



**CENTURION**



**VERT-X<sup>®</sup>**

**LINEAR  
SWING GATE  
MOTORS**



# VERT-X<sup>®</sup>



## Beauty is the beast!

With such striking, rugged good looks, the **VERT-X** linear swing gate motor for domestic gates is more than just a pretty face. Combining an innovative open-nut drive system, advanced diagnostic capabilities and functionality, rugged die-cast aluminium construction and exceptional aesthetics for a wholly unobtrusive installation, **VERT-X** is positioned firmly at the apex of swing gate automation.

### Main Features

---



#### Strength meets style

**VERT-X** travels in style: using a novel open-nut drive system, **VERT-X** opens and closes domestic gates smoothly, safely and reliably. Because there is no extending and retracting as one would find in piston-driven systems, **VERT-X** delivers unmatched convenience without impacting the aesthetic appeal of your gate, and its rugged die-cast aluminium armour not only looks good, it keeps your trusty gate swinging like it is 1938!

---



#### Easy to install

The fully-integrated linear action operator, with no complicated linkages, makes the installation of the system very quick and easy. Added to this, the internal position control mechanism simplifies the installation even further, as the gates no longer require external end-stops...and the optional mounting templates make getting your installation dimensions just right a piece of cake!

---



#### High push force

The high-torque DC motor operating through an efficient planetary gearbox, delivers a potent 220kg push force. The **VERT-X** is capable of reliably operating swing gates in the majority of domestic and light-industrial applications.

---



#### Revolutionary brake

The revolutionary centrifugal brake developed for the **V-Series range of swing gate motors** ensures secure locking of the operator when the gate is both open and closed.



### Internal limits

The **VERT-X's** advanced internal limit system guarantees very reliable operation and precise control of the movement of the gate. It is designed to provide precision position information to the controller, resulting in unparalleled reliability and setting the standard in early collision detection.



### Complete speed control

The **V-Series** electronics, with 'Quadra-Drive' speed control, maintains smooth and quiet starting and stopping of the gate regardless of its condition and ambient temperatures, even after many years of service. This state-of-the-art control reduces the operating stresses and extends the life of both the operator and the gate.



### Swift operation

The mechanical gearing of the **VERT-X**, combined with its leading-edge speed control system, maintains rapid and precisely-controlled opening and closing of the gate for greater convenience and security.



### Safe battery backup

With only a low-voltage battery supply powering the **VERT-X** operator, the system is totally safe from risks such as electrocution and has the added benefit of providing power-failure protection. The added efficiency of the operator results in an exceptional number of uses in the event of a power failure.

But the good news doesn't stop there. You can enjoy complete power failure autonomy and save on installation costs while doing your bit for the environment by connecting your **VERT-X** to a solar power supply. **VERT-X** is completely solar-ready, making it ideal for sites with no mains at the gate and saving significantly on installation costs. There is simply no better time to go green and let the sun take charge of your access automation power requirements.



### Sensitive anti-crushing control

The **V-Series** controller accurately monitors any obstructions to the movement of the gate and ensures ultra-safe operation, protection against crushing and end-user peace of mind.



### Anti-fatigue cable harness

Every aspect of the **VERT-X** has been designed to work hard, and its anti-fatigue cable with over-moulded strain relief guarantees excellent reliability and maximum mileage.





SWING GATE  
MOTORS



## All-weather construction

All external components of the operator are manufactured from a combination of stainless steel, epoxy-coated coastal-grade aluminium and UV-stabilised engineering polymers. This guarantees a robust and durable unit in both inland and coastal environments.



## Easy to use

The **VERT-X** controller, combined with its Liquid Crystal Display (LCD), provides a very intuitive and easy to use menu system for setting up the end-of-travel limits and all features available on the system. Offering an extensive range of useful features, the controller is exceptionally versatile and has the ability to adapt the system to suit the requirements of almost every user.



## Operate wirelessly, thanks to CENTURION<sup>1</sup>

Besides its ultra-secure code-hopping technology offering the highest level remote control security, this CENTURION's onboard receiver is both multichannel and multi-user. It allows for multi-button remote controls to operate any combination of the system inputs, such as Gate trigger, Pedestrian Opening, Holiday Lockout, etc. It stores up to 64 transmitter buttons, and amongst other access control features, it provides the ability to selectively add and delete transmitter buttons saved into its memory.

