

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 worldwide. 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

MAGNETIC 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 Gates with fingerprint verification in Singapore 8 years ago.

By now many Magnetic Immigration Gates are installed in:

- Singapore • Malaysia • Dubai • Australia • Abu Dabi • Sharjah • Fujairah • Hong Kong
- Cambodia • Burma • Indonesia • Nigeria • Al Ain • Ras Al Khaimah • China

What is MRTD ?

As a standard format, MRTD contain identification information from the holder, including a photo 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.

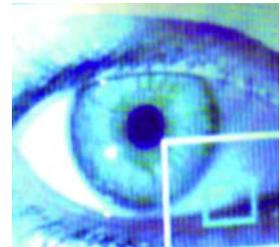
What is Biometrics ?

- 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



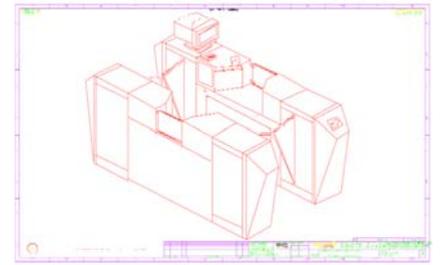
Hand
Geometry



Fingerprint
Recognition



Since the very first Immigration Gate in 1996, technology has changed dramatically and many modern international airports have been built worldwide.



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.

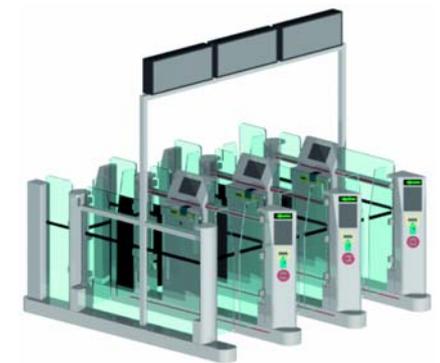
Most of the Immigration Gate materials are glass and stainless steel because this will fit into any architectural environments.



Glass has the additional 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.

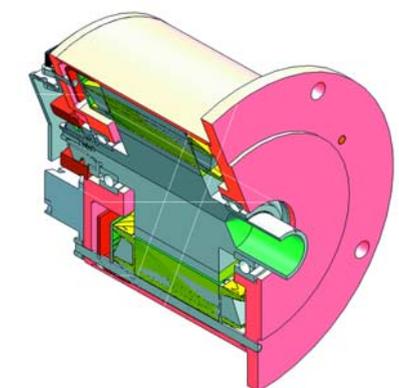
Security & safety are essential, therefore new gate drive systems have been developed.



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.

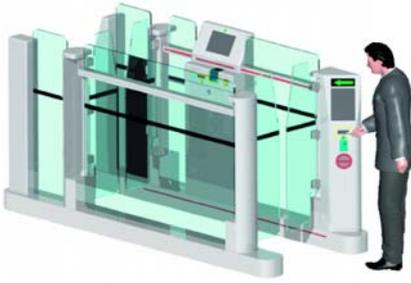
The new “MHTM™ -drive inside”

- 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
- More than 50 million operations



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How it works



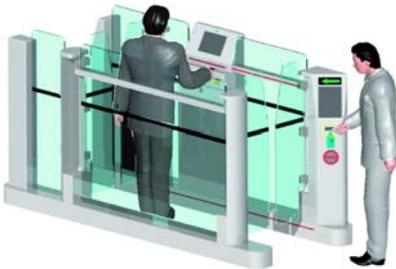
1 Access

- The traveler approaches the kiosk and inserts the Smart ID-card



2 Control

- The traveler collects the Smart ID-card
- The first set of doors opens
- The traveler steps into the channel
- The detection systems verifies one person only and filters out luggage
- The first set of doors closes
- Safety photocells prevent the door wings from closing on an obstruction



3 Verification

- The traveler places the finger on the scanner for verification
- The next traveler inserts the Smart ID-card into the kiosk



4 Exit

- After verification and correct match of data the second set of doors opens and the traveler exits the gate
- The system checks the walkway to ensure no luggage has been left behind.
- The second set of doors closes

The Magnetic Immigration Gate works also with:
Iris Scan, Facial Recognition and Hand Geometry scanners

Applications

The 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.

