DS!®

DESIGNED SECURITY, INC.

A Detex Company

ES811

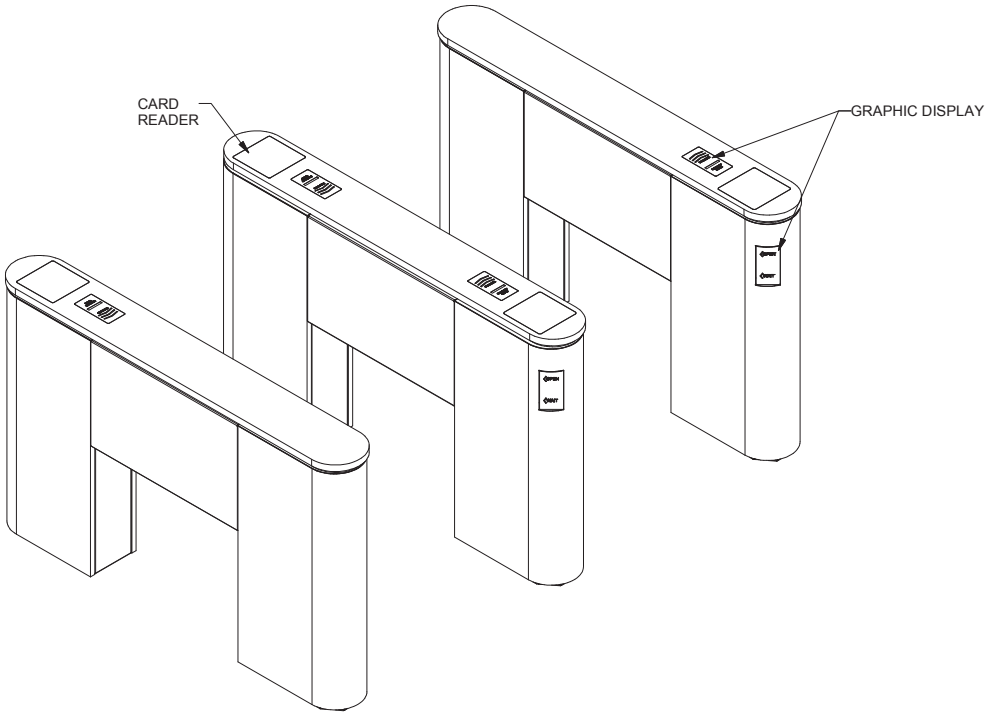
**Custom model shown*

Bi-Directional Optical Turnstile Model ES811

ES811 optical turnstiles form pedestrian walkways to controlled areas and are typically used in upscale lobby entrances where high security, high-speed throughput and interior aesthetics are priorities.

These bi-directional pedestrian control devices are used with an access control system to prevent tailgating and to grant or deny access into a facility. Normally used in conjunction with a guard station, these optical turnstiles can grant access to up to 60 people per minute per lane. Sleek bollard designs can be surfaced to match the interior of any lobby with standard or custom designs and finishes.

In addition to custom finishes and designs a number of options and accessories are available. Any number of options can be combined to fit the individual needs of the building tenants which include visitor badge readers, voice enunciation, visitor card collector and, special reader mounting. Our most popular options include floor mounting plates. Floor plates are used in areas where core drilling is not an option.



ES811 Optical Turnstiles

1. Determine the number of walkways required based on the desired pedestrian throughput and space availability. Typical pedestrian throughput is 60 people/min, 3600/hr, per walkway.
2. Walkway bollards should be spaced 32”-37” apart. Wider spacing results in pedestrians attempting to pass through the lane two abreast, resulting in a high incidence of alarms.
3. Optical Turnstile Model:
   ES811: Bi-directional access control (card-in/card-out).