<sup>1</sup>. CENTURION ultra-secure code-hopping remote controls and receivers



## Break-in Alarm<sup>2</sup> (a world first)

Improve the security at your entrance by enabling the onboard Break-in Alarm, and be alerted to the presence of would-be intruders loitering at the gate trying to devise a way to get in. This feature, which uses the gate operator safety beams, activates for the period of time that the beam is broken (and for 30 seconds thereafter) and can be linked to a third party alarm, such as armed response.

<sup>2</sup>. Requires gate safety beams to be installed



## Ambush Alarm<sup>2</sup> (a world first)

Counter the security risk presented by a would-be intruder using the opportunity of covering the gate operator safety beams, waiting for the gate to be opened and stay open and ambush an unsuspecting homeowner. This feature will set off an alarm if the beams have been blocked for an extended period of time. The alarm remains active while the beams remain broken.

<sup>2</sup>. Requires gate safety beams to be installed

## V-Series Controller Features

### Hardware Features

- Separate weatherproof housing for dual-channel controller, battery and charger
- Fully-sealed plastic housing for controller to prevent ingress of dirt and insects
- Easy setup of controller using LCD user interface
- Removable connectors on controller for easy maintenance
- Watchdog IC ensures full and safe operation of controller

### Electronic Features

- Onboard multichannel CENTURION code-hopping receiver with the ability to learn transmitter buttons to specific functions (e.g. Gate trigger, Pedestrian Opening, Free-exit, Pillar Light Control<sup>1</sup>, Holiday Lockout), and selectively delete specific transmitters that have been lost or stolen
- Multiple Modes of Operation, including Standard Mode and Condominium Mode (multi-user)
- Full configuration of gate opening parameters, including independent gate opening and closing speeds, ramp-up and ramp-down distances and end-of-travel crawl distance
- Automatic closing with adjustable time, pushbutton override and selectable according to gate status

<sup>1</sup>. Security / pillar light must be fitted





- Selectable leaf-delay on either gate leaf
- Advanced Positive Close Mode ensuring the gate remains closed in a secure, rigid position
- Multiple Operating Profiles to suit region of installation - select between ZA, CE, etc.
- Pedestrian Opening (adjustable opening and Autoclose time)<sup>2</sup>
- Remote Gate Status Indicator (gate position, power failure, low battery, multiple collision detection and Pillar Light status indication)<sup>3</sup>
- Courtesy / Pillar Light Timer with adjustable time<sup>1</sup>
- Fully configurable pre-delays with multi-modal pre-flash<sup>1</sup>
- Opening and closing safety beam inputs with beam circuit functional test<sup>4</sup>
- High-security cleared-beam Autoclose in conjunction with safety beam (PIRAC)<sup>4</sup>
- Break-in and Ambush Alarms with configurable outputs via onboard buzzer, Pillar Light Relay, etc.<sup>4</sup>
- Holiday Lockout – configurable as Emergency Stop<sup>5</sup>
- Free-exit facility<sup>6</sup>
- Advanced solenoid or magnetic gate-lock release pulse
- Supports inward- and outward-opening swing gates without the need for mechanical endstops

<sup>2</sup>. Onboard receiver must be used or external access control device such as keypad or keyswitch must be fitted

<sup>3</sup>. Remote LED must be fitted

<sup>4</sup>. Infrared safety beams or equivalent detection device must be fitted

<sup>5</sup>. Emergency stop pushbutton must be fitted

<sup>6</sup>. Inductive loop detector or infrared safety beams must be fitted

## Technical Specifications

### VERT-X

Input voltage	90V - 240V AC $\pm$ 10%, 50Hz <sup>1</sup>
Motor voltage	12V DC
Motor power supply	Battery-driven (standard capacity - 7Ah) <sup>2</sup>
Battery charger <sup>1</sup>	CP84SM - 1.8A @ 13.8V
Current consumption (mains)	170mA
Current consumption (motor at rated load)	3A
Current Consumption (motor at max load)	13A
Operator push force - maximum	220kgf
Operator stroke - maximum	320mm
Operator speed (motor at rated load)	28mm/sec
Typical gate opening time (90°) <sup>6 7</sup>	< 11 sec
Manual override	Key release
Maximum number of operations per day	250
Design Life of electric motor	150,000 cycles
Duty cycle (mains present) <sup>3 4</sup>	60%
Operations running on battery backup (no mains present) over 24 hours (with fully charged 7Ah battery) <sup>5</sup>	300
Collision sensing	Electronic
Controller solenoid output rating	2A DC
Operating temperature range	-15°C to +50°C
Onboard receiver type	CENTURION code-hopping, multichannel
Receiver code storage capacity	64 transmitter buttons
Receiver frequency	433MHz
Mass of unit packed (excluding battery)	
Single kit	10kg
Double kit	18kg

