

# ALVARADO

## Supervisor 500 / 500CL Optical Monitor Lane for Bi-directional Counting



### Technical Specifications

<b>Dimensions</b>	<u>Cabinet Length:</u>	SU500: 12.5" (318 mm)
		SU500CL: 17.25" (438 mm)
	<u>Cabinet Height:</u>	SU500: 39" (991 mm)
		SU500CL: 37.5" (953 mm)
	<u>Cabinet Width:</u>	SU500: 3.5" (89 mm)
		SU500CL: 3.0" (76 mm)

**Materials**      Cabinet:                      Formed and welded steel.

**Function**                      The SU500 / 500CL is a waist high, optical sensor monitored, barrier free passage lane that utilizes infrared sensors to provide highly accurate bi-directional pedestrian counting.

**Method of Operation**                      The SU500 / 500CL utilizes multiple transmit / receive infrared sensors mounted inside the lane cabinets to detect the direction of patron travel and distinguish between objects that should be counted (such as people), and objects that should not be counted (such as umbrellas, walkers, or small bags). The lane sensors allow entrance and exit counts to be tracked separately and are capable of detecting quick and slow moving patrons.

**Available Configurations**                      The following configurations of the SU500 are available:

<b>SU500</b>	Bi-directional counting lane designed for indoor use.
<b>SU500CL</b>	Shared center cabinet configurable bi-directional counting lane. The SU500CL can also be installed outdoors. Note: Please consult Alvarado before installing the SU500CL outdoors for temperature and environmental parameters.

**Electrical Components and Functionality**                      The following are the electrical requirements and standard features of the SU500 / 500CL:

<b>Power Supply</b>	110 VAC, 60 Hz
<b>Power Rating</b>	Maximum power consumption is 10 W per turnstile.
<b>Operational Voltage</b>	Primary power is stepped down and rectified for low voltage 12 VDC and 5 VDC operation.
<b>Count Outputs</b>	The SU500 / 500CL can provide two separate count signals in the form of relay outputs for each direction of operation every time a person passes through the lane. Terminal strip connections are provided for this purpose. In addition to these dry contact outputs, the SU500 / 500CL has the capability to display counts on a local counter mounted into the SU500 / 500CL cabinet.

*Available Count Output Summary:*

Entry	2 dry contact signals 1 local counter
Exit	2 dry contact signals 1 local counter

	<b>Adjustable Violation Alarm</b>	The SU500 / 500CL can be configured to count in one or both directions. If the lane is set for only one passage direction, an alarm mounted inside the SU500 / 500CL cabinet can be configured to sound when a passage is made in the unauthorized direction. The duration of the alarm is user adjustable and can be set to sound from 1/2 to 2 seconds. Dipswitches are provided to set the alarm to the desired duration.
	<b>Field Adjustable Tailgate Detection Sensitivity</b>	Dipswitches are provided to adjust the tailgate detection sensitivity setting.
<b>Available Finishes</b>	<b>Powder Coated</b>	Available in a wide variety of colors. Sub-assemblies are sand blasted to prepare for the powder coating finish. The powder is electrostatically applied, then baked to assure proper curing and adhesion.
	<b>Stainless Steel</b>	All external fabricated materials are composed of #304 stainless steel.
<b>Shipping Details</b>		SU500 / 500CL cabinets are shipped fully assembled for easy installation. Each cabinet includes mounting hardware (anchors, bolts, washers, etc.) to mount the unit to a standard, level concrete floor. Alvarado ships products throughout the world.
<b>Installation Details</b>		All SU500 / 500CL lanes must be installed on a firm foundation in a manner that allows the required power cabling to be pulled into the lane cabinets and required communication cables to be run between lane cabinets. The cabinets must be installed on level concrete. No embedded fasteners are needed for installation. Installation should be performed by a skilled installer following the manufacturer's directions and instructions (supplied with the unit).

## Options

### Portable Baseplate

Available in 22" and 36" passage widths. All SU500 baseplates are designed to allow for the "daisy chaining" of power and count data from lane to lane. When daisy chained, count data terminates out to a single DB25 connector. Contact Alvarado regarding daisy chain wiring specification details. Portable baseplates are available with SU500 models only.

### Shared Center Cabinet Configuration

Multiple lane applications can be accomplished with shared center cabinets. Center cabinets are configured to house the infrared transmitters of one lane and the receiving infrared sensors of the other. Available with SU500CL models only.

### Weather Package

Gasket material is added to give the unit additional weather resistance. Available with SU500CL models only.

