Speed Gate and Turnstile Introduction

Internal Use Only

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Market Analysis
PART 01

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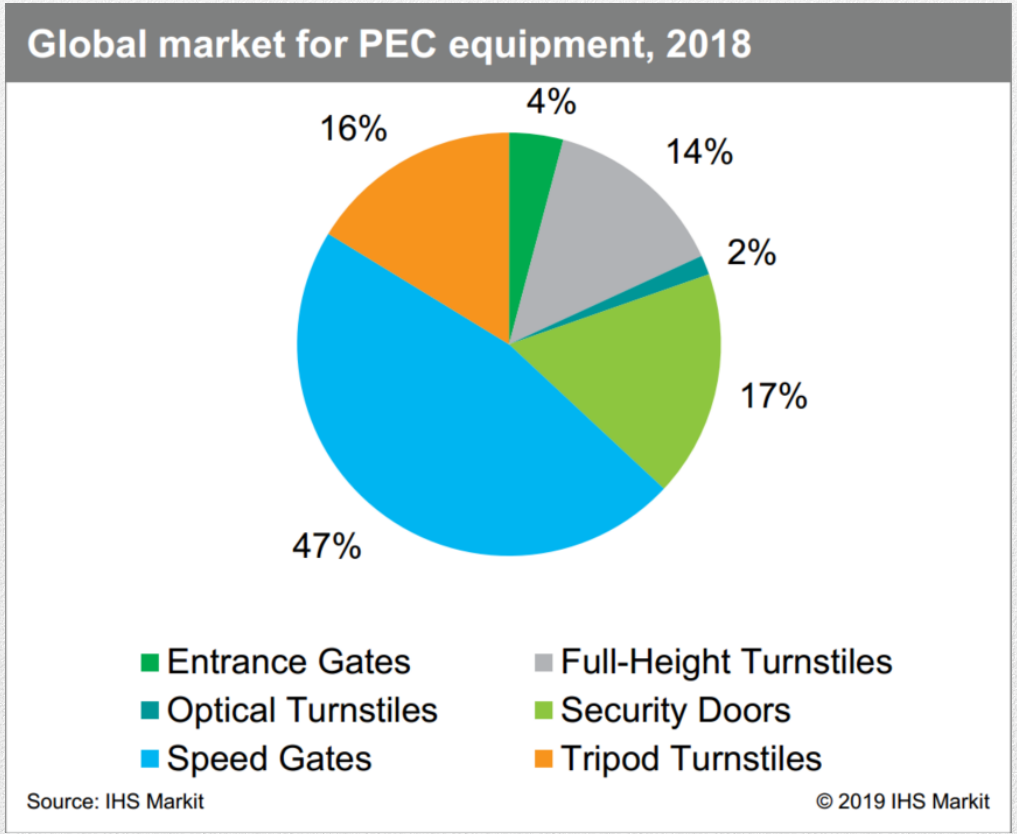
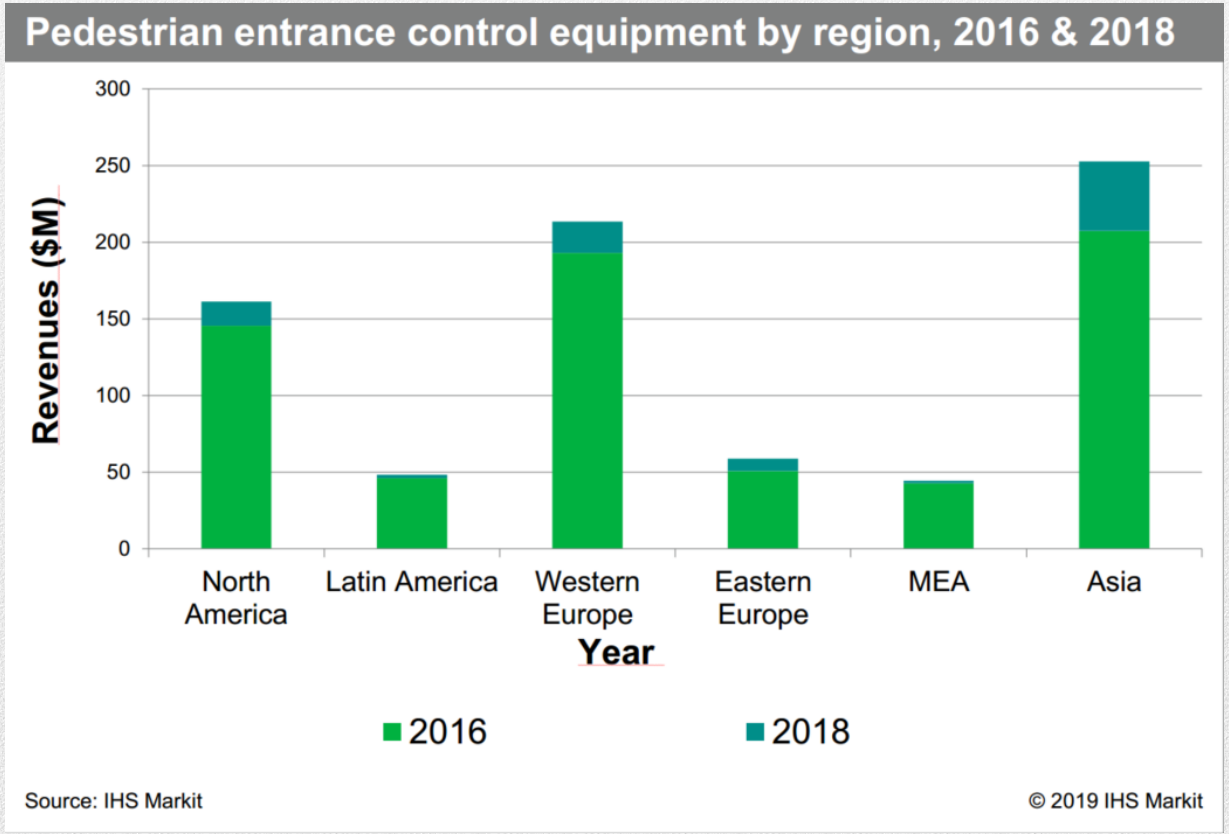
Global Market





