

**General Description**

The retractable flap Barrier controls pedestrian access between public and secure areas. The barrier lane uses an array of optical sensors to determine the number and direction of persons passing through the lane. The barrier uses a retractable flap to block the pedestrian's path. The barrier is able to authorize passage to persons presenting a valid electronic security card (or other authentication device). The barrier can integrate with the building access control system.

**Physical description**

The barrier has a stainless steel housing made from grade 304 stainless steel with hairline finish. There are no visible fasteners. The standard shape is a rectangular with funnel shaped end modules to guide pedestrians into the lane. Customized housing are available as an option.

**Detection sensors**

The barrier uses 6 sensors transmitter and receiver type. The sensors are positioned at two different heights to defend against people trying to roll/crawl through the lane without being detected. The sensors are positioned at approximately knee height and waist height. The barrier uses 4 photo sensors to prevent barrier closure on a person while inside the lane.

**Controller**

An industrial computer (PLC) is used. This allows flexibility for software upgrades or adjustable timers.

**Operation modes**

The barrier provides bi-directional access control. Each direction may be in one of three states:-

- Free passage: all person are authorized to pass under all conditions
  - Controlled access: each person must use a card reader before being authorized to pass
- Lane closed: no persons are authorized to pass, and security cards are ignored

**Configuration**

It is possible to control the barrier (set free passage/ card access/ lane closed mode, clear alarms, manually authorize access for a single person) by all of the following methods:-

- From the access control system
- From a desktop-mounted control panel

**Card Reader mounting:**

Card readers may be mounted on the surface of the barrier, or the card readers may be mounted flush mounted. There is an output to interlock the card

**Control console:**

The barrier may be controlled remotely from a control console; this would typically be wired to a pushbutton at the guard desk to allow a site visitor to enter without a badge and without generating an alarm. When the input contact is closed momentarily, then released, the barrier will open the lane for a single person to pass in one direction without presenting a badge, and will wait for many seconds (configurable by the similar) for the person to actually walk through; while the contact is held, the lane will act as if it were in free passage mode – any number of persons shall be allowed to pass.

**Alarms:**

The barrier provides alarms for the following:-

- Intrusion – A person is detected in the lane without a valid card
- Opposite direction – When the barrier opens, a person enters illegally from the wrong direction

**Fire alarm:**

When the fire alarm input is triggered, the barrier will open automatically. The barrier will release for manually push to open if the power is lost.

**Orientation pictograms:**

The barrier has LED orientation displays. The lights shall appear on the right-hand side of each lane in each direction. The displays are clearly visible by a person approaching the barrier.

- Green shall mean unit ready to accept user card
- Red shall mean that the lane is closed/ disabled

**Functional pictograms:**

Function displays are optional and may be installed on the upper part of the barrier. These displays show the user what to do.

**Technical date:**

Dimensions:	1200 x300 x1000mm
Walkway:	500 - 550mm
Cabinet Finish:	Hairline finished 304 stainless steel
Flap Material:	20mm clear acrylic
Drive:	AC motor, worm gear with torque limiter
Supply Voltage:	230 VAC
Frequency:	50 Hz
Power	0.18KW
Throughput:	30 persons/minute
Speed:	Open/close 0.5 seconds (programmable)
MTBF:	2,500,000 operations
Weight:	100kg (each lane module)

**Option:**

Housings:	Customized cabinets are available:- Stainless steel finish Different RAL colors
Displays:	Granite top covers Orientation Functional
Detection Photocell:	2