### Local Counters

Lithium battery powered counters are installed in the end of the unit cabinets to provide a local count of patron passages. If counts in both the entry and exit directions are desired, two counters must be used, one installed in each end. When the unit is powered down, the registered counts are still visible on the counter. Both resettable and non-resettable counter options are available.

### GateWatch

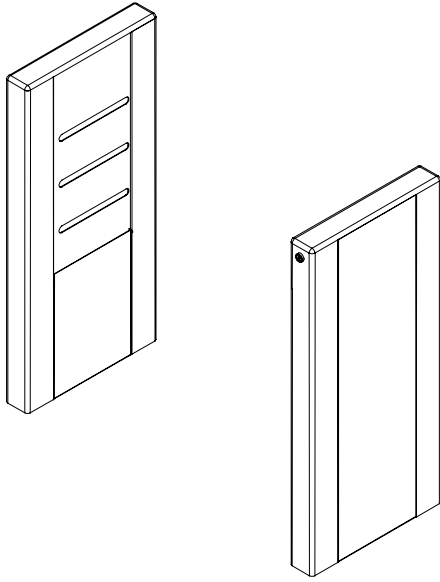
PC Based facility counting software that provides a complete record of entrance and exit counts.

### Warranty

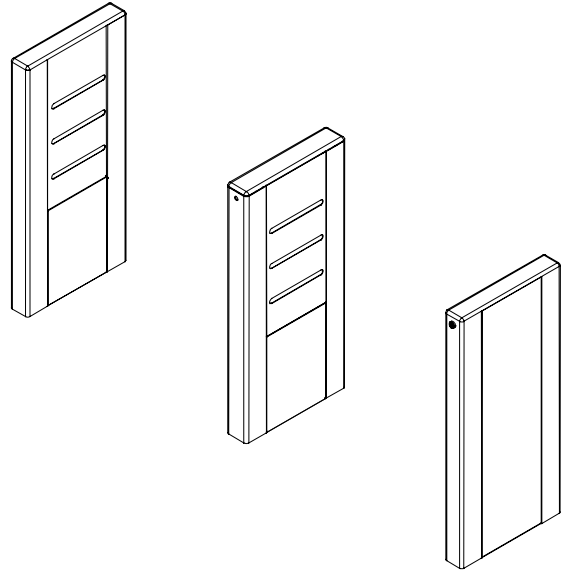
Alvarado Manufacturing Co., Inc. warrants the SU500 / 500CL, from defects in material or workmanship, for the period of ONE YEAR from date of shipment. Complete details of the warranty are available from Alvarado by request.

# SU500CL General Configuration

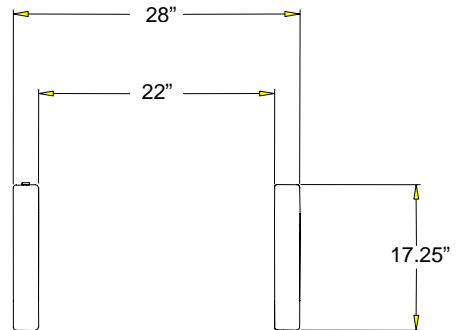
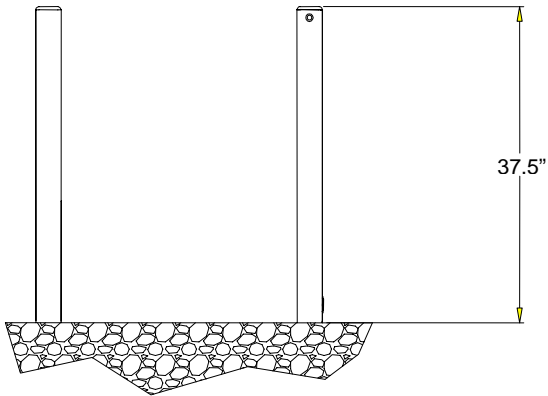
*Single Lane Configuration*