1. According to the CAGR (6%), the market size of PEC equipment is about 880 million in 2020.
2. Speed Gates (Swing Barrier, Flap Barrier) are up to 47%, around 410M. Full-Height and Tripod Turnstile are up to 30%, around 260 million.

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Pain Points

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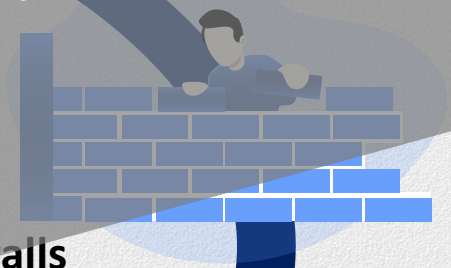
Low efficiency in the entrance/exit and we need to make it more convenient and efficient.

Need to limit the throughput



It's difficult to built walls or doors in open area and it costs a lot of labors, money and time.

Need to manage the entrance

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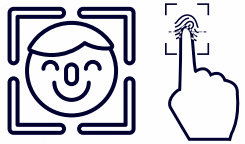
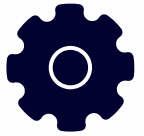
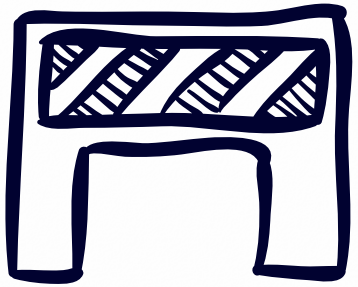
Technology Development Trend



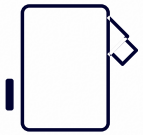
Biological Recognition



Motors



Speed Gate and Turnstile



Card Reader

Controller

Professional Manufacturer

Delivering a comprehensive pedestrian entrance solution for different scenarios.

