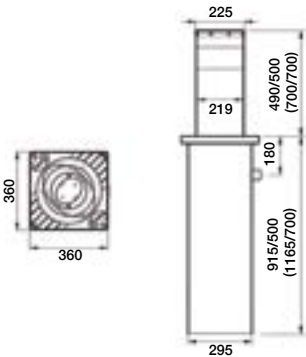
Dakota 220-700 Light

Standard
£3280

Stainless
£4380

Technical Specifications

Supply voltage	230 Vac +/- 10% 50Hz
Opening time	6s H:500mm and 9s H:700
Max manoeuvres a day	1500
Working temperature	-40°C +60°C
External control unit	CDS (max four bollards each)
Break resistance	120,000J (500), 150,000J (700)
Colour	RAL 7022 or stainless
Protection level	IP67
Locking	With battery backup
Reed limit switch	Open only





O&O Bollards

The Grizzly bollard offers a host of newly-designed features making it the **fastest, safest, most robust and cost effective** hydraulic bollard on the market today. A fast lift time of **5–6 seconds** is complemented with a special safety valve allowing the bollard to stop and reverse on **obstacle detection**. An integrated heating circuit allows the Grizzly to operate at temperatures down to **-40°C**.

The whole layout and design has been created with ease of installation and future maintenance in mind. Even the integrated pump can be removed and **serviced by one person**. Debris ingress has been reduced by up to 80% with a unique conical design of the crown with **12 LED lights and motion siren**. Installation is far less involved with a shallow hole for the height of the bollard. O&O also supply an optional steel kick-plate cover allowing the casing to be **pre-fitted early** in a property development.

Operating from the new CDS control panel, the Grizzly has auto set-up, digital display and two programmable outputs allowing simple integration into any security system.

Available at 600mm or 800mm high and with either 6mm or 10mm thick casing (additional cost for 10mm version), as standard RAL 7022 painted or stainless finish. Each bollard can be supplied with or without brakes (fail-safe or fail-secure).

In March 2014, O&O launched a PAS68 anti-terrorist version of the Grizzly with UK Highway rating performed by MIRA. For more details on the PAS68 model contact our office.



Fail open as standard.
Fail Up with SCT version (request at order, with no extra cost)

Grizzly 275-600 Light

Standard
£4070

Stainless
£4775

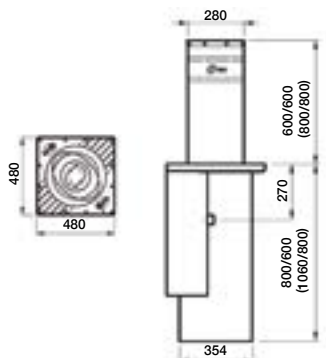
Grizzly 275-800 Light

Standard
£4240

Stainless
£4985

Technical Specifications

Supply voltage	230 Vac +/- 10% 50Hz
Opening time	5s H:600mm and 6s H:800mm
Max manoeuvres a day	3000
Working temperature	-40°C +60°C
External control unit	CDS (max 4 bollards each)
Break resistance	250,000J (600), 800,000J (800, 10mm)
Colour	RAL 7022 or stainless
Protection level	IP67
Manual release	With SCT version
Reed limit switch	Open & close



Grizzly Design Features



New conical light crown housing 4 axial and 8 radial IP67 LED circuits and built-in acoustic buzzer

New independent bollard casing, with ability to pre-install during construction and subsequent installation of the bollard



Kick plate reinforced steel installation cover for use in pre-installation of bollards



- Conical shaped cylinder housing and new flange seal drastically reduce the entry of debris by up to 80%
- 273mm diameter bollard with thickness of 6mm or 10mm. 600mm and 800mm heights
- The new square and oval shaped flange design allow the bollard to blend in perfectly with any city or private environment
- Raised multi-pole cable output channel for easy wiring during installation and maintenance
- Easy to access hydraulic pump housing for easy maintenance. By removing the top case, it is possible to extract the pump by releasing a single connector

Bollard Accessories



CDS control board, up to four bollards per panel

£355



Red/Green LED traffic light with wall-mount kit

£385



Twin channel induction loop controller with LCD

£260



Two button remote with rolling code for built-in receiver

£35



Bollard battery backup (not for Grizzly)

£230



Custom colour in any RAL paint finish (free over ten units)

£205



BL Ram Kits

High intensity, 24Vdc electromechanical ram motor for gates up to 3.5m. Encoder safety and integrated battery backup.

