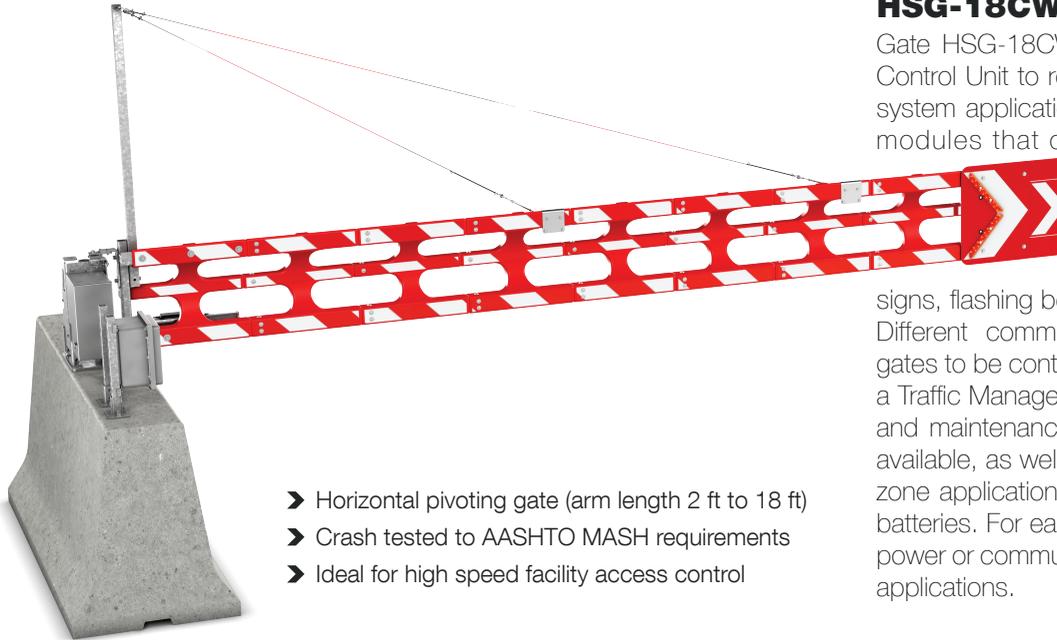


# HSG-18CW

HORIZONTAL SWIFTGATE CRASHWORTHY (UP TO 18')

PRODUCT SHEET

PATENTED



- Horizontal pivoting gate (arm length 2 ft to 18 ft)
- Crash tested to AASHTO MASH requirements
- Ideal for high speed facility access control

## SWIFTGATE SOLUTION OVERVIEW

SwiftGate is the Versilis automated gate solution specifically designed for highway traffic control operations. Various types of gates, such as the Horizontal HSG-18CW, fall under the SwiftGate umbrella, as they all share the same design key features and communication technology. Whether the gates are short or long, pivot horizontally or vertically, Versilis has kept the same objectives in the design of each SwiftGate product: motorist safety, ease of integration and operational efficiency.

## HSG-18CW OVERVIEW

The HSG-18CW pivots horizontally and offers increased visibility using a high surface of reflective material and LED lighting. The gate arm's unique design provides strength, flexibility and durability. Manufactured with corrosion resistant materials, the HSG-18CW is designed to withstand harsh roadside conditions and weather environments.

Operation and integration is made easy with the Versilis communication hardware which offers different communication options to allow gates to be operated, monitored, and sequenced, locally and remotely.

## HSG-18CW OPERATION

Gate HSG-18CW includes the necessary Versilis Control Unit to receive and execute commands. A system application may include one or many gate modules that can be activated individually, in sequence, in groups, or as part of an overall solution that brings together various traffic devices, including SwiftSign, lane control signs, flashing beacons, traffic light controllers, etc. Different communication interface options allow gates to be controlled and monitored remotely from a Traffic Management Center. For on-site operation and maintenance, a Smart Handheld Controller is available, as well as push buttons. Temporary work zone applications use solar energy to charge gate batteries. For ease of installation and relocation, no power or communication wiring is required for these applications.

## HSG-18CW ARM

The HSG-18CW gate arm is built with easily replaceable high density polyethylene sections. The HSG-18CW is crash tested to MASH TL-3 requirements (tests 3-71 and 3-72). The gate arm's ribcage design offers maximum visibility and reflectivity using an increased flat surface of high intensity retroreflective sheeting, more than double the surface of typical highway gates. A large flexible polycarbonate chevron sign with flashing LED lighting installed on the gate arm's extremity closest to the traffic provides a clear and visible message to motorists that the access is closed. The chevron sign increases the overall visibility of the gate and protects the gate arm from nuisance hits. In the event of an impact, a shear pin mechanism allows the gate arm to swing out and minimize damage to the gate. A safety latch is provided to lock the impacted gate arm and prevent the arm from swinging back.