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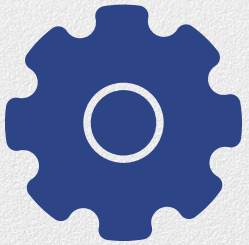
The Core of Turnstile - Motor



Motors

	Brush Motor	Brushless Motor	Servo Motor
Rotational Speed Control	N/A	**Support**	**Support**
Position Detection	N/A	Support (Low precision)	**Support (High precision)**
Life Span	Short	Medium	**Long**

Performance: Brush motor < Brushless motor < Servo motor

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Speed Gate and Turnstile Introduction
PART 02

Swing Barrier

Flap Barrier

Tripod Turnstile

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Swing Barrier

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Various verification methods

- In-built access controller and EM/M1 card reader.
- *Optional configuration of face terminal, fingerprint, card and QR code*.

Safe and Secure

- *Self-detection and self-diagnostics* when strong force struck.
- Barrier will be open for *emergency status.*

DS-K3B801 Series

High reliability and good quality

- *Servo motor: > 6 million times of opening/closing.*
- 32-bit high-speed processor.
- Up to *24 pairs* of IR light detectors, and barrier will withdraw when people are nipped.

Friendly user experience

- *Self-defined audio prompt content*.
- Intrusion, tailgating, reverse passing, and climbing over barrier *alarm.*
- Easy-to-remove top cover, *no need to keep a distance from the wall for installation convenience.*
- Remote control and management.

Easy integration methods

Provides Wiegand and I/O interfaces.

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Flap Barrier

HIKVISION

Various verification methods

- In-built access controller and EM/M1 card reader.
- *Optional configuration of face terminal, fingerprint, card and QR code.*

Safe and Secure

- *Retractable flap barrier design.*
- Barrier will be open for *emergency status.*
- *Self-detection and self-diagnostics* when strong force struck.

DS-K3Y501 Series

Easy integration methods

Provides Wiegand and I/O interfaces.

High reliability and good quality

- *Servo motor: > 6 million times of opening/closing.*
- Up to *12 pairs* of IR light detectors and barrier opened or stopped working when people are nipped.
- *Outdoor/Indoor* application environment
- Up to *60 persons* per minute.

Friendly using experience

- *Self-defined audio prompt content*.
- Intrusion, tailgating, reverse passing, and climbing over barrier *alarm*.
- *Barriers opened when power off.*
- Remote control and management.

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Tripod Turnstile

HIKVISION

Various verification methods

- In-built access controller and EM/M1 card reader.
- *Optional configuration of face terminal, fingerprint, card and QR code*.

DS-K3G501 Series

High reliability & good quality

- *Outdoor/Indoor* application environment, waterproof up to *IP54**
- *> 3 million times of opening /closing.*
- *> 35 persons per minute.*

Safe and Secure

- Tripod design, better performance in *anti-tailgating.*
- Barrier will be free for *emergency status.*

Friendly using experience

- LED indicators design especially in the middle of the turnstile.
- *Self-defined audio prompt content*.
- Barrier *dropped automatically* for emergency evacuation.
- Remote control and management.

Easy integration methods

- Provides Wiegand and I/O interfaces.
- Flexible *sidewalk, fence or base* installation.

*(*Proved by Hikvision laboratory).*

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Swing Barrier Family

Hikvision swing barrier datasheet and comparison

Product type	**Value** series swing barrier	**Pro** series swing barrier	**Ultra** series swing barrier
Product image			
Product model	DS-K3B501S	DS-K3B601	DS-K3B801
Lane width	550 mm to 1100 mm (21.65" to 43.31")	550 mm to 1100 mm (21.65" to 43.31")	550 mm to 1100 mm (21.65" to 43.31")
Speed of throughput*	20 to 60 persons per minute	30 to 60 persons per minute	Up to 60 persons per minute
Pedestal material	SUS304 stainless steel 1.2 mm	SUS304 stainless steel 1.5 mm	SUS304 stainless steel 2 mm
IR light detectors	12 pairs	12 pairs	24 pairs
Infrared detection sensitivity	High	Middle	High
Working environment	Outdoor/Indoor (IP54*)	Outdoor/Indoor (IP54*)	Indoor
Pedestal width	200 mm	200 mm	160 mm

