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## Introduction

Iris recognition biometric technology is proven to increase security, speed, accuracy, and user satisfaction when used as an access control solution within the aviation sector. Iris biometrics are also beneficial as a tool to help law enforcement monitor and secure border crossings and immigration. There is no doubt that speed nor accuracy can be sacrificed when protecting the lives of passengers or securing the border in the name of security. Airport staff, federal, local and international agencies depend on the tools they have to process large numbers of people in and around airports and as they leave and enter destinations in the US and globally.

**Iris technology is already in use at 40 US airports and 33 airports globally.** Iris recognition technology is a field tested resolution that provides highly reliable authentication as well as numerous advantages.

### Iris Recognition Benefits:

**Accurate & Reliable:** More accurate than other alternatives - biometric or otherwise. A distinctive iris pattern is not susceptible to theft, loss or compromise.

**Fast & Stable:** A unique iris pattern is formed by 10 months of age and stays stable throughout one's life. Enrollment takes less than 2 minutes. Authentication takes less than 2 seconds.

**Non-invasive & Touchless:** No bright lights are used in the imaging process. No physical contact is required for authentication.

**Expandable, Scalable, Flexible:** Templates only need 512 bytes of storage per iris. Large databases perform well in terms of speed and accuracy. Iris operates in standalone mode or integrates into existing security systems.



# Iris Technology:

## Improves Airport Security & the Customer Experience

## Iris Recognition

### An Ideal Authentication Solution for Aviation

Iris recognition provides the perfect solution for both air travelers and airport security professionals. It ensures fast throughput at security checkpoints by employing the most secure and accurate form of non-invasive biometric authentication. The iris alone has 240 recognition points – far more than fingerprint and facial technologies – supporting higher security, fewer false positives, and absolutely no opportunity for bias. Unlike ID cards and passports alone, a person's unique iris pattern is not susceptible to theft, loss, or compromise. This makes iris recognition technology highly reliable and uniquely suited to accurately authenticate and verify identities.

In an airport operation, iris recognition's unique capabilities increase security, speed, and user satisfaction when used for personal identification. Full enrollment with instruction can take less than 2 minutes. Once enrolled, authenticating an individual takes less than 2 seconds and allows for an entirely touchless access control experience.

Making security check-in faster, frictionless, and more secure presents a win-win for both travelers and airport management. The same holds true for protecting secured areas, where fast, accurate authentication of staff, vendors, and third-party contracted workers increases security and improves operations.

### The Canadian Air Transport Security (CATSA) Uses IrisAccess™ Technology for Access Control

CATSA, a crown corporation of the government of Canada, uses Iris ID's iris recognition hardware and software as part of the Restricted Area Identity Card (RAIC) program. The RAIC enables authorized personnel to access secure areas of the airport only after presenting both a valid card and the appropriate biometric. The iris recognition reader compares the biometric template stored on the card to the live sample presented by the individual. The biometric reader also validates the authenticity of the credential and confirms clearance on the basis of the access rights of the individual as set by the airport access control system. Since the pilot was first initiated in 2004, the program has expanded across **29 airports** and **successfully authenticates 250,000 employees**. The program uses both iris and finger encoded on the smartcard card (HID iCLASS).

Transport Canada and CATSA have worked in partnership with the airport authorities to develop and deploy the RAIC solution. Every employee is enrolled and provided a RAIC identification number (RIN) upon successful completion of a government background check against the central database. The RIN is assigned to the card and access rights are granted by the existing airport access control system.

### Biometric Badge Process at CATSA Network

- A user has their information entered at the enrollment/badge station
- An encrypted iris template is created
- The template is encoded onto a smart card, printed and given to the user
- The iCAM is embedded with smart card reader and serves as the verification station
- User presents their card/badge to the smart card reader in the iCAM
- The iCAM gives an audio prompt
- The user's iris images are captured, converted to iris templates and then matched to those read from the smart card
- If matched, authorization request is sent to access control system

### Advantages

While every airport operation will install differently, the benefits of having the iCAM with embedded smart reader are:

- No central database of iris template is needed
- No network connections to the iCAM to a server is required
- The user retains control of their biometric data
- Unlimited user population (each user has their own card)



# Schiphol

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## Iris Recognition

Access Control Technology of Choice by Schiphol Airport

Schiphol Airport was one of the first airports to use iris recognition. Leadership had the foresight to invest in this technology to streamline operations and provide ROI. The goal was to secure restricted areas within the airport environment, ensure efficient airport operations, and comply with all regulations in the most cost effective way possible. Leadership also looked to this new method as a solution to improve the experience of security by the end-user as well. In the end, iris recognition was selected as the access control biometric modality of choice because it offers accurate, reliable, quick and easy identification and authentication.