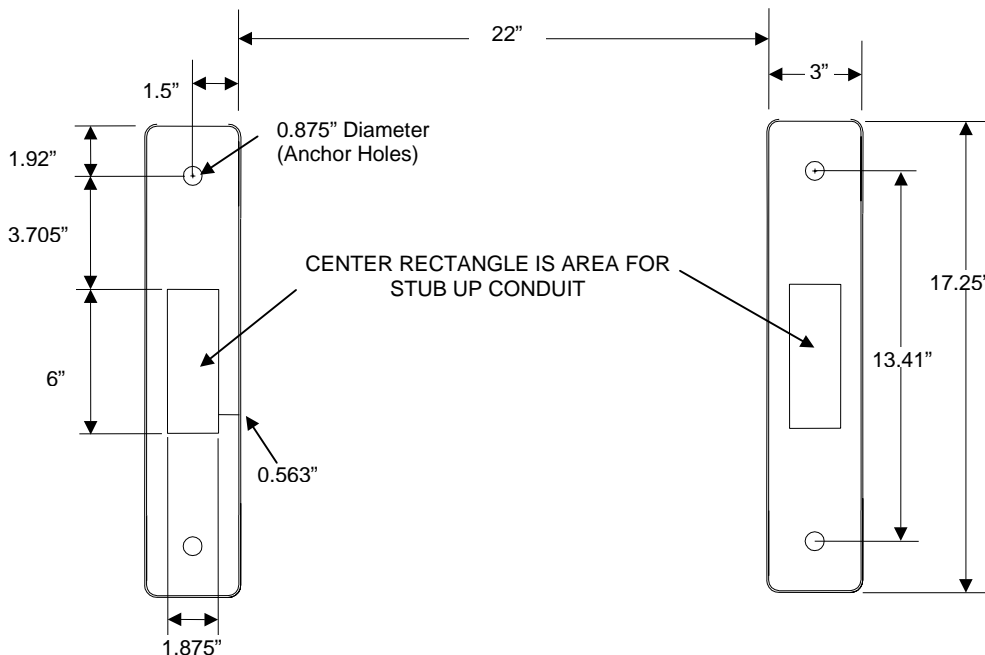
*Multi Lane Configuration*



## SU500CL Single Lane Site Preparation



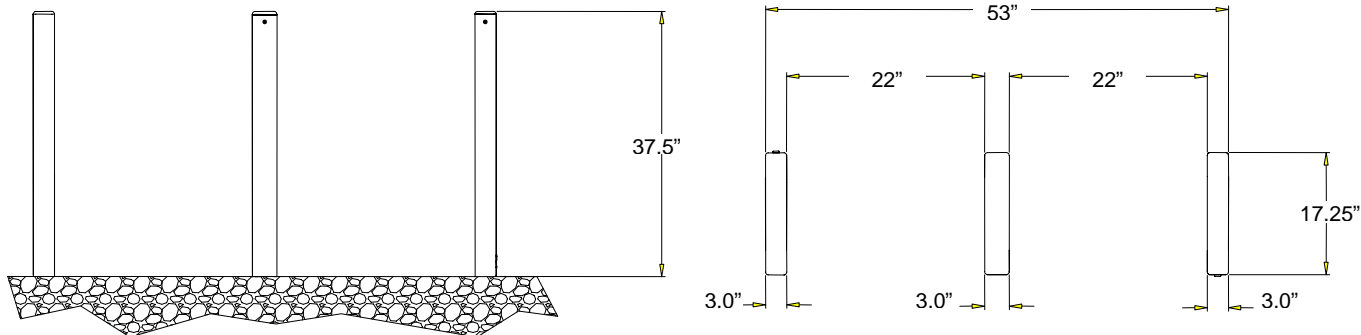
### SU500CL Single Lane Footprint Drawing