*(*IP54 proved by Hikvision laboratory).*

*(*The actual throughput is affected by the person passing rate and passing method).*

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Peripherals Overview

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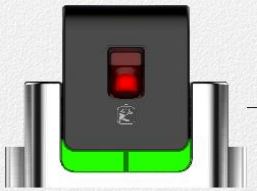
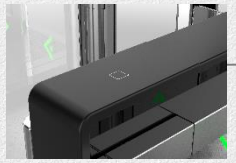
Fingerprint reader



Face recognition terminal

Provides quick and efficient way for authentication

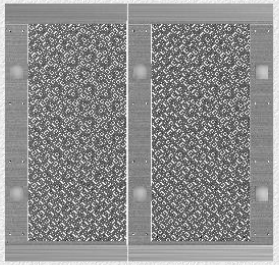
Card reader



Supports EM/M1 card optional

Base Module

Provides enough space for cables and this solution reduces much extra installation works for customers.



QR code reader

Only able to read the card number

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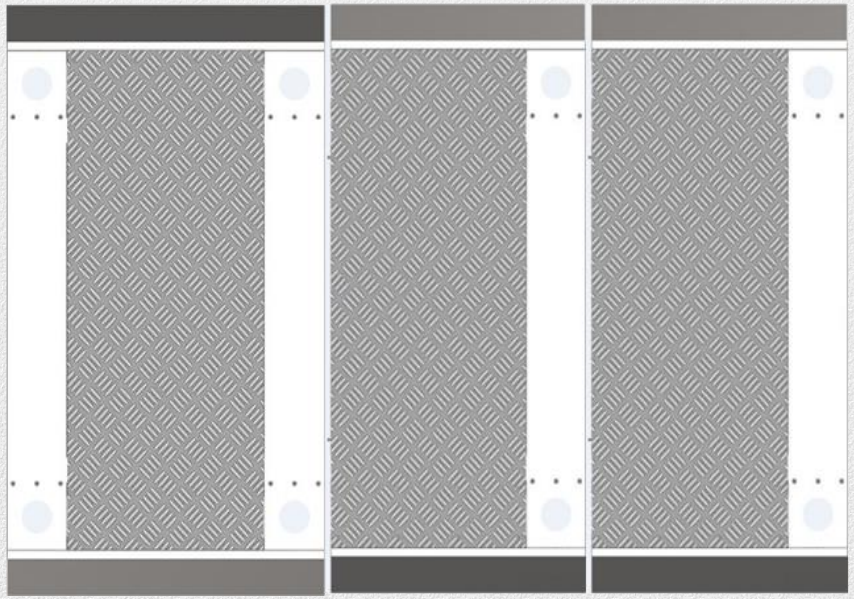
Base Module Overview

Main Spare Parts

Base module for pedestals

Provides base modules for single lane or multiple lanes solution

DS-K3XX01-BASEXXX-S
For single lane



DS-K3XX01-BASEXXX-S + DS-K3XX01-BASEXXX-M
For multiple lanes

The reason why we need base module

For actual application scenarios, it is hard to make underground hole for wiring. However, with a base module, there is no requirement of doing such construction works and the base module provides enough space for cables and this solution reduces much extra installation works for customers.

Base module selecting method

- **Single lane requirement**: Directly selects BASE-Single lane module according to lane width.
- **N (N>1) lanes requirement:** Selects 1 BASE-Single lane module according to lane width, and N-1 BASE-Expansion modules.

