

TASPL - Flap Barrier
Model: TDB-201 Series



TDB-201 S



TDB-201 D



TDB-201 S

Company Profile

Toshi Automatic Systems Pvt. Ltd. Flap Barriers are designed to control pedestrians entering or exiting security controlled areas. The standard model has an aisle (lane) width of upto 600mm. Flap Barriers can be used in Uni-directional & bi-directional control applications with high volume of pedestrian traffic. Our gates are used in Applications including ITMS (Integrated Transport Management System) & AFCS (Automatic Fare Collection Systems) such as (Stadiums and Arenas, Perimeter and Interior Security, Recreation and Amusement Parks, Retail crowd control, Transit fare Collection and Lobby Access Control).

Brief Description of the Product

The Intelligent Flap Barriers are one of the serial products of intelligent passage management system from our product portfolio. It possess a high level of superiority which is uncomparable with the traditional management mode. For Instance, as per the traditional management mode, there could be high degree of manpower and material involvement, a lot of time consumption for controlling the right of passenger for passing or on tolling or even counting of the passenger which in turn would result in low efficiency. this problem can however be solved by Intelligent Passage Management Products through the scientific crystallization of the highly developed social civilization, thereby opening the new era of scientific management.

The outline of the product is formed after pressing the stainless steel plate. The shape is featured as pleasing in appearance, righteous, stainless and durable. The system is provided with a standard electric interface which is easily integrated into the product with read/write facilities. A special control system is quipped within the product to meet the requirement of fire control, so that the smooth passage flow is ensured, realizing timely diverting of passengers. The product is featured as stable, safe and reliable in performance and can be used widely in the places where passenger flow is high but monitoring is needed such as in stations, harbors and guest houses.

Main Function and Features

1. Rapid identification technique, available to identify accurately and efficiently the magnetic cards, bar code cards, ID cards and IC cards.
2. With normally open & normally closed working mode
3. Real time failure self-detect and alarm indication, ensuring system safe operation and facilitating maintenance and operation.
4. With direction indication, guides passenger for entry and exit.
5. Automatic counting and displaying of number of passengers, facilitating observation and displaying total amount which is as high as 90,000. (Optional)
6. Sound (Light is optional) alarm indication function, prevents illegal entry or irregular passing.
7. Powerful on-line intelligent control mode, facilitating you:
 - A. To adjust the speed of operation of the barrier according to the flow of passenger and to improve the passing rate.
 - B. To setup operation mode for passage entry and exit.
 - C. To read a card multiple times, the special function meeting the application requirements of particular site.
 - D. To set up the card reading with or without memory.
 - E. To select a reasonable normally open or close mode, to divert effectively the flow of passenger.
 - F. To have humanized setting function for reset of over time passing.
8. After the system power is cut off, the plate barrier starts the standby of power the barrier, so that the passage is ensured to be smooth and to divert the flow of passengers timely.
9. The infrared sensing technique realizes real time monitoring of the passage, safe protection and tail-proof.
10. The treatment mode in emergency or in special conditions.
11. Having standard input/output port, facilitating the integration of the system and the other equipment, available for far end control and management.
12. The Super strong combination capability, with the combined application of products of different passage types and series, not affecting the systems performance.
13. Strong systems expanding capability, facilitates to add new product at any time.
14. Far end control management: function of far end control of barrier mode, enables meeting the special requirements of the users and the fire protection.
15. Product Structure: The Structure of the product is mainly composed of mechanical systems and the electric control systems.

16. The Structure of mechanical systems: The mechanical system is composed of cabinet and core mechanism. The Cabinet is equipped with counter, directional information device, light/sound alarm device, infrared sensor and door lock. The core Mechanism is composed of motor, reducer, chassis, transmission axle barrier, etc.

17. Electric control system:

a. Composition and function of electric control system

Electric control systems is mainly composed of reading device, main control board, infrared sensor, driving board, motor module, directional indicator, counter, alarm, voice board, limit switch, transformer, air switch, switching power and speaker, of which the function of the main components are given below:

- **Reading device:** To Read the information on the card and to issue the barrier open signal to the main control board after signal processing:
- **Main control board:** As a control center of the product, it receives the signals from the card reader and infrared sensor and carries out signal processing, and then, it issues executive command to the direction indicator, motor deriving board, counter and alarm.
- **Infrared sensor:** It detects the location of the passenger, and plays a safe protection function. The sensors at the both terminals of the passage determine the location of the passenger, and the medium sensor mainly functions as a safe protection:
- **Motor driving board:** It receives signal sent form the main control board and the limit switch and controls the motor running. realizing barrier open/close:
- **Direction indicator:** It indicates the present status of passage, and guides the passenger to pass the passage orderly and safely:
- **Counter(optional):** It records the number of passenger effectively passing through a certain passage in the same direction:
- **Sound/light(optional)alarm device:** It delivers alarm indication signal for the illegal passenger:
- **Limit switch:** It controls the rotation position of the barrier:

b. Connection diagram

Each passage is quipped with a set of electric control system, with the electric control devices installed respectively in the main cabinet and sub-cabinet as shown in Appendix D.

c. Systems Operation Principle

C1. Turn on the poser, 3 seconds later: the systems enters into operation mode.

