# SW1000

# **Pedestrian Gate**

The SW1000 is a stylish motorized gate that provides single direction or bi-directional access control.



## **COMMON APPLICATIONS**

- Employee / Visitor Access Control
- Wheelchair / Disabled Access Control
- Bulky Item Delivery

## TYPICAL INSTALLATION SITES

- Corporate Lobbies
- Health Clubs / Recreation Centers
- Entertainment Venues



## **FUNCTION**

The SW1000 provides single direction or bi-directional access control. The SW1000 is an ideal product to provide disabled or delivery access in conjunction with our waist high or optical turnstiles. In closed or home position, the barrier is held in place by motor force. Upon receipt of a dry contact input from an access control system or input device such as a push button, the locking device disengages and the motorized barrier will open 90 degrees away from the signal direction.

The SW1000 is microprocessor controlled. Programmable features are factory set at appropriate levels for most applications, but various features of the product are PC programmable (see Functionality – User Customizable Features, below).

Access control readers or push buttons for patron use attach to pedestals located on either side of the gate. Activation by attendant or guard personnel can be accomplished by installing a push button or key activation device at the guard or attendant station.

An input is available for fire alarm systems. When received, the gate opens in the exit direction and remains open until the input is removed.

In the event that power to the unit is removed, the barrier can be manually moved to the open position with less than 2 lbs. of force.

The SW1000 is available as a tandem gate set - the SW1000T.

## **AVAILABLE CONFIGURATIONS**

### SW1000

The SW1000 consists of a single gate.

## SW1000T

The SW1000T consists of two gates that operate in tandem. Posts are on either end with panels facing inward. The SW1000T provides approximately double the passage opening as an SW1000.

## **AVAILABLE FINISHES**

## STAINLESS STEEL, POWDER COATED AND PLATED

External post cladding materials are fabricated from #304 stainless steel polished to a #4 satin finish. Powder coated and plated post cladding is available.



## **MATERIALS**

#### **POST**

The post is fabricated from #304 stainless steel. The black top cap is injection molded ABS.

#### **INTERNAL FRAME**

A powder coated internal steel frame houses electronics, motor, power supply and mechanical components.

#### **MOVING BARRIER**

The barrier is fabricated from 0.5" (13mm) thick acrylic with abrasion resistant coating.

## CONTROL, OPERATIONAL MODES AND FUNCTIONALITY

## **CONTROL MECHANISM**

The precise movement of the SW1000's motorized barrier is controlled through a DC brushless motor working in conjunction with a position encoder and motor controller. Motor control software uses closed loop position control for precise movement and operational control. The gate interfaces with an Alvarado configuration application, SW Utility.

#### PASSAGE MODES

The SW1000 offers the following passage modes:

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Controlled Passage	The harrier is closed to	Inon receipt of an	authorization cignal	from a push button or
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access control system, the barrier moves away from the signal direction to the open position (approximately 90 degrees from home). The barrier remains open for a defined dwell time, then returns to the closed position. If an authorization signal is received while the barrier is closing, the barrier stops and returns to the open position. Controlled

passage can be implemented in either a single direction or bi-directionally.

Free Passage In select applications, an optional motion sensor can be added to one side of the

SW1000 or SW1000T. As a user moves toward the gate, the motion sensor detects the

user and the gate opens in the direction of travel.

Before ordering or specifying use of the motion sensor option, have the layout and application approved by Alvarado's internal technical support department. The motion sensor can be activated by such things as cross pedestrian traffic, loitering users, etc.

Specific layout parameters must be followed for proper operation.

## FUNCTIONALITY - USER CUSTOMIZABLE FEATURES

Prior to shipping, gates are configured with settings that are appropriate for most facilities. A summary of software configurable features is listed below:



#### **BARRIER BREAKAWAY**

The SW1000 utilizes motor force which provides limited resistance against a user pushing or pulling the barrier open. When the barrier is forced open without activation, an alarm sounds notifying that a manual opening has occurred. After a defined time the gate resets and resumes normal operation.

#### BARRIER CYCLE AND DWELL TIME

This is an adjustable feature. Opening/closing speed and dwell time is factory set. Adjustments can be made within set limits appropriate for the installation application.

#### **BARRIER IMPACT**

Should the barrier encounter an obstruction while opening or closing, the barrier will stop moving and an alarm will sound. After a defined period, the barrier resets and the gate resumes normal operation.

#### EMERGENCY OVERRIDE / FIRE ALARM

Activation to open the barriers in conjunction with a fire alarm system is achieved by supplying a sustained dry contact to the appropriate input point. When received, the gate opens in the exit direction and remains open until the input is removed. Upon removal, normal operation resumes.

#### POWER FAILURE

When power is removed from the unit, the barrier of the SW1000 can be freely moved in either direction. When pushed or pulled to the open position, the barrier remains open. When power is restored, the gate resumes normal operation.

## **CARD READERS**

Alvarado offers an optional pedestal to mount card readers and activation devices (see Options). Devices can also be installed on existing walls, cabinetry or equipment. There is no space to attach readers or activation devices directly to the gate.

## INTERFACE TO ACCESS CONTROL SYSTEM

The SW1000 is activated (opened) by supplying an isolated, voltage free, momentary dry contact at the appropriate location on the product I/O terminal block. An input is available for each direction of operation.

## **OPTIONS**

## **ALTERNATE FINISHES**

The post can be plated in bright chrome or brass. Powder coating in one of Alvarado's many colors is also available.



#### **ALTERNATE POWER SUPPLY**

A 220-240VAC, 50 Hz power supply and appropriately rated on/off switch are utilized.

## **BARRIER HEIGHT**

The standard barrier height is 39" from the floor. An optional "mid" barrier height (46" from the floor) is available.