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Integration with MinMoe

DS-K5671-ZU

DS-K5671-ZV

DS-K5671-ZH

- **50,000 Faces**
- **7 Inch Touch screen**
- **2MP wide-angle dual lens, WDR**
- **Face recognition duration:**
  1:N＜0.2S
- **Integrated with turnstile**
  Standard Wiegand, RS485 and I/O output
- **Video Intercom Function**
- **Water-proof**
  IP65 for DS-K5671-ZU and DS-K5671-ZV

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Solution Overview

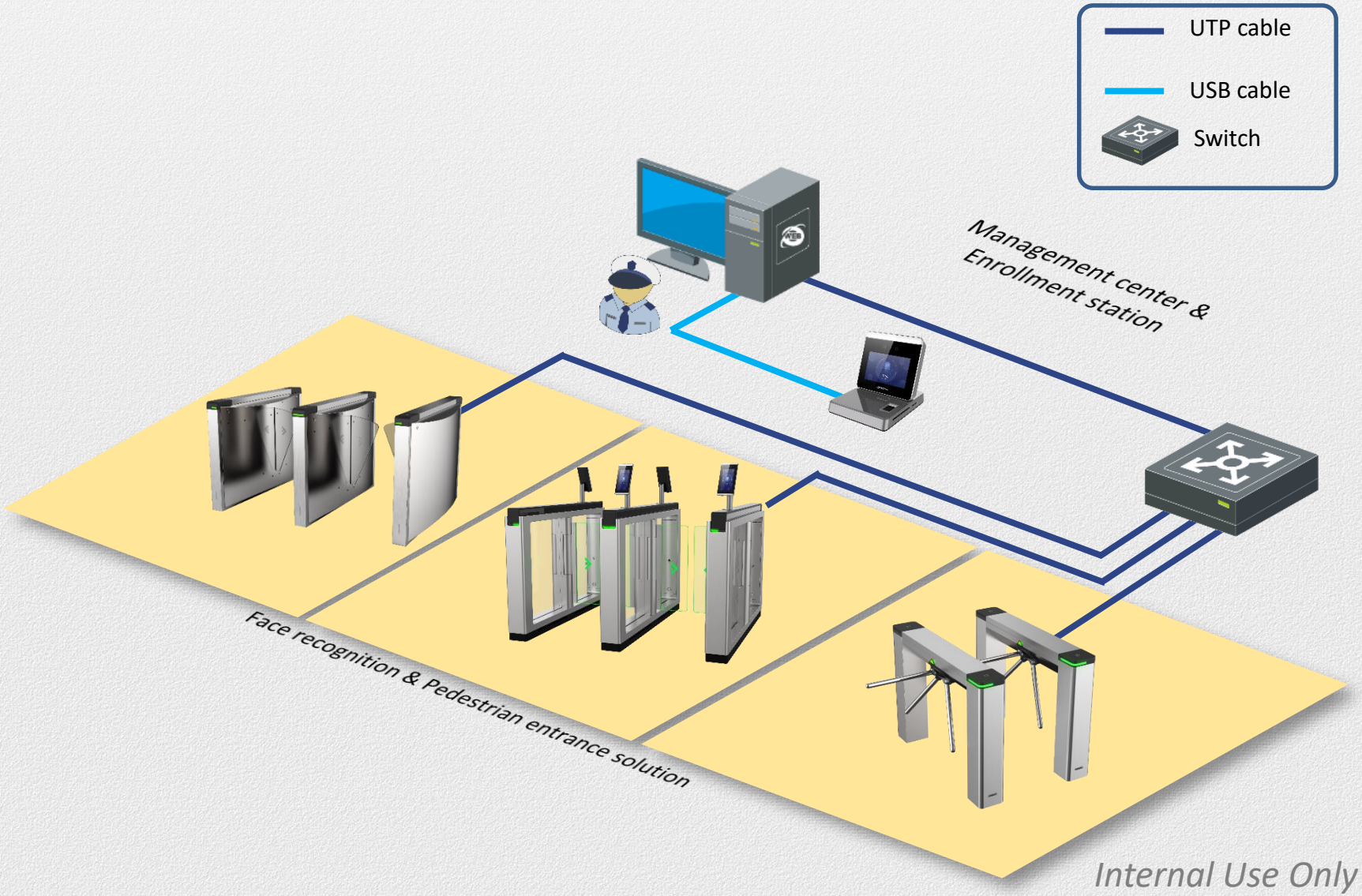
Advantages

- For customer

- Suitable for various scenarios
- Manage large throughput
- Attendance management
- Reduce human resources cost

