### INSTALLATION INFORMATION

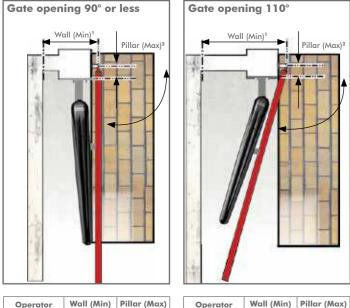
#### VERT-X Maximum Allowable Gate Mass & Coverage: Maximum Allowable Gate Mass (per gate leaf)

| 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   |  |
|------------|------------------------|-----|-----|-----|--|
| Mass (kg)  | 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  |  |

#### MINIMUM INSTALLATION REQUIREMENTS



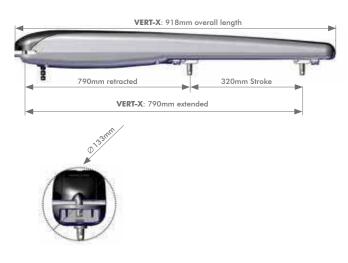
| Operator | Wall (Min) | Pillar (Max) | Operator            |   |
|----------|------------|--------------|---------------------|---|
| VERT-X   | 190mm      | 60mm         | VERT-X1             |   |
|          |            |              | VERT-X <sup>2</sup> | Γ |

370mm 60mm

540mm 60mm

1. For gates 1.0m to 2.0m long 2. For gates 2.0m to 3.0m long

#### **OVERALL DIMENSIONS**



# **TECHNICAL SPECIFICATIONS**

|   | VERT-X  |  |  |  |
|---|---|--|--|--|
| Input voltage <sup>1</sup>                                  | 220V AC ±10%, 50Hz  |  |  |  |
| Motor voltage   | 12V DC  |  |  |  |
| Motor power supply  | Battery-driven (standard capacity - 7Ah)                  |  |  |  |
| Battery charger <sup>1</sup>                                | CP84SM - 1.8A @ 13.7V                                     |  |  |  |
| Current consumption (mains)                                 | 170mA   |  |  |  |
| Current consumption (motor at rated load)                   | 3/13A   |  |  |  |
| Current consumption (quiescent load)                        | 70mA  |  |  |  |
| Operator push force - maximum                               | 220kgf  |  |  |  |
| Operator stroke   | 320mm   |  |  |  |
| Maximum leaf width for corresponding gate mass <sup>2</sup> | 2m/335kg  |  |  |  |
| Maximum leaf width for corresponding gate mass <sup>2</sup> | 3m/150kg  |  |  |  |
| Gate opening time - typical                                 | 11 sec  |  |  |  |
| Maximum daily cycle   | 250 cycle/day   |  |  |  |
| Design life   | 150 000 cycles  |  |  |  |
| Operations in standby with standard batt                    | ery <sup>3</sup>  |  |  |  |
| Half day  | 120 cycles  |  |  |  |
| Full day  | 100 cycle   |  |  |  |
| Collision sensing   | Electronic  |  |  |  |
| Operating temperature                                       | -15°C to +50°C  |  |  |  |
| Degree of protection  | IP55  |  |  |  |
| Controller incorporated                                     | V-Series in separate wallbox                              |  |  |  |
| Onboard receiver type                                       | NOVA code-hopping onboard multichannel                    |  |  |  |
| Receiver frequency  | 433.92MHz   |  |  |  |
| Receiver code storage capacity                              | 60 transmitter buttons                                    |  |  |  |
| Mass of unit packed   |   |  |  |  |
| Single kit  | 10kg  |  |  |  |
| Double kit  | 18kg  |  |  |  |
| Packaging dimensions  |   |  |  |  |
| Single kit <sup>4</sup>                                     | Length: 1105mm<br>Width: 335mm<br>Height: 270mm           |  |  |  |
| Double kit⁴   | Length: 1105mm<br>Width: 335mm<br>Height: 270mm (2 boxes) |  |  |  |

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

2. To secure gate a lock is recommended when gate is closed 3. Can increase battery capacity for longer standby times

4. Dimensions of the kit of components packed together

# **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.



### **ACCESSORIES**





SMARTGUARD or SMARTGUARDair keypad beams Cost-effective and versatile gate automation installation wired and wireless keypad, allowing access to pedestrian

**CENTURION** Infrared Pedestrian keyswitch Always recommended on any allowing access to pedestrians



FLUX SA loop detector SOLO/Lattice proximity Allows visitors to communicate Allows free-exit of vehicles from access control the property - requires ground Proximity reader for allowing loop to be fitted access for both pedestrians and



with people inside in order to

gain access to the property

A fully weatherproof wall-

mounted enclosure for the



CENTURION transmitters G-ULTRA GSM device Available in one-, two-, threeand four-button variants. Incorporates code-hopping encryption

Gooseneck The ultimate new GSM solution Steel pole for mounting

vehicles

Basic key-operated switch for

6

9





the system - consult your operator's controller electronics CENTURION dealer

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

15

Call 0860-CENTURION (0860 236 887) to order or to find out more Technical support line: 0861 003 123 (Monday - Friday: 07h00 - 18h00, Saturday 8h00 - 13h30) E&OE. Centurion Systems (Pty) Ltd reserves the right to change any product without prior notice

for monitoring and activating the intercom gate station or access operator via your mobile phone control reader 11



# 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:

- Light pipes displaying LED outputs, which will indicate gate status from the interface board
- Interface board with an anti-tamper switch which can be linked to a security 1b
- 2 Spare fuse holders for both ATO and glass fuses
- 3 Clip-in component brackets
- 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
- Screw-down points for cover and mounting slots located outside of the general 4c 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
- Gas breathing point allows any potential build-up of gas to escape, whilst still 8 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





# **LINEAR SWING GATE OPERATORS**

Exceptional aesthetics for a wholly unobtrusive domestic gate installation



# VERT-X

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!



# **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.



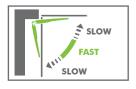
#### Easy to install

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 end-of-travel endstops.



# 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 industrial applications.



#### 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 system maintains rapid and precisely-controlled opening and closing of the gate for greater convenience and security.

















# Safe battery backup

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 against crushing and ensures 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 makes for excellent reliability and maximum mileage.

# 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 V-Series 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 60 transmitter buttons, and amongst other access control features, it provides the ability to selectively add and delete transmitter buttons saved into its memory. 1. 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. 2. Requires gate safety begans to be installed

# Ambush Alarm<sup>3</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. 3. Requires gate safety beams to be installed



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

### 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

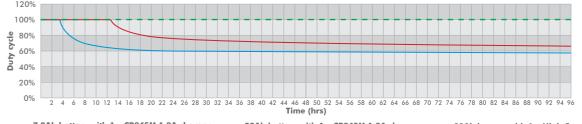
#### **Electronic features**

- 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 rampdown distances and end-of-travel crawl distance
- Automatic closing with adjustable time, pushbutton override and selectable according to gate status
- Selectable leaf-delay on either gate leaf

#### Electronic features

- 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
- 1. Security / pillar light must be fitted
- 2. Onboard receiver must be used or external access control device such as keypad or keyswitch must be fitted
- 3. Remote LED must be fitted
- 4. Infrared safety beams or equivalent detection device must be fitted
- Emergency stop pushbutton must be fitted
- 6 Inductive loop detector or infrared safety beams must be fitted

#### VERT-X SINGLE OPERATOR DUTY CYCLE AS A FUNCTION OF OPERATING TIME



#### VERT-X DUAL OPERATOR DUTY CYCLE AS A FUNCTION OF OPERATING TIME