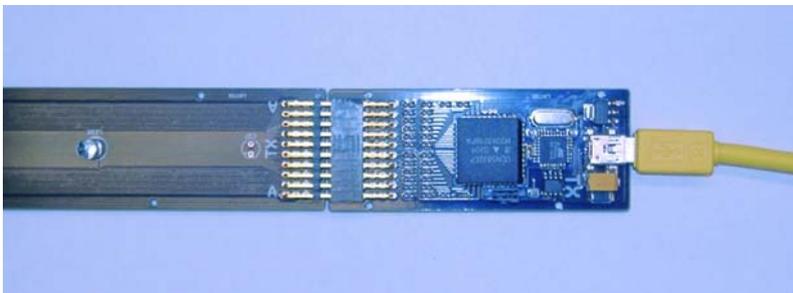
Security

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

User friendliness

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

Photo electric sensors with microprocessor and decoder



The Gate Master Controller



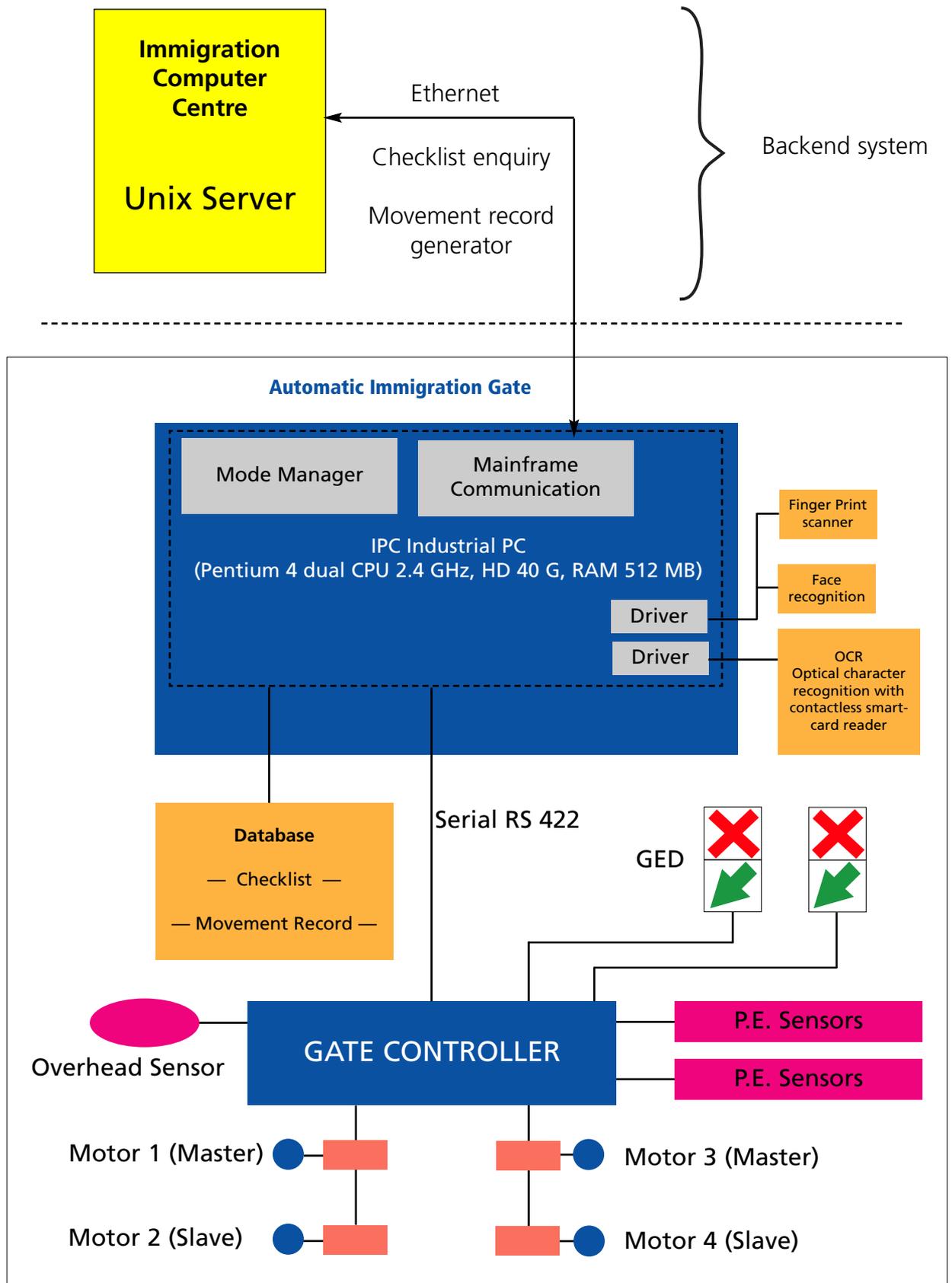
The Magnetic Gate Master Controller comprises a number of sub-modules when interconnected via an internal bus are able to control the operation of the gate via commands received from an external serial port or as a stand alone unit with a dedicated I/O module.