- For end user

- Fast accessing speed
- High verification accuracy
- Multiple authentication choice
- Used-friendly experience



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Solution Advantages

Multiple Authentication Methods

- Face verification
- Card authentication
- Fingerprint authentication
- QR code verification

No Touching Accessing

- Hygiene - indirect touching can be avoid
- Convenient – no cards need to be carried

Easy and Convenient

- Reduces need for manned entrance
- Easy to installation

Fast Accessing

- Face verifying only takes 0.2 seconds

High Security

- Anti-spoofing detection - No photos, videos or fake models can pass the verification.

Simple Registration Steps

- Uploads photos
- Takes photos at enrollment station
- Finishs the enrollment on the device locally

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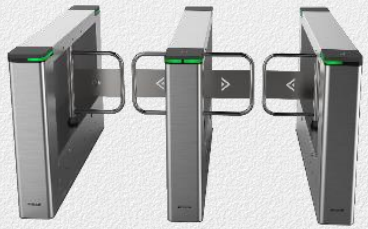
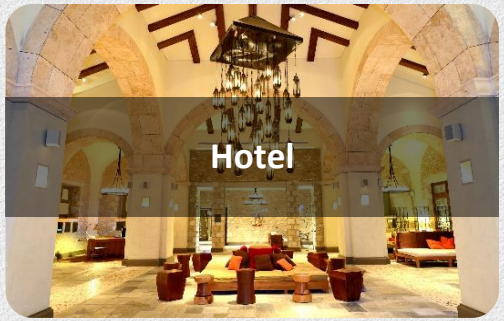
Scenarios

Recommended application scenarios

Swing barrier gate

- Fast accessing speed
- High verification accuracy
- More safe for passengers
- Adjustable lane width for various scenarios
- No extra construction works needed
- Elegant appearance for high-end scenarios.





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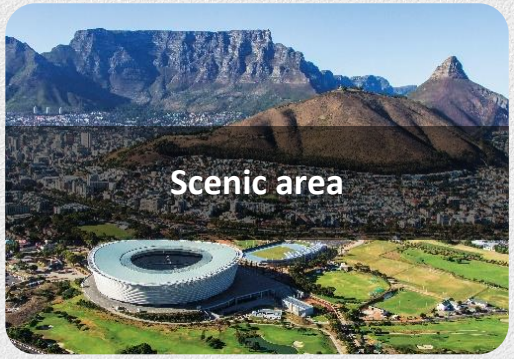
Scenarios

Recommended application scenarios

Flap barrier gate

- Enhanced fast accessing speed
- High verification accuracy
- Regular lane width
- No extra construction works needed



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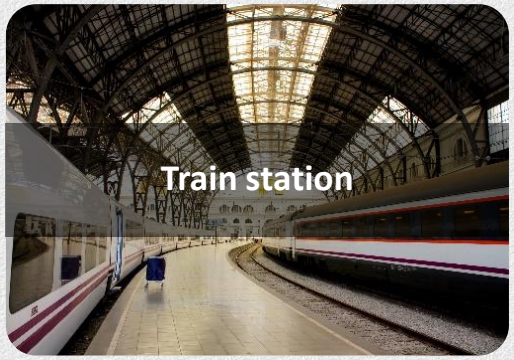
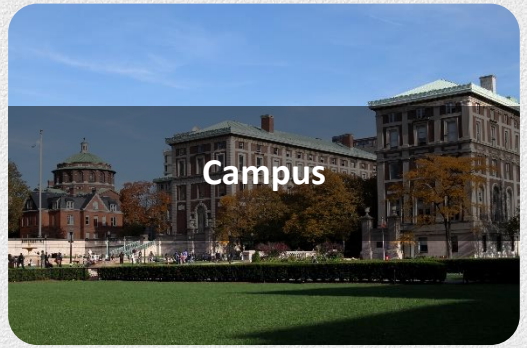
Scenarios