### Why Iris ID?

Iris ID is a pioneer and leader in commercializing iris recognition technology used for access control, time and attendance, border crossings and national ID programs. Since 1997, Iris ID solutions have been installed on six continents, authenticating more people's identities - than all other iris recognition products combined.

Our solutions seamlessly integrate with identity authentication applications and strengthen the bridge between legacy and future systems. Iris technology integrated with secure systems provide an end-to-end solution for managing identities and granting appropriate privileges.

Iris ID continues to push technology's boundaries, making its iris recognition systems the ideal choice for any process requiring fast, simple-to-use and highly accurate identity authentication.

Schiphol's workforce includes 70,000+ airport workers employed by more than five hundred companies. At Schiphol, the iris-based access control system:

- prevents transferability of access cards and PINS
- reduces errors associated with human identification
- process automates security functions
- increase user convenience

Additionally, Schiphol offers a premium service called Privium. Enrolled members use iris recognition to move through airport security lines and board their flights. Members do not present passports, tickets or other travel documents. They simply look into an iris scanner and are quickly and accurately identified.



# Iris Technology:

## Improves Airport Security & the Customer Experience

## Transforming the Industry

Iris recognition technology and IrisAccess platforms are used in numerous capacities within the aviation and transportation sectors including access control and immigration.

Iris ID also has a partnership with CLEAR, a New York based private company that uses iris authentication software and the OU7S-AKT embedded in kiosks to identify enrolled travelers as part of a premium passenger processing, identification and security clearance program in 40 US airports.

Beyond airports, Iris ID iris technology is deployed at over 500 border crossing points in Qatar and will also be used to process an estimated 3 million visitor identities leading up to the 2022 FIFA World Cup.

### US & International Airports That Use Iris Technology for Access Control

- Calgary International
- Charlottetown
- Daytona Beach International
- Edmonton International
- Fredericton
- Gander International
- Halifax International
- Iqaluit
- Kelowna International
- London International
- Moncton International
- Montreal Trd.
- International Montreal
- Mer. International
- Ottawa International
- Prince George
- Quebec International
- Regina
- Schiphol Airport,
- Amsterdam St. John
- St. John's International
- Saskatoon International
- Thunder Bay international
- Toronto City
- Toronto International
- Vancouver International
- Victoria International
- Whitehorse
- Windsor International
- Winnipeg International
- Greater Sudbury
- Yellowknife

### iCAM 7S Features:

- Fast fully automatic dual iris camera
- Easy non-intrusive, non-contact user interface
- Integrated high-resolution face capture
- Integrated contactless smart card reader option
- Leverage existing infrastructure
- Easy installation and maintenance
- Remote management
- Stand alone door access capability
- Time and attendance ready
- Flush or recess mounting
- Capable of 1:N matching of millions (architecture dependent)





# Iris Technology:

## Improves Airport Security & the Customer Experience

## Transforming the Industry

The iCAM D2000, a multimodal biometric system that fuses iris and face is ideal in an airport environment for passenger enrollment and verification or for employee identification in access-controlled areas.

Its small size allows installation flexibility. And with capture time less than 1 sec for dual iris and face, there will be no bottleneck.



### iCAM D2000 Key Applications:

#### Kiosks

Mounted atop a kiosk, the iCAM is used for enrollment and/or entry and exit. Passengers are guided through the process. Users can access a touch screen if enabled. Successful identification grants access. Unsuccessful verification prompts the traveler to stop the process and seek help.

#### E-gate

Like the kiosk functionality, the iCAM D2000 is placed on top of the e-gate to verify the traveler before granting access. Passengers do not need to show paper documentation as their faces and/or irises are proof of identity.

#### National ID

Biometrics is a key solution for governments to better control who has enrolled in national benefit programs. A shared database also helps track illegal immigration and unlawful entry.

#### Access Control:

Within an airport, there are many restricted areas. the iCAM D2000 can be setup at these stations to only grant access to those with access privileges.

For 25 years, Iris ID has pioneered iris recognition technology. Our technology is now helping airports secure airport personnel as well as make travelling safer for passengers nationwide and globally. Iris technology is a proven solution to help reduce long lines and repetitive steps during the travel and immigration process. Iris technology is the way for better efficiency and safety; we are seeing it now. To learn more or for a demo, please contact your sales rep or email [sales@irisid.com](mailto:sales@irisid.com).