Electrical Specifications

Power: 12 VAC @ 6 Amp/walkway; transformer included
Inputs: N/O dry contact/card reader for valid card
N/O dry contact/card reader for invalid card (optional)
N/O dry contact to override lane operation
Output: N/O alarm contact for walkway violation - 500 mA @ 30 VDC
N/O dry contact for invalid card

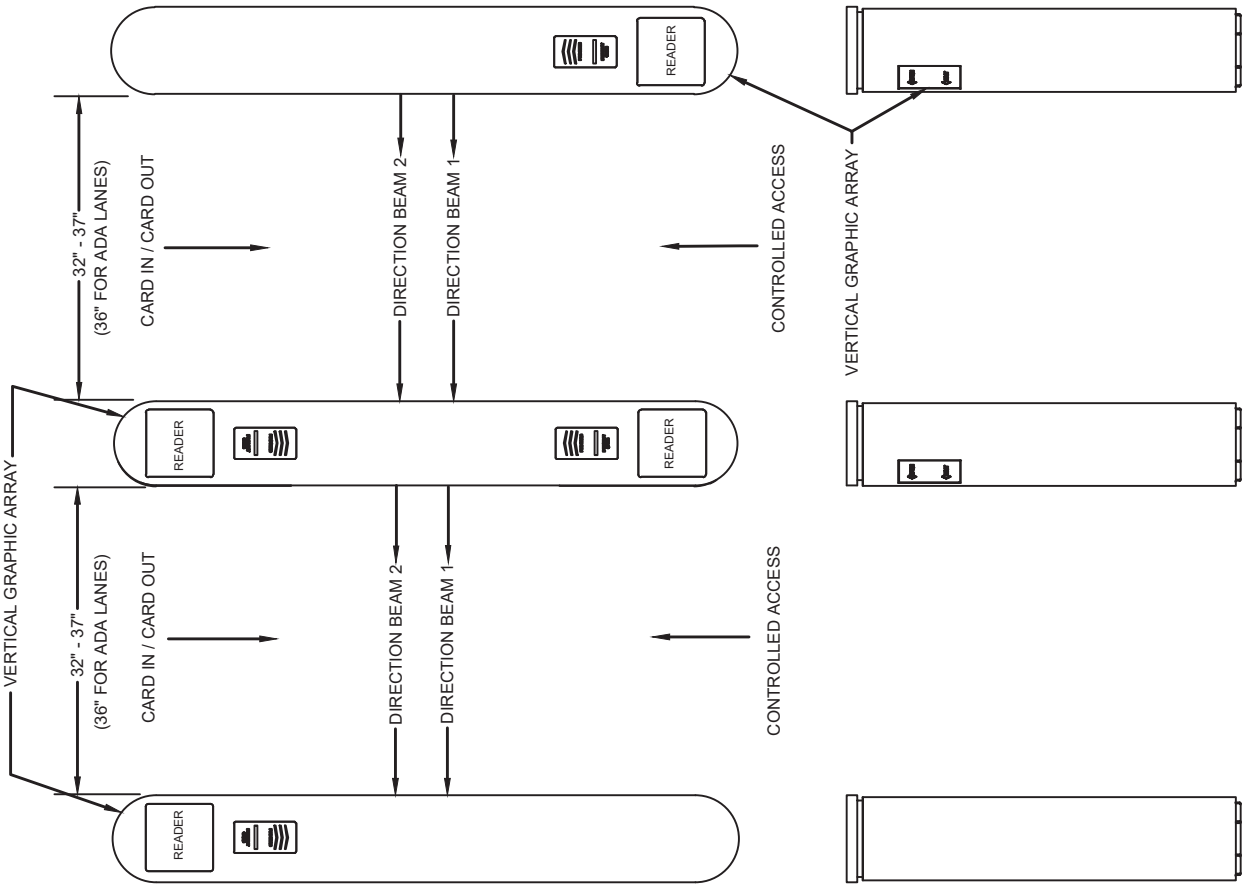
Mechanical Specifications for the Bollard