Recommended application scenarios

Tripod Turnstile

- Excellent performance in anti-tailgating
- Good resistance to damage
- Easy installation
- Strong maintainability





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Case Study
PART 03

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Case Study – BI Group in Kazakhstan

We apply 4 lanes solution for BI Group in Kazakhstan along with MinMoe temperature screening products and we make it as a touchless solution for staffs. If any one who has abnormal temperature will be denied and turnstiles block their entrance. This provides efficient solution to protect them from possible risks.

DS-K3B801

- High-end Swing Barrier
- 32-bit high-speed processor
- Up to 60 persons per minute
- Up to 60,000 card capacity and 180,000 event capacity
- SUS304 stainless steel 2 mm

DS-K1T671TM-3XF

- Face recognition terminal with temperature screening function
- Temperature measuring range: 30℃ to 45℃ (86℉ to 113℉), accuracy: 0.1℃, deviation: ± 0.5℃
- Face recognition duration < 0.2 s/user; face recognition accuracy rate ≥ 99%
- 50,000 card capacity, 50,000 face capacity and 100,000 event capacity

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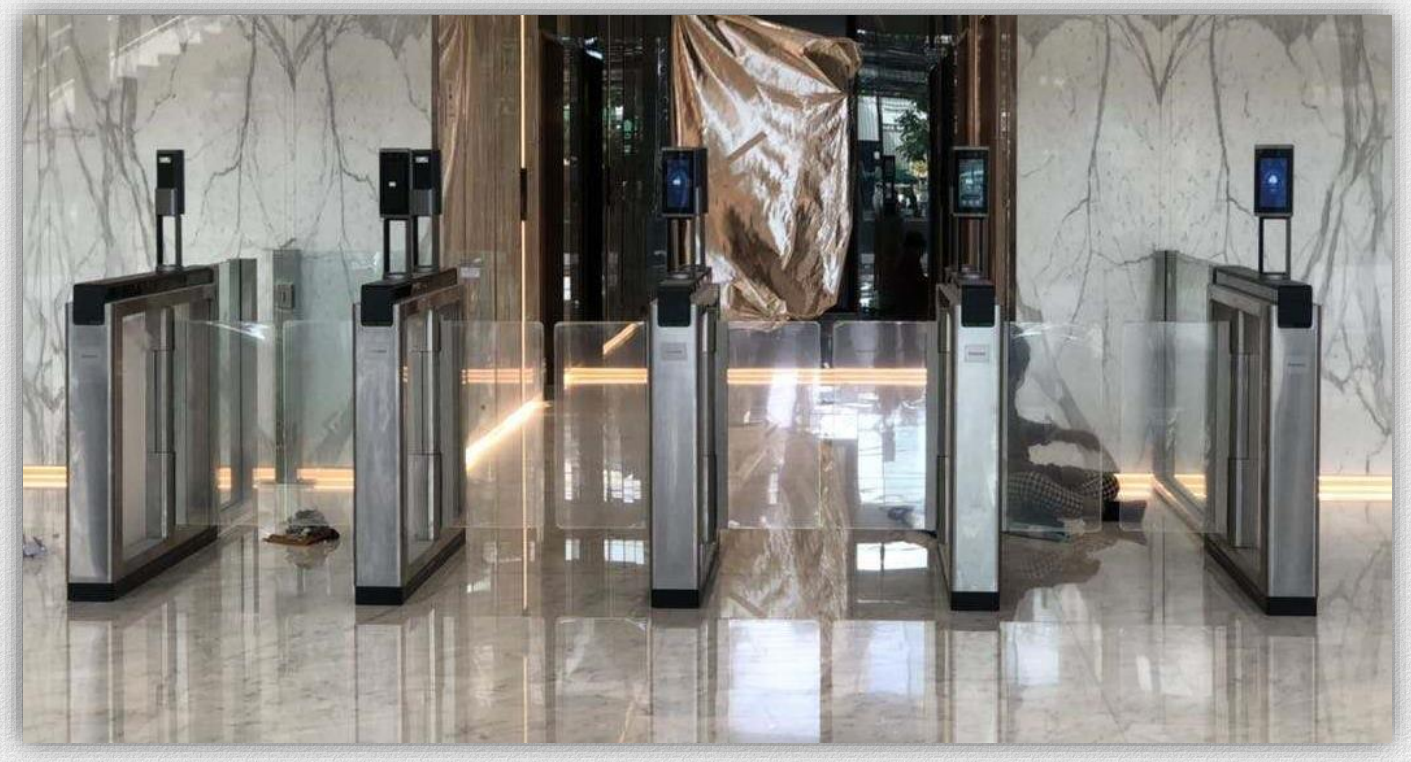
Case Study – Muangthai Capital in Thailand



