

Magnetic Autocontrol. Immigration Gates



Security and Safety with technology is our Vision

The steady increase in international travel and concerns about international crime and terrorism has put high pressure on immigration and custom departments world wide. The tourist industry loses millions because many international travelers are not willing to put up with the inconvenience of the current custom clearance procedures. Faster clearance times and increased security is essential.

The solution is – automatic passenger clearance with

MAGNETIC AUTO IMMIGRATION GATES

Interfaced to Machine Readable Travel Documents (MRTD) and Biometric Identification systems (BIS), the immigration process is more secure and much faster.

Magnetic pioneered the introduction with the first Immigration Auto Gates with Fingerprint verification in Singapore 8 Years ago.

By now many Magnetic Immigration Barriers are installed in:

- Singapore
- Malaysia
- Dubai
- Australia
- Cambodia
- Burma
- Indonesia
- Nigeria

What is MRTD ?

As a standard format, MRTD contain identification information from the holder, including a photograph and a digital image together with identity particulars printed in a 2 line machine readable zone. Printed in optical character recognition – B (OCR-B) style.

What is Biometrics ?

- Uses measurable physical characteristics to identify an individual
- Creates an Irrefutable Audit Trail of Events
- Provides High-speed, automated Authenticity of I.D.
- Identity Verification, non Identity Establishment

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Typical Biometrics

Iris Scan



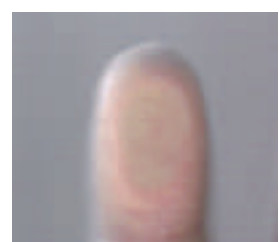
Face Recognition



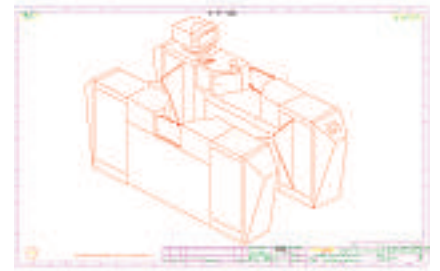
Hand Geometry



Fingerprint Recognition



Since the very first Auto Immigration Gate 9 Years ago, technology has changed dramatically and many modern International Airports have been built world wide.



The “one fits all” approach for Immigration Gates is no longer acceptable.

Magnetic has opted to provide a modular system to be able to blend into new architectural environments.

Most of the Auto Gate materials are glass and stainless steel because this will fit into most demanding installations.



Glass has the added benefit of visibility but also takes away the claustrophobic concerns of many travelers.

Ergonomics and functionality are most important to achieve fast throughputs of travelers.

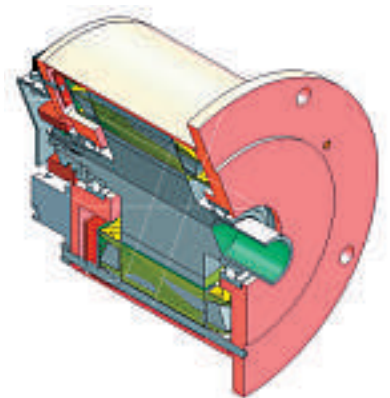
Security & Safety are essential, therefore new Gate drive systems have been developed.



With the introduction of the new “MHTM”(Magnetic High Torque Motor) the Gate dimensions are extremely compact, and many lanes can be installed in a limited space.

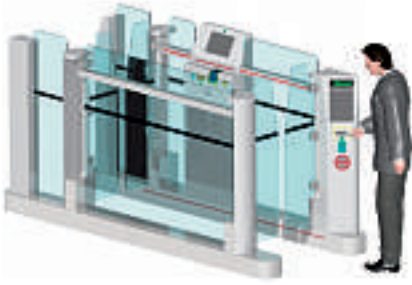
The new MHTM Direct drive

- Absolute maintenance free direct drive.
- No Gearbox or mechanical gear parts.
- No gear means no backlash.
- High efficiency no Gearbox losses.
- No wear.
- No oil or grease change.
- Virtually no noise
- Absolute free rotation of output shaft without power.
- Design lifetime > 10 Years.
- > than 50 Million operation.