<sup>1</sup>. Can operate off a solar supply, consult CENTURION dealer for assistance

<sup>2</sup>. Can increase battery capacity for longer standby times

<sup>3</sup>. Based on 25°C ambient temperature and unit not in direct sunlight

<sup>4</sup>. Based on an operator push force of less than 50% rated

<sup>5</sup>. Based on a double kit excluding infrared safety beams

<sup>6</sup>. Assume a 90° opening gate and optimum mounting position

<sup>7</sup>. Assumes full stroke of operator is used

## Installation Information

### VERT-X Maximum Allowable Gate Mass & Coverage

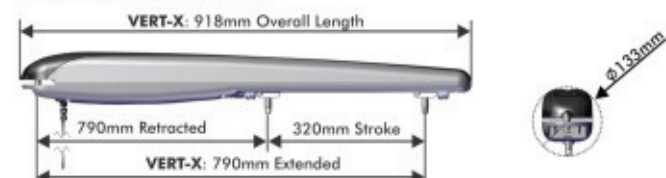
#### Maximum Allowable Gate Mass (per gate leaf)

Length (m)	1.5	2	2.5	3
Mass (kg)	600	335	215	150

#### Maximum Allowable Coverage in Wind Speeds

Length (m)	1.5	2	2.5	3
Height (m)	1.8	1.8	1.8	1.8
Coverage	Max Wind Speeds (km/h)			
25%	91	68	55	45
50%	64	48	39	32
75%	52	39	31	26
100%	45	34	27	23

### Overall Dimensions



### Minimum Installation Requirements

Gate opening 90° or less			Gate opening 100°		
	Wall (Min)	Pillar (Max)		Wall (Min)	Pillar (Max)
Operator			Operator		
VERT-X	190mm	60mm	VERT-X <sup>1</sup>	370mm	60mm
			VERT-X <sup>2</sup>	540mm	60mm

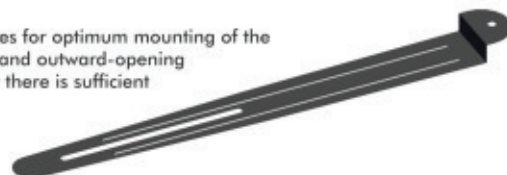
<sup>1</sup>. For gates 1.0m to 2.0m long

<sup>2</sup>. For gates 2.0m to 3.0m long

## Optional mounting kit available



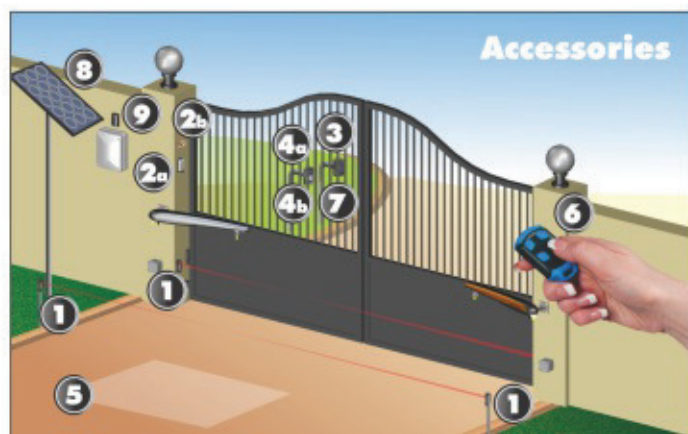
The optional mounting kit enables the installer to easily determine the installation values for optimum mounting of the Wall and Gate Brackets. The templates provide installation support for both inward- and outward-opening gates, and helps to ensure that the geometry of the installation is correct and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