DS-K3B801

- High-end Swing Barrier
- 32-bit high-speed processor
- Up to 60 persons per minute
- Up to 60,000 card capacity and 180,000 event capacity
- SUS304 stainless steel 2 mm

DS-K5671-Z(V)

- Face recognition terminal
- Face capacity: 50,000
- Face recognition duration < 0.2 s/user face recognition accuracy rate ≥ 99%
- Water-proof
- 2 MP wide-angle dual lens

We apply 4 lanes solution for Muangtahi Capital in Thailand along with MinMoe face recognition products and we make it as a touchless solution for staffs. We make it as quick and effective for staffs to go in and out. Not only decorate the hall but also help them control the flow of people.

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Case Study – MOU Bron in Czech Republic

DS-K3B601

- 12 pairs of IR light detectors
- Up to 60 persons per minute
- Remote control doors status via keyfob, up to 32 keyfobs
- Up to 60,000 card capacity and 180,000 event capacity
- AISI304 stainless steel 1.5 mm

DS-K5671-3XFZ(U)

- Face recognition terminal with temperature screening function worked with turnstile
- Temperature measuring range: 30℃ to 45℃ (86℉ to 113℉), accuracy: 0.1℃, deviation: ± 0.5℃
- Face recognition duration < 0.2 s/user; face recognition accuracy rate ≥ 99%
- 50,000 face capacity and 100,000 event capacity

Masaryk Memorial Cancer Institute in Brno, Czech Republic established in the year of 1935, is a comprehensive cancer center where all necessary medicinal specialists are located at one place. Almost 10,000 patients are hospitalized at the institute and 200,000 people are treated in outpatient clinics every year. In this COVID-19 time, measures need to be taken to increase efficiency of temperature measurement.

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Case Study – PPT Factory in Vietnam

PPT factory in Vietnam, is a company producing electronic components from Taiwan. It's necessary to build a barrier gate to help the company control the flow of people and make sure no unwanted persons can get in. Installed with swing barrier and MinMoe face terminal, the devices make it quick and efficient to help them control the entrance.

DS-K3G501

- Tripod turnstile
- More than 35 persons per minute
- Up to 60,000 card and 180,000 event capacity
- Tripod design, better performance in anti-tailgating
- Outdoor/Indoor application environment, waterproof up to IP54

DS-K1T671MF

- Face recognition terminal
- Face recognition duration < 0.2 s/user; face recognition accuracy rate ≥ 99%
- 5,000 fingerprint capacity, 6,000 face capacity and 50,000 event capacity

DS-KAB607-B1

- Bracket for DS-K1T671 when it works with speed gate & turnstile products

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Thank You!

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