## **BARRIER WIDTH**

Barrier widths can be customized to meet unique installation requirements.

## **BARRIER ETCHING**

Customer's choice of logo/artwork may be etched on the barrier. Contact Alvarado for artwork requirements.

# **CONDUIT REQUIREMENTS**

#### SW1000

Primary (AC)	.5" conduit for primary power is run up and into the post. The product standard is 110-
Power Conduit	120 VAC (use of 220-240 VAC is an available option).

Activation	.5" conduit for activation signal(s) and fire alarm input. Also used for outputs, if
Signal Conduit	applicable.

## SW1000T

Primary (AC)

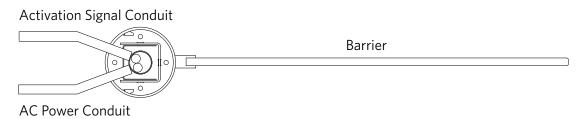
**Power Conduit** 

Low Voltage (DC) Power Conduit	.5" conduit for DC power is run from the Master Gate to the Slave Gate.
Master / Slave Signal Conduit	.5" conduit that tee's off the Activation Signal Conduit at the Master Gate. This conduit is used to run communication signal wire between the Master Gate and Slave Gate. The communication signal wire synchronizes barrier opening and closing between the Master and Slave Gate.

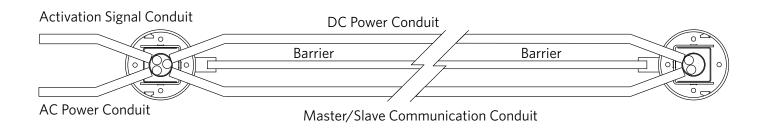
.5" conduit for primary power is run up and into the Master Gate.



#### **SW1000 CONDUIT**



### **SW1000T CONDUIT**



## SHIPPING AND SITE PREPARATION

## **SHIPPING**

The SW1000 is shipped with mounting hardware to mount the unit to a standard level concrete floor.

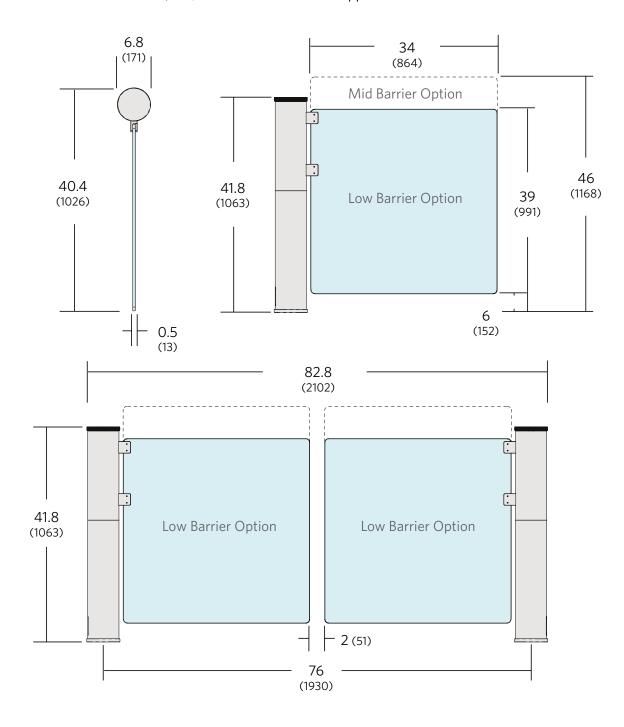
## SITE PREPARATION

The SW1000 must be installed on a firm foundation in a manner that allows the required power and signal cabling to be pulled into the cylindrical tower. The slab platform should be a minimum of 4" deep, level concrete. Installation should be performed by a skilled installer following Alvarado's instructions. Drawings and installation manuals are available online.



# **TECHNICAL DIMENSIONS**

Dimensions are shown in inches (mm). All measurements are approximate.





Electrical	Description		
UL Rated Power Supply	100-120 VAC, 60 Hz or 220-240 VAC, 50 Hz (optional)		
Power Requirements	Maximum power consumption is 228W per gate with all options installed.		
Operational Voltage	Primary power is stepped down and rectified for low voltage 24VDC, 12VDC, and 5VDC operation.		
On/Off Switch	An on/off switch is located on each gate.		
Fuse Protection	A 3.0 amp fuse (slo-blo) is installed in each gate.		
Surge Protection	Alvarado suggests use of surge protection equipment in connection with the installation to protect electronics.		
Weights and Environmental			
Product Weight	85 lbs.	39 kg Double weight for SW1000T	
Shipping Weight	140 lbs.	64 kg Includes weight of shipping crate(s)	
Operating Temperature	50° to 140° F	10° to 60° C	
Storage Temperature	32° to 104° F	-0° to 40° C	
Relative Humidity	15-85% (non-condensing)		

## WARRANTY

For a period of one year from the date of shipping, Alvarado will replace or repair, at Alvarado's option, any products or parts which are defective in materials or workmanship, provided recommended installation and maintenance procedures are followed. This warranty is void if damage is due to improper installation, maintenance or use. This warranty is limited to parts only, and does not cover labor or shipping charges incurred in connection with the removal or replacement of warranted products or parts.

This warranty is expressly made in lieu of any and all other warranties, expressed or implied, including, but not limited to implied warranties of merchantability and fitness for a particular purpose. Alvarado shall not be liable for any loss or damage, directly or indirectly, arising from the use of purchased products. In no event shall Alvarado be liable to buyer for consequential damages, special damages, incidental damages, loss of use, business interruption, loss of profits, or damages of any kind arising out of the use or inability to use a purchased product. In NO event shall Alvarado be liable for damages which exceed the purchase price of a covered product.

