

**DATASHEET** 

# Hitachi Face Matching and Detection for Proactive Security and Automated Operations

Matches faces in real time for identity verification, to proactively address threats to safety and security, and to automate recognition of registered individuals for autonomous operations.

## Choose a Force-Multiplier for Security, Identity Verification and Customer Experience

Hitachi Face Matching and Detection analyzes live video to recognize registered individuals for security or operational purposes (see Fig. 1). Highly accurate and able to run on a variety of different camera feeds and/or video management software, it is a powerful tool for law enforcement, corporate security, identity-based operations and customer services. High accuracy, frame rate capacity and affordability make Hitachi Face Matching and Detection a clear choice for your facial recognition solution.

#### Safety and Security

Facial recognition can assist in a wide variety of applications for law enforcement, campus or facility security, and investigations. Hitachi Face Matching and Detection provides the high accuracy required for security and safety-related environments, consuming and analyzing massive amounts of data to reduce data overwhelm, automate real-time alerting and enable proactive response. Use cases include:

- Threat detection and alerting
- Suspect search for known criminals and terrorists
- Missing person investigation, location and alerting
- Loss prevention alerting for known offenders
- Trespass alerting for entry denial of past offenders
- Identity verification for fraud prevention

## **Automated Operations**

Businesses in every sector are under intense pressure to improve efficiencies and reduce wasted time. Hitachi Face Matching and Detection delivers the capabilities to improve the speed and efficiency of operations, especially with crowd management. Use cases include:

- Journey tracking throughout campus or facilities
- Return customer or visitor statistics
- Personnel management

## **Customer Experience**

Enhance the experience of your customers with targeted services and fast identity verification in retail stores, airports, theme parks and stadiums, hospitality and more. Proactive alerts and tracking can help you understand their needs, and overdeliver on their expectations.

- VIP alerting and enhanced services for loyalty
- Member verification for automated concierge and VIP services
- Customer visit statistics from historical data



Fig. 1 Hitachi Face Matching and Detection matches faces in real time.

## Superior Accuracy, Speed and Extensibility

Facial recognition technology has advanced quickly in recent years and is being used for a variety of applications, such as smartphone security, law enforcement and smart retail. However, Hitachi Face Matching and Detection is built for enterprise environments as a robust, accurate and high-speed solution. This strong performance is delivered through:

#### **High-speed matching**

Hitachi Face Matching and Detection can extract multiple faces from a single image in parallel and match in real time (5fps), processed at a high-speed with a single server input of four cameras running in parallel.

#### Robust solution for real-world environments

In the real world, faces shift direction and appear differently due to lighting, shadows and so forth. Hitachi Face Matching and Detection is a robust solution that is built for these environments, using IP video surveillance footage, or using new cameras (camera positioning will still affect accuracy, as is the case for any facial recognition solution).

#### Search stored footage

In addition to matching using live footage, Hitachi Face Matching and Detection also allows uploading of movie files to match faces in historical footage.

#### **Auto-alert reporting and configuration**

Hitachi Face Matching and Detection can report an external alert to devices, and the user has the option of switching the matching function on or off and setting the threshold for facial similarity to match the monitoring environment or degree of similarity they are seeking.

# Hitachi Face Matching and Detection Sequentially Reports Subjects Registered in the Image Database

- Large images of matching faces
- Stored subject images
- Alarm notification
- Date and time of match, Hitachi Face Matching and Detection threshold, confidence rating, camera of match
- Integrated alerts in Hitachi Visualization Suite (HVS)

Hitachi Face Matching and Detection is a powerful, accurate and accessible solution for security, operations and business that can be deployed in a variety of environments to meet the needs of your use cases and outcomes. Hitachi Face Matching and Detection is a valuable part of a full Smart Spaces and Video Intelligence solution that helps improve safety, operations and customer experience. Together, these technologies help organizations reach the holistic business, safety and operational outcomes they seek.

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# Take the Next Step

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