



Access control gates

MULTITECHNOLOGY CONTACTLESS SOLUTIONS FOR INTEGRATED FARE SYSTEMS



Gate_VA01_2006

Thales gates offer a flexible and modular design with the security, reliability and high performance throughput required in mass transit application today.

FUNCTIONS

Thales gates ensure that the transport system is only used by fare paying passengers. It achieves this by processing the fare media of each passenger wishing to enter or leave the transport system and allowing or denying passage through the gate aisle according to the validity of the fare media. The gate can operate either under control of a central system or in stand-alone mode. The barrier mechanism gives an effective compromise between fraud prevention and physical safety of adult, child and handicapped passengers. Doors are automatically opened in case of a mains power failure. The gate is designed to handle a flow of up to 10 000 passengers/day on average and up to 20 000 passengers/day at peak times-thus minimising queuing times to enter or exit the subway system.

SECURE ACCESS

The gate is identified by an electronic tag. Downloading security keys is protected through an authentication process between the gate and its host (option).

THALES EXPERTISE AT YOUR SERVICE

FEATURES



Housekeeping

The operating mode of the gate may be set locally or remotely.

The modes are:

In Service: Entry/Exit/Bi-directional

Out of Service: Out of order/Maintenance/Station closed

- Different fare modes are permitted by the business rules (set remotely or locally)
- Business rules, operating parameters and fare tables updated by the central system
- Transactions, contents of audit registers and system alarms, warnings uploaded to the central system
- Operates in stand-alone mode for up to 7 days at 2 000 transactions/day

Station implementation

- Combined to form a modular gate array
- Different types of gate cabinet can be used

Structure

- Integral body type unit made from stainless steel with a brushed finish

Passenger detection

- Optical sensors

Direction display

- Pictograms: entry or exit aisles visible up to 20 m

User-friendly passenger interface

- Clear and logical passenger interface
- Invalid transaction warning (sound and display)
- 6.4" colour TFT passenger display or LCD
- Intrusion and fraud management (alarm and display).

Fare media processing

- Fare media are checked for validity and updated in accordance with the business rules and fare tables currently in force

Media formats accepted

- CSC and/or CST, type A and B (ISO 14443) and C Sony
- Magnetic, ISO/Edmonson type (low/high coercitivity)

Maintainability

- Modular design
- Maintenance management
- Different types of gate cabinets can be used
- Viewing gate parameters

Equipment upgrade

- Uses standardised interfaces
- Easily adaptable to new requirements by adding or replacing modules

FLAP GATES



- Operates in Doors Normally Open (DNO) mode or Doors Normally Closed (DNC) mode
- **CSC and CST:** 60 passengers/min
- **Magnetic:** 45 passengers/min
- **Barrier type:** Central retractable flaps (standard or wide)
 - Gap between flaps < 50 mm
 - Flap opening < 0.5 sec
- **Flap MCBF:** > 2 000 000 operations
- **Consumption:** 250 VA, 550 VA peak
- **Tailgating:** 300 mm

SLIDING DOOR GATES



- Gate operates in Doors Normally Open (DNO) mode or Doors Normally Closed (DNC) mode
- **CSC and CST:** 60 passengers/min
- **Magnetic:** 45 passengers/min
- **Barrier type:** Retractable sliding doors made of 12 mm tempered glass, resistant to a force of 1 200 to 2 000 daN/cm²
 - Space between door panels: < 80 mm
 - Central free part: 140 mm (front)
 - Flap opening: < 0.5 sec
- **Flap MCBF:** > 2 000 000 operations
- **Consumption:** 250 VA, 550 VA peak
- **Tailgating:** 300 mm

TURNSTILE GATES



- **CSC and CST:** 35 passengers/min
- **Magnetic:** 30 passengers/min
- **Barrier type:**
 - Three arms tripod in stainless steel or aluminium 35 to 40 mm diameter
 - Both directions, electrically controllable
- **Flap MCBF:** > 5 000 000 operations
- **Consumption:** 250 VA, 350 VA peak

POSSIBLE GATE EQUIPMENT



Smart Media Validator (SMV)

- CSC card processing:
depends on the card type



Smart Media Acceptor (SMA)

- Process A, B and Sony
- Smart token
- CST process < 300ms



Magnetic Validator (with or without SMV options)

- ISO size
- Magnetic ticket
- Processing < 500 ms (without printing)