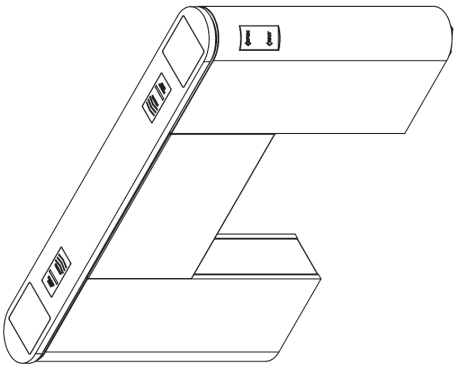
Size: 60”L x 38”H x 8”W
Mounting: 12 gauge steel base at each end with 4 - ½” mounting holes
Finish: Top Surface: Avonite Black Lava
Side Panel: Stainless steel

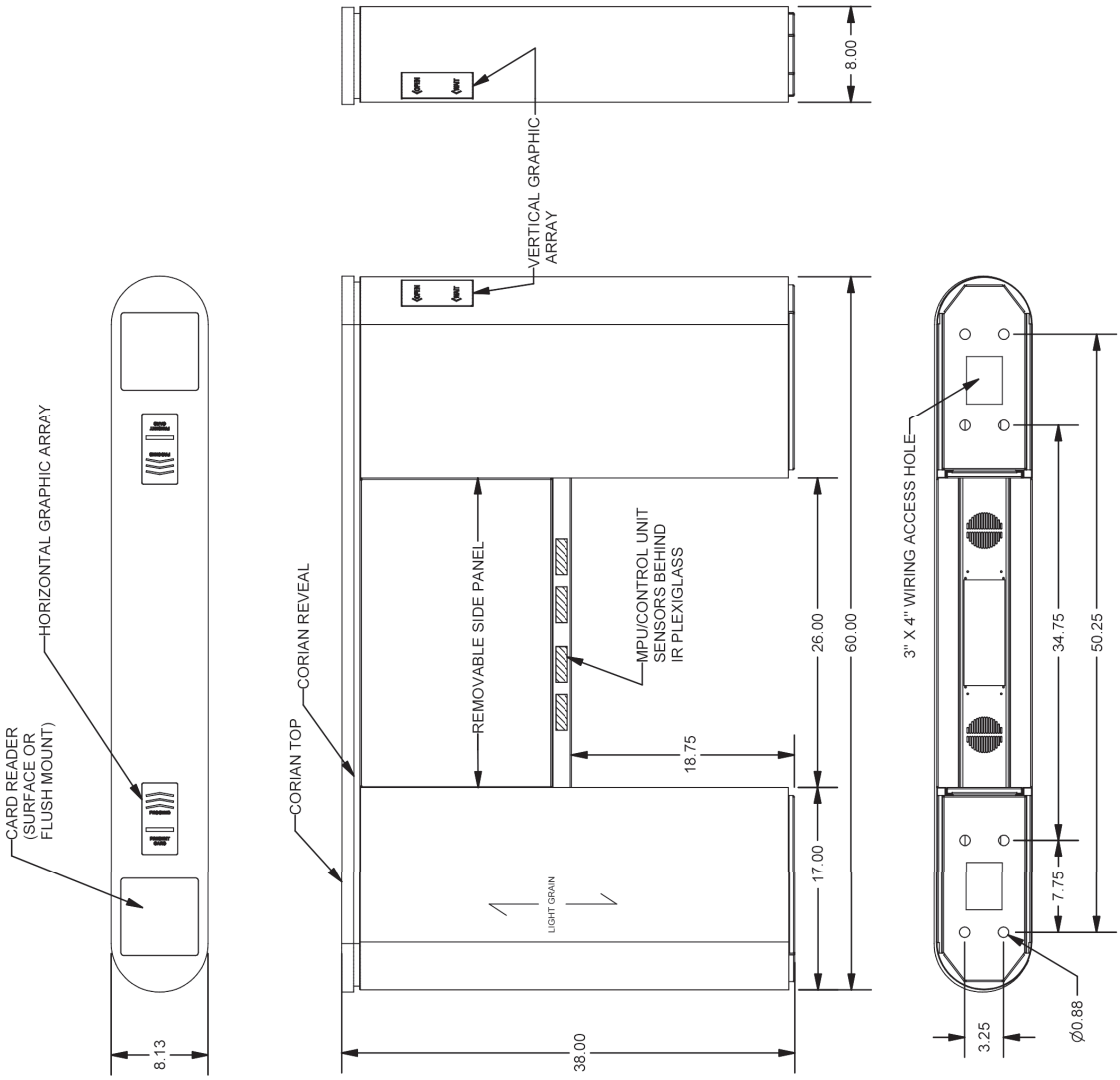
** colors selected by customer*

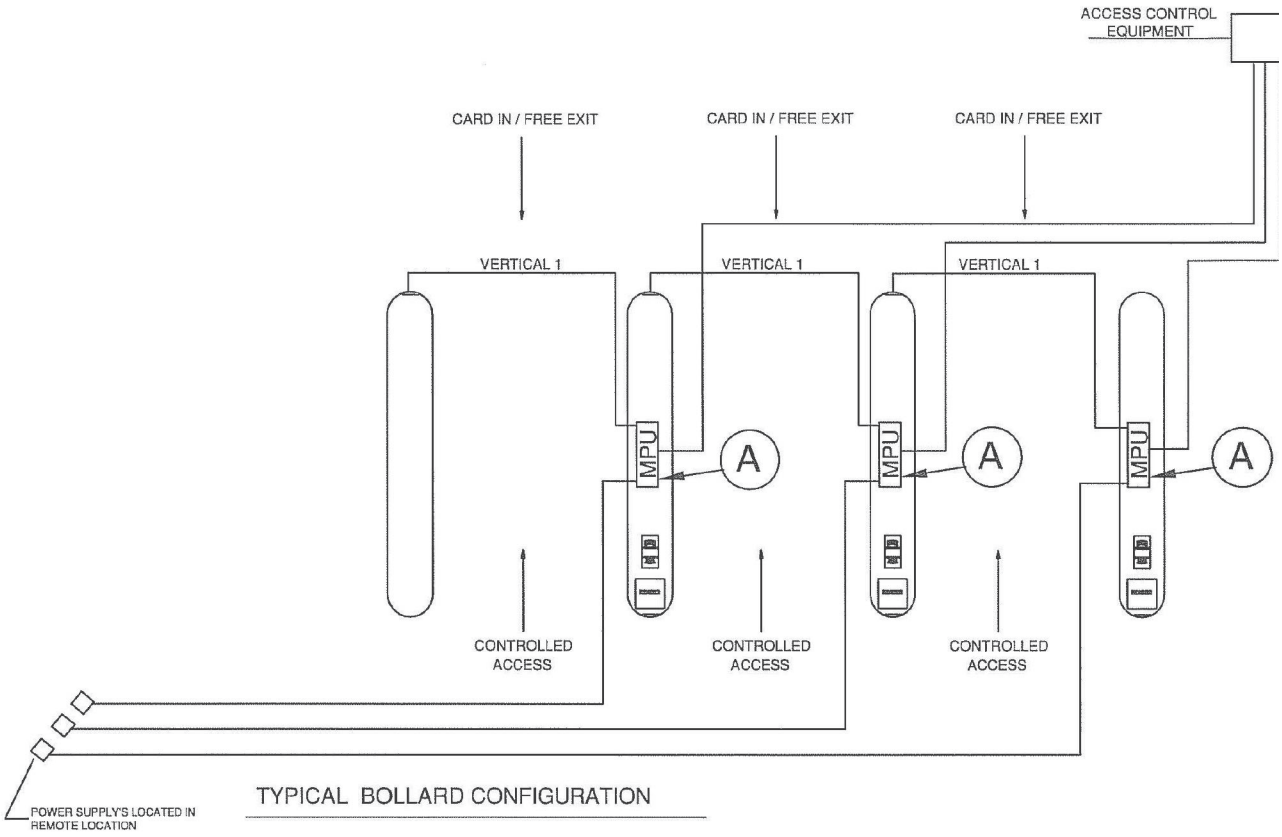
DESIGNING AN OPTICAL TURNSTILE SYSTEM

1) DETERMINE THE NUMBER OF WALKWAYS REQUIRED BASED ON THE DESIRED PEDESTRIAN THROUGHPUT AND SPACE AVAILIBILTY.
2) A CONSERVATIVE ESTIMATE OF PEDESTRIAN THROUGHPUT IS 20 PEOPLE / MIN. 1200 / HR. PER LANE. THIS FIGURE ASSUMES THE USE OF A FAST RESPONSE (1/4 SEC) CARD READER SYSTEM.
3) BOLLARDS SHOULD BE SPACED 32"-37" APART. WIDER SPACING RESULTS IN PEDESTRIANS ATTEMPTING TO PASS THROUGH THE LANES TWO-ABREAST, RESULTING IN A HIGH INCIDENT OF ALARMS.