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How it works



1

The traveler approaches the kiosk and inserts his Smart ID card.



2

The traveler collects his Smart ID card.

The first set of doors open.

The traveler steps into the channel.

The detection systems verifies one person only and filters out luggage.

The first set of doors close.

Safety photocells prevent the door wings from closing on an obstruction.



3

The traveler places his finger on the scanner for verification.

The next traveler inserts their Smart ID card into the kiosk.



4

After verification and correct match of data the second set of doors open and the traveler exits the Auto gate.

The system checks the walkway to ensure no luggage has been left behind.

The second door wings close.

The Magnetic Immigration Gate works also with:

Iris Scan, Facial Recognition, Hand Geometry scanners.

Applications

The Auto Immigration Gate is designed to process travelers at border crossing points at airports, seaports and International railway border crossings. A single Gate can process about 300 transactions per hour depending on the Verification technology.

Flexibility

The Gates can be built for uni or bi-directional applications. Several traveler detection technologies can be used.

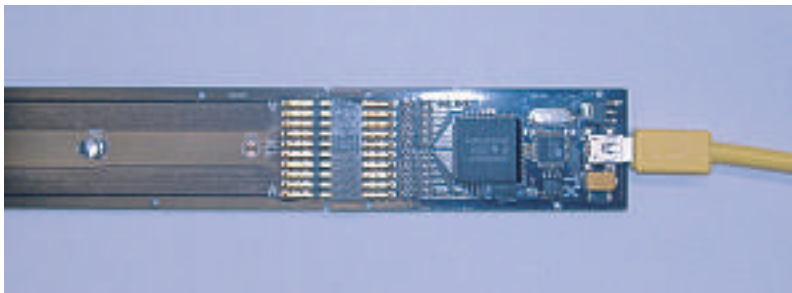
Security

There are many remote monitoring features available to alert improper use or unauthorized access attempts.

User friendly

Information displays guide the traveler through the automated process are part of the Magnetic Auto Immigration Gate.

Photo electric sensors with microprocessor and decoder.



The Gate Master Controller



The Magnetic Gate Master Controller comprises of a number of sub modules that when interconnected via an internal bus are able to control the operation of the gate via commands received from an external serial port or as a stand alone unit with a dedicated I/O module.