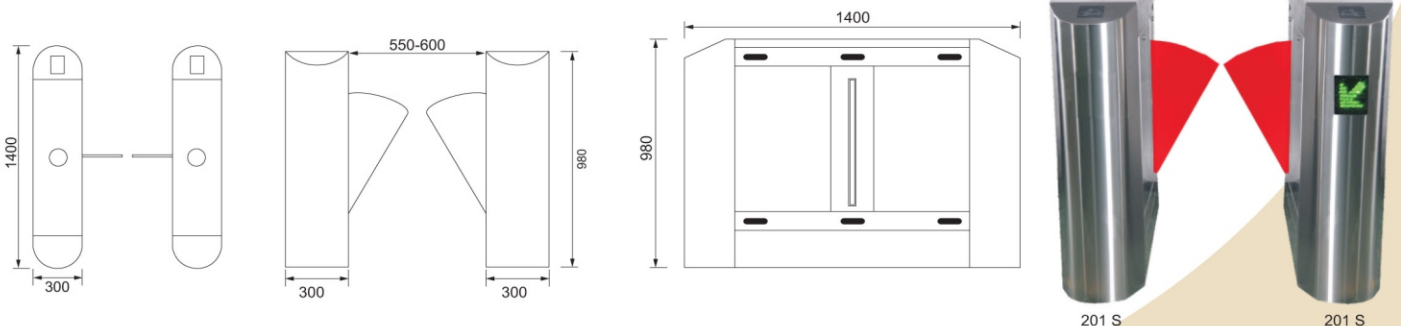
C2. After the legal card reading for the passenger, the system delivers to the main control board of the barrier the open signal:

C3. The main control board receives the information form the car reader and infrared sensor and carries out signal professing and then, it delivers control signal to the direction indicator, driving board, controlling the indication mark changing the form from red into green. At the normally close mode, it controls the driving board to drive the motor running and to open barrier (at normally open mode, no action for the barrier), allowing the passenger to pass through.

C4. After the passenger passing through the passage in accordance with the direction indicator marks, the infrared sensor detects the complete process of the passenger passing through the passage, and issues signals continuously to the main controller board, until the passenger passes through the passage completely.

C5. After the passenger passe through the passage completely, the main controller board delivers a signal to the counter, which will increases to 1 automatically, ending the passing process.

C6. If the passenger forgets to read card, or reads with an illegal card when passing through the passage, the systems will bar the passing of the passenger (at normally open mode, the barrier will close, and at normally close mode, the barrier will not act). At the same time, . sound/light alarm signal will be given. The alarm signal will not be cancelled until the passenger retreats from the passage and the passing is only allowed after reading again the effective card.



TDB-201 S

TDB-201 D

Cabinet	: Stainless Steel AISI 304	: Stainless Steel AISI 304
Internal Structure	: Stainless Steel Frame	: Stainless Steel Frame
Barrier (Retractable)	: Rubberized	: Rubberized
Unlock Time	: 0.2 Sec.	: 0.2 Sec.
Passing Speed	: 30 - 60 Persons / Min	: 30 - 60 Persons / Min
Passing Width	: 500 - 600mm (Lane)	: 500 - 600mm (Lane)
Power Supply	: AC 220V, 50Hz,	: AC 220V, 50Hz,
Humidity	: 95 %	: 95 %
Communication Interface	: RS485 or TCP IP	: RS485 or TCP IP
Operational Voltage (Motor)	: 24v	: 24v
Max Power Consumption (Motor)	: 30w	: 30w * 2
Frequency	: 50Hz~60Hz	: 50Hz~60Hz
Protection Level	: IP44	: IP44
Working Temperature	: -25°C to +70°C	: -25°C to +70°C
Electro-Magnetic Drive	: DC	: DC
Dimension Excluding Bars	: H980xW300xD1400mm (May change as per the requirement)	: H980xW300xD1400mm (May change as per the requirement)

Double Lane Layout



Triple Lane Layout



ASCION ENTERPRISE

77A/ 22, Raja S. C. Mullick Road, Kolkata- 700092

Tel: 033 2413 7160 M# +91 98300-39931 / 94335-56655 / 90736-79221

e-mail : asconsanjib@gmail.com Web. www.asconenter.com