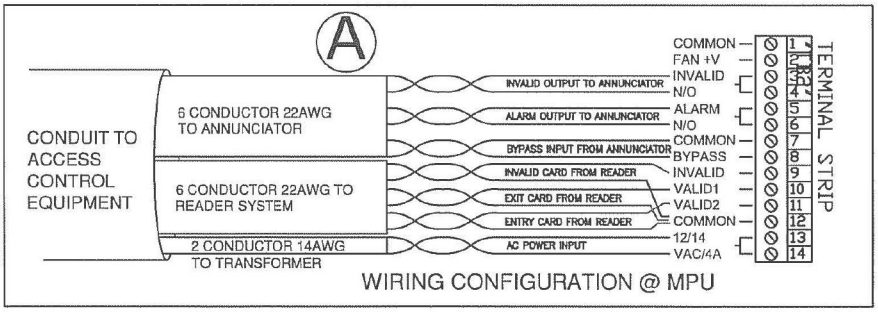





8.00
VERTICAL GRAPHIC ARRAY
HORIZONTAL GRAPHIC ARRAY
CARD READER (SURFACE OR FLUSH MOUNT)
CORIAN REVEAL
CORIAN TOP
REMOVABLE SIDE PANEL
MPU/CONTROL UNIT SENSORS BEHIND IR PLEXIGLASS
LIGHT GRAIN
18.75
26.00
60.00
17.00
3" X 4" WIRING ACCESS HOLE
34.75
50.25
7.75
8.13
38.00
3.25
Ø0.88



TYPICAL BOLLARD CONFIGURATION



WIRING CONFIGURATION @ MPU

TYPCIAL WIRING CONFIGURATION FOR ES811 / ES820 OPTICAL TURNSTILE

ES811 Series Accessories

Floor plates

Floor Plates are used where floors cannot be core drilled such as in landmark buildings. The Floor Plates provide a mounting surface for the turnstiles and provide a wire way to run all cables. The ES811 floor plates meet the standard of the Americans with Disabilities Act of 1990.

Card reader decals

Provides an icon to help communicate to users where the card reader is located.

ES811 Series Options

Visitor/Bar code reader

DSI can provide a bar code reader system in the turnstiles to process a temporary visitor badge. Please call to confirm the configuration of your specific readers.

Card reader mounting

DSI provides, free of charge, card reader mounting during the fabrication of the turnstiles, in some cases, were multiple readers and/or access control boards are used, there may be an extra charge.

For custom materials, call DSI at 800-272-3555