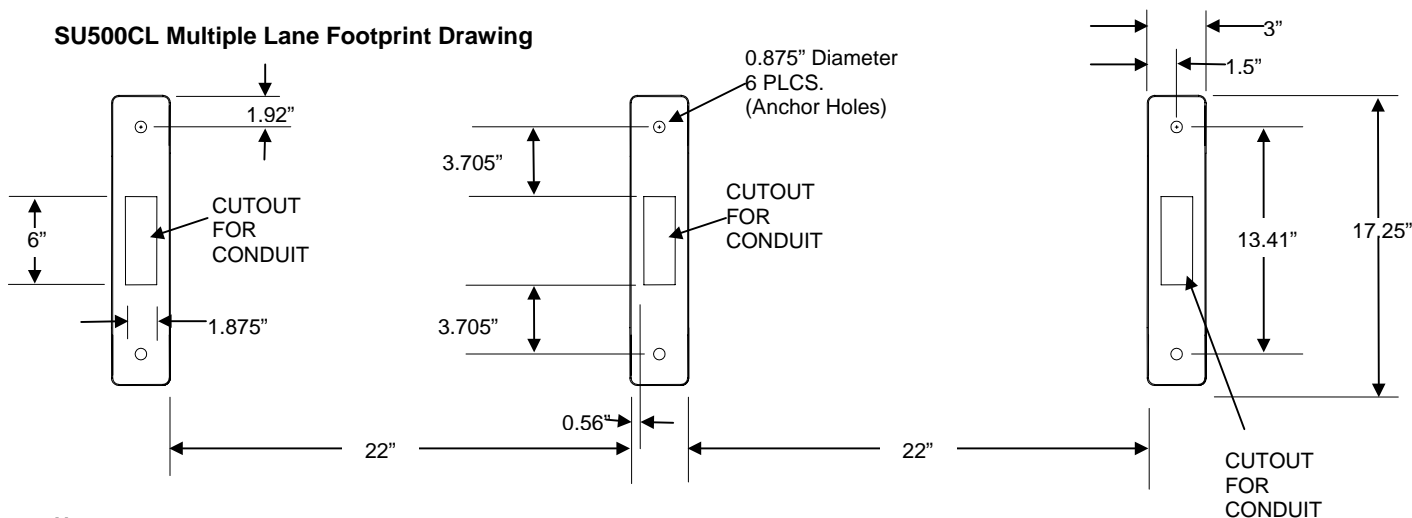
**Notes:**

- The cabinet centerline to centerline dimension for a 22" passage width is 25".
- The cabinet centerline to centerline dimension for a 36" passage width is 39".

### SU500CL Multiple Lane Site Preparation



### SU500CL Multiple Lane Footprint Drawing



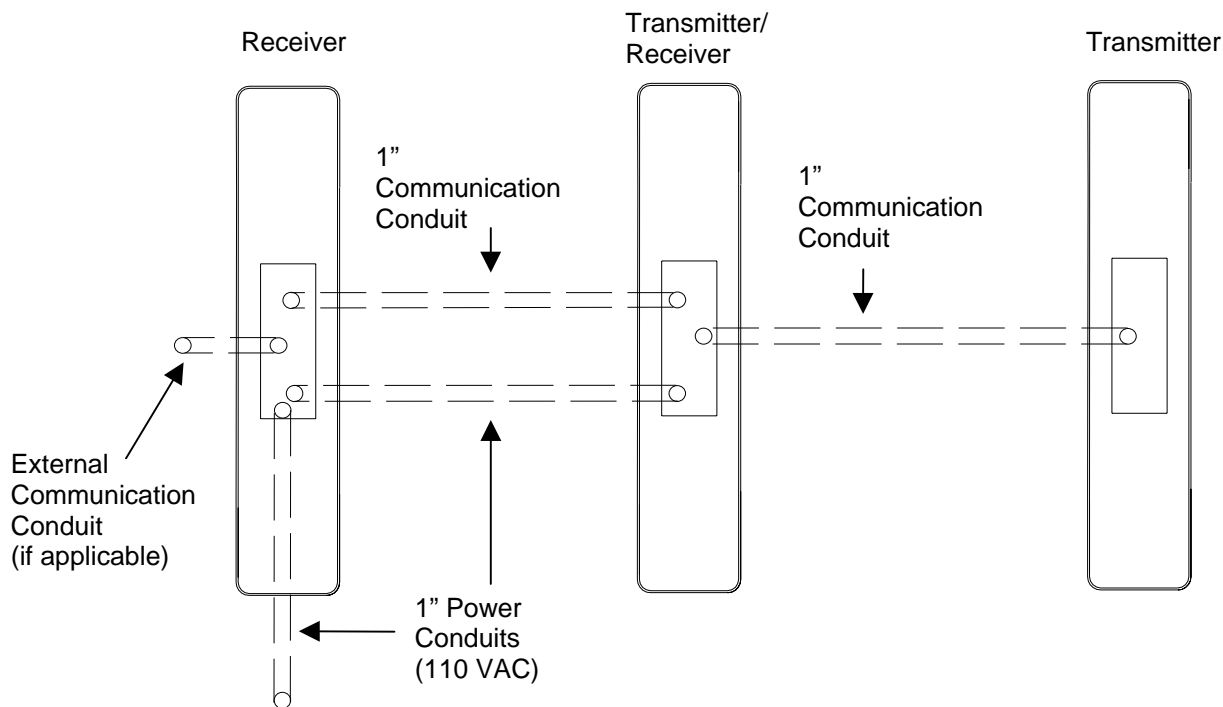
#### Notes:

- The cabinet centerline to centerline dimension for a 22" passage width is 25".
- The cabinet centerline to centerline dimension for a 36" passage width is 39".

#### Slab Requirements

- Minimum thickness: 4" level solid concrete pad
- Horizontal conduit runs must be at least 5.5" below the SU500CL turnstile.

#### SU500CL Conduit Requirements



**High Voltage Power Conduit:** 1" power conduit for 110 VAC primary power must be run to the Receiver End Cabinet and each Center Cabinet.

**Communication Conduit:** 1" conduit must be run to interconnect the cabinet sets that form each passage lane. Alvarado provides the 12' category 5 cable required to interconnect the cabinet sets that form each passage lane with the SU500CL optical turnstiles.