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

Typical Network



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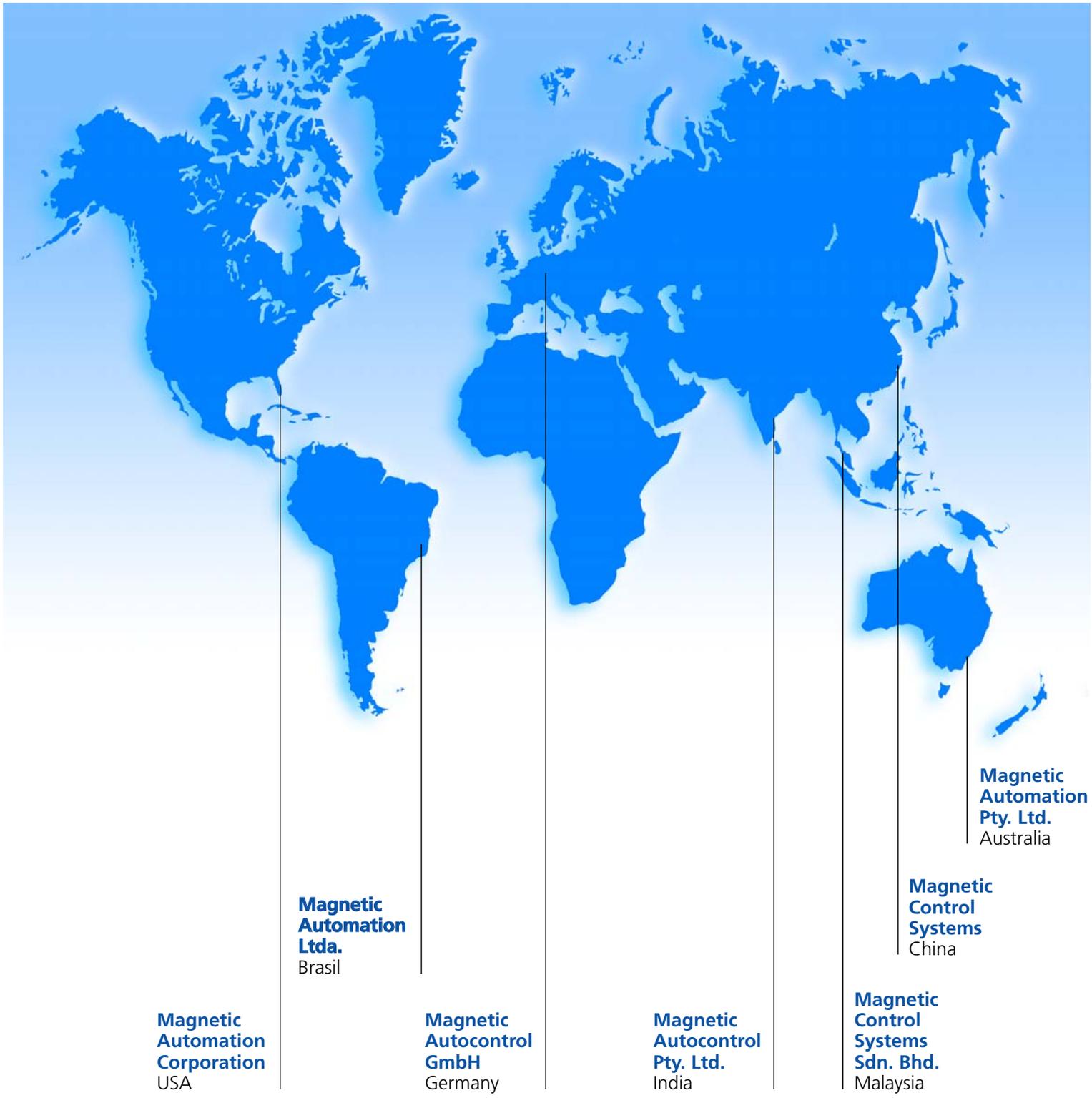
Magnetic Automatic Pedestrian Gates are not only installed in Airports



Security and Access Control into buildings, and automatic fare collection gates at railway stations we are also experts in



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