## APPLICATIONS

- Reversible lane access control
- Tunnel/Bridge maintenance/emergency closures
- Flooded roadways
- On-ramp and off-ramp access control
- Work zone repetitive lane closures
- Express lane maintenance/emergency closures
- Movable barrier operations
- Event traffic management

**SAFETY  
PERFORMANCE  
EFFICIENCY**

INCREASED HIGHWAY OPERATION EFFICIENCY

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## TECHNICAL FEATURES

### PHYSICAL

- Gate arm lengths available from 2' to 18' in 1" increments
- Pivoting range of 90 degrees (horizontal)
- Deployment or retraction time: typically 23 seconds
- Arm: high density polyethylene sections (with fiberglass inserts for gate arm lengths 14' to 18')
- Narrow base support frame footprint
- Wind load: see wind specifications for details
- Crash tested to AASHTO MASH 2016 (Manual for Assessing Safety Hardware)

### REFLECTIVITY

- Gate arm retroreflective sheeting surface: 80 in<sup>2</sup> per linear feet
- Chevron sign retroreflective sheeting surface: 390 in<sup>2</sup>
- Retroreflective sheeting colors and grade: high intensity Type 3 or 4 or equivalent, alternating red and white, angled at either 45 or 90 degrees, or as specified
- Red flashing gate LED arrow mounted on chevron sign; configurable light intensity and flashing pattern i.e. synchronized or delayed through the gate system

### ELECTRICAL

- Standard Versilis Control Unit for electrical motor control, LED power management & flashing logic, and battery charger function
- Gate works on battery 12V DC (AGM type); also used as power backup for communication hardware and gate LED operation
- Charger input can be a solar panel or an external power supply
- Typical external power supply consumption: 0.6 A at 120V AC or 0.3 A at 230V AC

### GATE MECHANISM - MOTORISATION

- Weatherproof electrical linear actuator
- Mechanical overload protection
- Hand crank manual override

### COMMUNICATION INTERFACE OPTION

- Wireless (US 915-MHz ISM band)
- Wire RS-485 interface
- Fiber optic

### SMART HANDHELD CONTROLLER (with RF modem)

- Capable of managing up to 40 sites simultaneously
- Equipped with an ITS field device sequencer
- Enables control and monitoring of a Versilis Commander

### CONTROL OPTIONS

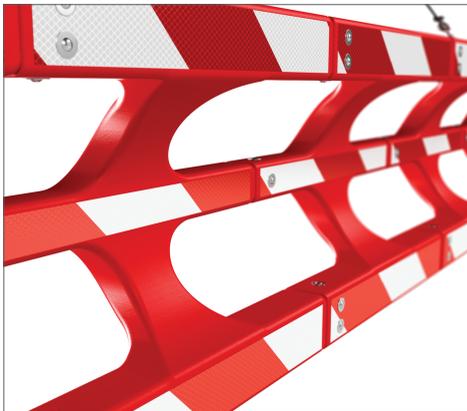
Ability to mix and match control options for added operational flexibility and redundancy.

#### Local Control Options:

- Versilis Smart Handheld Controller
- Push buttons

#### Remote Control Options:

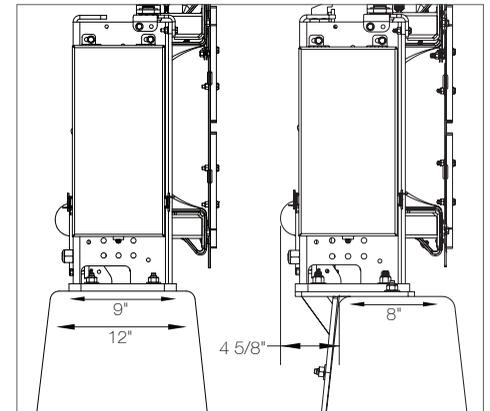
- Versilis Commander for NTCIP and WEB access over Ethernet
- PLC using dry contacts



MASH crash tested gate arm assembly



Gate chevron with flashing LED lighting



Gate mechanism front view for median & shoulder barrier wall

### ABOUT VERSILIS

Versilis takes pride in developing quality innovations and providing exceptional service. Everything we do is governed by three principles: quality, safety and efficiency. In an effort to meet the highest quality standards and respond to clients' evolving requirements, Versilis engineers work hard at continuous product improvement. For this reason, Versilis reserves the right to modify minor technical details listed in this product information sheet without warning.

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