Cardin Automation and Solar Kits

One of the best thought-out systems on the market today, the Cardin BL Ram Series installs with ease, and delights for years. The operator arm, built around a robust structure in cast aluminium, features an efficient motor that works in complete synergy with a high performance reduction unit. Housed in its three-piece waterproof casing, the worm-drive is lubricated with **permanent fluid grease** and **supported by double bearings** and special drag screw making it a top-of-the-range operator with a unique performance level. It moves silently and fluently and is encoder controlled with soft start/stop.

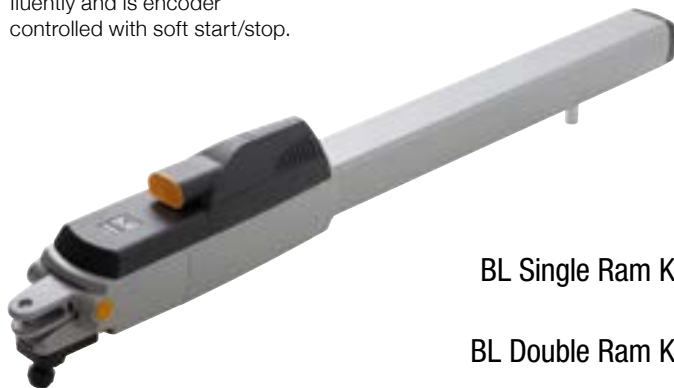


The control electronics, with a full display, allows **simple self programming** and manoeuvre counts, reducing installation times. Precise digital repositioning takes place automatically whenever the gate senses obstacles ensuring safe, quiet and reliable operation.

In case of power-cut, the **built-in emergency battery** keeps the motors in operation and override is guaranteed by the unique 'always easy' key release mechanism.

For installation without mains, the **solar kit version** is supplied as standard with enough power to operate the gate up to 30 times per winter day, with an extra GSM intercom and exit loop. This is not just a gesture, this is a **UK-based solar solution** for remote gates and real installations.

Each Ram Kit is supplied as standard with **BL Ram(s)**, **10m connecting cables**, **digital control panel**, **battery backup** (or solar system) **two pairs of IR beams**, **mounting brackets** and **two radio fobs**. For accessory and solar options, see page 15.



BL Single Ram Kit

Mains
£1280

Solar
£2040

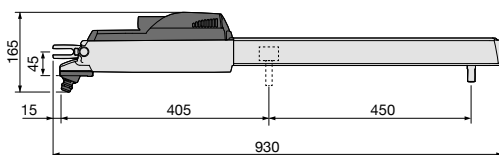
BL Double Ram Kit

Mains
£1395

Solar
£2155

Technical Specifications

Supply voltage/current	230 Vac +/- 10% 50Hz, 2A
Motor voltage/Power	24Vdc, 60W
Opening time	25 seconds
Duty cycle	70%
Travel distance	450mm
Thrust	2200N
Max. opening angle	110°
Protection level	IP44
Max Gate Weight	200kg @ 3.5m
Encoder	Integrated



Heavy duty, 24Vdc underground motor for gates up to 3m. Encoder safety and integrated battery backup.

HL Underground Kits



Cardin Automation and Solar Kits

Guaranteed to give an excellent first impression, the HL Series motors are, simply, a cut above the rest. The **robust and reliable electromechanical** operator guarantees optimum performance under all working conditions. Its system of **bearing balanced pivoting levers** guarantees regular and silent running. Gate position is encoder controlled with **soft start-stop and self-programming** thus reducing installation times to a minimum. Fully rubber-sealed connections are simple colour-to-colour with the supplied 10m shielded cables. The control electronics with a full display allows simple programming



and manoeuvre counts. Precise digital repositioning takes place automatically whenever the gate senses obstacles ensuring safe, quiet and reliable operation.

The irreversible reduction system guarantees the locking of the gate in the closed position. The manual emergency release

is easy to operate using a **personalised key** and the battery backup keeps the gates moving in a power-cut.

The standard operator opens to 110° with an optional 360° self-tensioning chain drive version for wider opening gates.

For installation without mains, the solar kit version is supplied as standard with enough power to operate the gate up to **30 times per winter day** with an **extra GSM intercom and exit loop**. This is not just a gesture, this is a **UK based solar solution** for remote gates and real installations.



Each Underground Kit is supplied as standard with **HL motor(s) and foundation case, 10m connecting cables, digital control panel, battery backup (or solar system), two pairs of infrared beams and two radio fobs**. For accessory and solar options, see page 15.