SWING GATE  
MOTORS



**CENTURION Infrared Safety beams**  
Always recommended on any gate automation installation



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



**Pedestrian keyswitch**  
Basic key-operated switch for allowing access for pedestrians



**SOLO/Lattice proximity access control**  
Proximity reader for allowing access for both pedestrians and vehicles



**POLOphone intercom**  
Allows visitors to communicate with people inside in order to gain access to the property



**G-SPEAK Intercom**  
Allows visitors to communicate with people inside in order to gain access to the property



**FLUX SA loop detector**  
Allows free-exit of vehicles from the property - requires ground loop to be fitted



**CENTURION transmitters**  
Available in one-, two- and four-button variants. Incorporates ultra-secure code-hopping encryption



**Gooseneck**  
Steel pole for mounting intercom gate station or access control reader



**Solar supply**  
Alternative means of powering the system - consult your CENTURION dealer

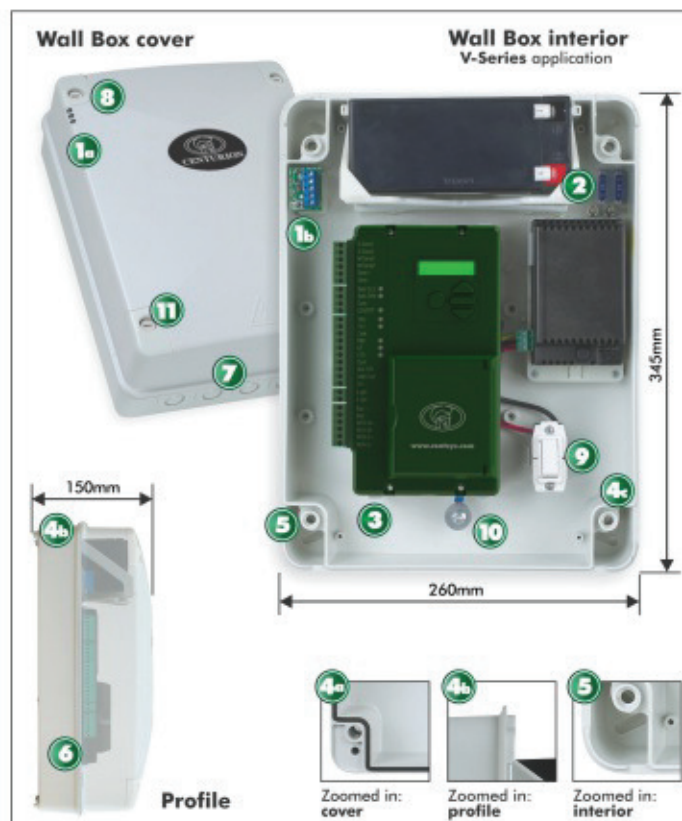


**G-SWITCH-22 devices**  
Allows for monitoring and activating the operator, via your phone, from anywhere in the world that has 2G GSM network coverage

## The V-Series Wall Box

The **V-Series** Wall Box, supplied standard with all **V-Series** kits, is constructed out of tough, UV-resistant, fade-resistant ABS plastic, providing strength and long-term durability. The high IP65 rating (ingress protection) will assure you that just about nothing will get in.

Its contemporary design complements the unobtrusive design of the **V-Series** operator and enhances the aesthetics of any installation.



### Legend:

- 1a Light pipes displaying LED outputs, which will indicate gate status from the interface board
- 1b Interface board with an anti-tamper switch which can be linked to a security company
- 2 Spare fuse holders for both ATO and glass fuses
- 3 Clip-in component brackets
- 4a Weatherproof design to prevent ingress of water, dust and insects. Includes the built-in rubber seal on underside of lid
- 4b Exterior lip to ensure water stays out, even during the removal of the cover
- 4c Screw-down points for cover and mounting slots located outside of the general housing to ensure complete sealing of the unit
- 5 Slotted, diagonal mounting slots add mounting flexibility
- 6 Low level housing wall provides easy access to terminal points
- 7 Five knock-outs for easy, and multiple, cable entry
- 8 Gas breathing point allows any potential build-up of gas to escape, whilst still preventing the ingress of dust, water and ants
- 9 Built-in isolator to conform with legal requirements
- 10 Built-in, easily accessible earth point
- 11 Strip-proof, ultra-strong polycarbonate screws enclosed in screw-retaining slots