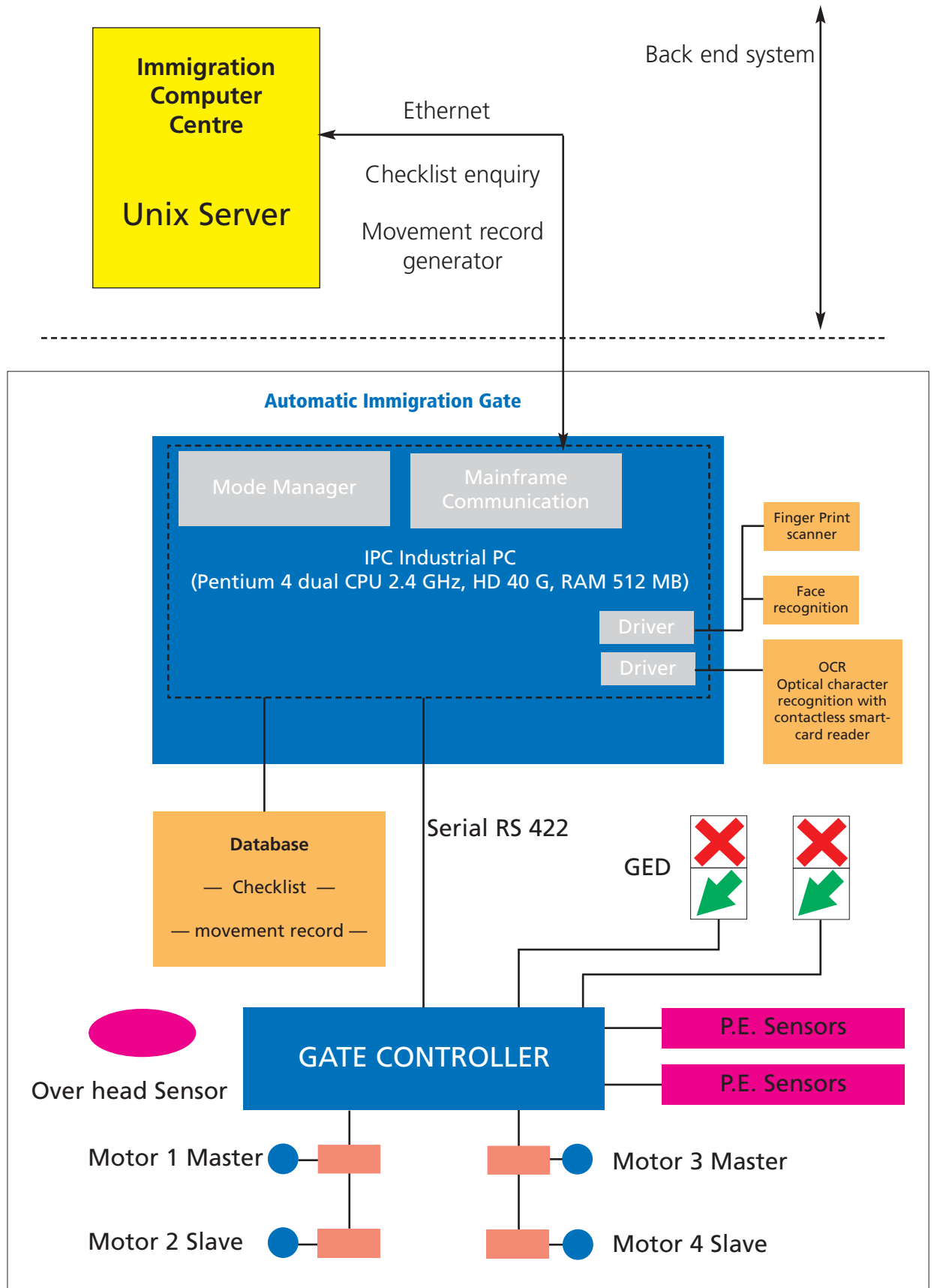
This internal bus provides a level of flexibility to fulfill most of the customers requirements.

When configured as an Immigration Gate, full control of the gate can be performed by the backend system via the serial port with bi-directional communication allowing the backend system to receive full gate status.

In a stand alone environment, simple switch commands allow the operation of the gate to occur whilst the processing of the patron is performed by the Gate Master Controller.

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Typical Network

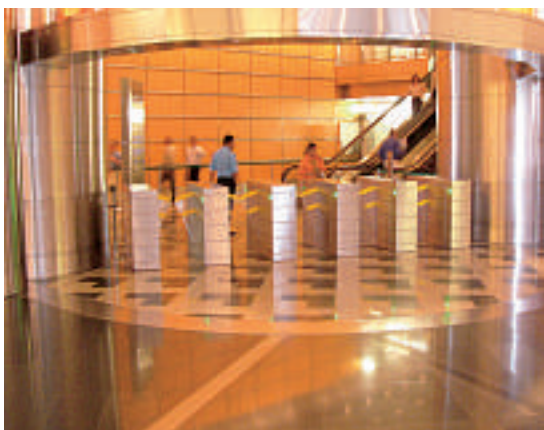


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Magnetic Automatic Pedestrian Gates are not only installed in Airports.



Security and Access control into Buildings, and automatic fare collection Gates at Railway Stations have contributed to our experience.



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