HL Single UG Kit

Mains
£1775

Solar
£2530

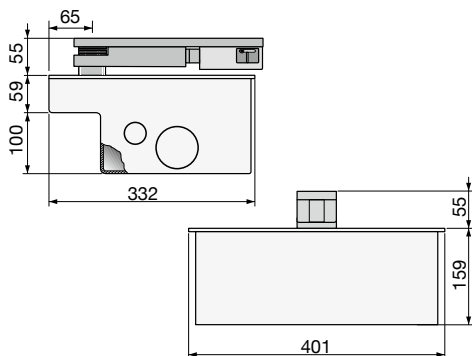
HL Double UG Kit

Mains
£1890

Solar
£2645

Technical Specifications

Supply voltage/current	230 Vac +/- 10% 50Hz, 2A
Motor voltage/Power	24Vdc, 60W
Opening time	22 seconds
Duty cycle	70%
Torque	170Nm
Max. opening angle	110° (180° with chain drive)
Protection level	IP67
Manual release	Key release
Max Gate Weight	350kg @ 3m
Encoder	Integrated





SL Slide Kits

Heavy duty, 24Vdc sliding gate motor for gates up to 1500kg. Encoder safety and integrated battery backup.

Cardin Automation and Solar Kits

Powerful and tireless, controlled by state of the art electronics, SLX1524 is fitted with a powerful dc motor. Guaranteed high efficiency, long life and silent running for gates up to 1500kg. Backed up by a finely tuned double gear kinematic system which reduces the stress on the motor and structure caused by the inertia of heavy gates.

Encoder controlled self-programming reduces installation time and provides soft start/stop. Precise digital repositioning takes place automatically whenever the gate senses obstacles ensuring safe, quiet and reliable operation.

The backlit LCD allows you to rapidly set the system parameters including the sequential button mode, automatic re-closing, safety edges, warning lamp pre-flash, and photo cell function settings, etc.

A built-in real-time clock, allows you to set 10 auto open events within 3 weekly time bands. (Mon–Fri, Sat–Sun, Mon–Sun); the events can be enabled or disabled (during holiday periods) from the menu or radio fob.

Truly a powerful and complete sliding motor system. For installation without mains, the solar kit version is supplied as standard with enough power to operate the gate up to **30 times per winter day** with an extra **GSM intercom and exit loop**. This is not just a gesture, this is a **UK based solar solution** for remote gates for real installation.



Each Slide Kit is supplied as standard with **SL motor and mounting plate, digital control panel, battery backup (or solar system) two pairs of infrared beams and two radio fobs**. For accessory and solar options, see page 15.

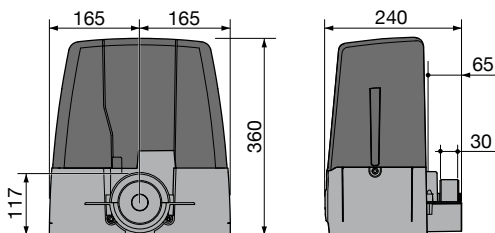
SL Slide Kit

Mains
£1025

Solar
£1785

Technical Specifications

Supply voltage/current	230 Vac +/- 10% 50Hz, 2A
Motor voltage/Power	24Vdc, 130W
Opening time	22 seconds
Duty cycle	70%
Torque	74Nm
Speed	9.4m/min
Protection level	IP44
Manual release	Key release
Max Gate Weight	1500kg
Encoder	Integrated



No power, no problem.
24Vdc solar systems for
all gate automation.

Solar Gates and Accessories



Cardin Automation and Solar Kits

All of our gate systems can be operated from solar power, where a green solution is required or a mains supply is not available. Often providing power is the most expensive part of automating a gate, the solar option allows security to be fitted to the most remote locations.

The standard kit has been rated to operate the gate 30 times a day in a British winter with a VIDEX GSM intercom and exit loop as standard. For busier systems, simply

upgrade the solar panel kit using the table to the right.

With years of experience of solar powered security installations, the systems have been developed in the UK to work in the UK – all year round.



Each Solar Kit is supplied as standard with **solar panel and frame for mounting to 100mm post, battery store, steel cabinet and charge controller.** Based on London location with GSM intercom and exit loop.

Standard

30 x per day
£included

Upgrade 1

100 x per day
+ £575

Upgrade 2

200 x per day
+ £1495

Gate Automation Accessories



Two button radio control.
433MHz. Colour cover available

£40



700m range radio remote.
433/868MHz, waterproof

£145



Twin switch induction
loop controller with LCD

£260



Wireless backlit keypad,
433MHz. IP57

£125



24V double LED warning
strobe light

£50



Videx single button GSM
intercom + Vodafone PAYG sim

£865



RadioShield wireless photocells
with solar backup, 868MHz

£190



Stationary Transceiver for
RadioShield products 868MHz

£110



Safety edge RadioShield kit with
transmit and receive, 868MHz

£185



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Registered Company Number: 5816689



Raising Standards
Safety Assured

