



This flap barrier is designed and manufactured by SmartKing™. This unique pedestrian barrier installed in conjunction with any access control system provides valuable assistance to security personnel at any monitored entrance. This Flap barrier is available as a single- or multiple-lane setup and is compatible with most access control systems, such as magnetic, biometric and proximity readers.

### ► Users include

- Government
- Retail
- Finance
- Telecommunications
- Information Technology
- Banking
- Publishing
- Leisure
- Petrochemical



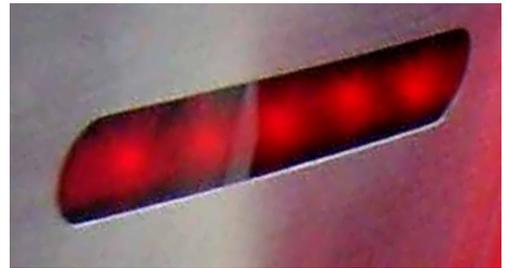


# CHARACTERISTICAL



## 1. Advanced Design

The design includes an elegant style appearance; a stainless steel cabinet; Which integrates the PLC with rigorous logic; an advanced system of detection and tracking sensors; the hieroglyphic symbols; and both audio and visual alarms.



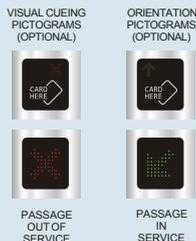
## 2. Finishing

The standard Flap Barrier is finished in brushed AISI 304 stainless steel and ACRYLIC arms. The top cover of the unit can be finished with marble, stainless steel or other materials, the color of arms can be optional for several color.



## 4. Detection Logic and Alarming

The standard Flap Barrier is equipped with several sets of detection cells on each side of unit. All the detection cells are in the position where they will most accurately detect intrusions according our rigorous defining. When detective any intrusion, the alarming will be triggered. Use an audio and visual alarming with corresponding output. (Detail See next page.)



## 3. Hieroglyphic Symbols

This Flap Barrier equipped with two types of hieroglyphic symbols to inform authorization permission and access situation.

## 6. Emergency

The Flap Barrier is a failsafe security barrier. In case of power failure the arms will open automatically. If a fire alarm system or other alarming signal is input by according ports, the barrier will also open automatically.



## 5. User Safety

We also define several cells to detect obstructions during its movement. If an obstruction is detected during closing, the arms wing will stop its movement to prevent the user from being clamped.

The speed of the door wings is adjustable, within the limits of the safety standards. For maintenance reasons, an internal counter is integrated, assuring timely service and maintenance.



## 7. Customized Finish

We offer a full design service for custom enclosures, as well as alternative colors and materials for arms and top cover.



# WORKING PRINCIPLE

The Flap Barrier divides an area into a secure and non-secure side. The barrier will only allow access after authorization from an access control system or a signal from an external control panel.



## ▀ Normally closed working mode (default)

In this mode, after authorization by a card reader, biometric or other authorization system, the Operate symbols on top of the unit changes from a red cross into a green arrow. The user can now step into the lane. Detection cell will detect the user and the arms open. Along the way the cell follow the movement of the user. After passing finish, it will close immediately. To allow larger capacity through the Flap Barrier, the authorized number can be memorized. If no one passes after arms opened, it will close again, after the preset time has elapsed.

## ▀ Normally open working mode

In this mode, the arms will always open and only closes if an unauthorized user steps into the Flap Barrier. After authorization the display on the top plate shows a green arrow and the user can walk through the lane. The arms will remain open after passage.

The intrusion detections and alarming in normally closed/open mode.

### “Standby” intrusion alarming

When the barrier is on standby, an intrusion is detected as soon as there is an obstruction of cell. Alarming time: 3s



### “Following after authorized passage” intrusion alarming

After the passage of the barriers by an authorized person, another person following in the same direction and without authorization causes an intrusion. Alarming time: 3s



### Counter direction intrusion alarming

The intrusion is declared when a person is authorized in a direction while a passage in the other direction is in progress. Alarming time: 3s



### Overtime alarming

If never detect any passing after authorization 20s, Flap Barrier will start alarming till 25s will cancel this passing authorization.



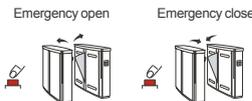
### “Stay” intrusion alarming

After the authorized and detected have gone into the access but don't detect finish the passage. The barrier will keep open and waiting 25s. Then barrier will output “stay” intrusion and close in 30s. Unless passenger block the safety detection cell, the arms will close when he leave the detection cell. Alarming time: start at 25s after detect gone into the access.



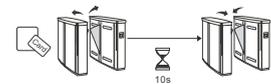
### Emergency open/close mode

Those two modes is used in special applications, such as fire alarm, etc. In those modes, the authorization will be shield and arms remains open/close till input any signal to change be other mode.



### Degradation mode

This mode appears when the detection cell are broken or blocked during initialization. In this mode, authorization is valid but all of the detection cell are shield, the arms will only close the after the valid time.



## ▀ Emergency open / close mode

Those two modes is used in special applications, such as fire alarm, etc. In those modes, the authorization will be shield and arms remains open/close till input any signal to change be other mode.

## ▀ Degradation mode

This mode appears when the detection cell are broken or blocked during initialization. In this mode, authorization is valid but all of the detection cell are shield, the arms will only close the after the valid time. (Default 10s)

► **List of technical parameters:**

<b>Electrical power supply</b>	AC 220V/110V	<b>Driving mechanism</b>	crankshaft-rod device for smooth operation
<b>Frequency</b>	50Hz/60Hz		with fast and progressive movements
<b>Motor</b>	24V/30W	<b>Automatic opening device in case of power failure</b>	
<b>Symbols</b>	4	<b>Opening time</b>	1 second
<b>Pass way</b>	Bi-direction	<b>Operating temperature</b>	-10°C to +60°C
<b>Open signal input</b>	dry connect, TTL or 5V impulse	<b>Weight</b>	Single lane 110KG
<b>Control logic</b>	PLC		Double lane ( Intermediate ) 150KG
<b>Torque limiter</b>	electronic	<b>Overall dimensions</b>	see below



### Options

- Single lane or multiple lane setups
- Normally open or normally closed working mode
- Top cover equipped with marble or stainless steel
- Several color of arms optional
- Adaptations for integration of a proximity card reader under the top cover
- Pedestal for mounting of external card readers, biometric or other authorization systems

► **Easy installation**

The Flap Barrier units are very slim to allow a multiple lane setup in a narrow corridor. The stainless steel frame is mounted on a small stainless steel base plate and partially constructed of transparent tempered safety glass. A hinged and locked top cover protects the controls and sensors.

► **Installation**

