DATASHEET

Hitachi Multifeature Video Search

Reduce search times by rapidly performing searches of large volumes of video data. Find people of interest by matching attributes, such as clothing and bags, without using personally identifiable information, such as biometric data.

Gain a Real-Time Force Multiplier for Your Video Investigations.

Video data has been growing rapidly, at a rate of 2.5 exabytes of new data being added on a daily basis from new, higher-resolution cameras. For safety and security professionals, this is an overwhelming amount of data. It is becoming impossible to expect people to be able to keep an eye on this data, especially during the confusion that occurs during a crime, crisis or violent attack. Computer vision and neural networks are providing artificial intelligence solutions to this challenge, like Hitachi Multifeature Video Search, Multifeature Video Search gives security officers the ability to comb through these massive amounts of data. They can easily search for suspects that fit descriptions of criminal offenders or missing persons in a short amount of time, which is required to respond effectively.

Smarter Safety and Security

First responders and law enforcement need to react quickly to minimize the impact of an incident. They must work rapidly to find the suspects of a crime to prevent them from committing more crimes or the case from going cold. Instead of manually collecting and searching through video footage, Multifeature Video Search allows safety and security professionals to quickly locate suspects fitting a general description. This search can be conducted without utilizing facial recognition or other tools that leverage personally identifiable information (PII), such as biometric data. Left-behind objects can also be searched for, improving security and customer experience.

High-Speed Search

In less than one second, search through 80 hours of video footage per server. Hitachi provides the fastest video search on the market, with blazing speeds supported by high-speed vector database of recorded images to enable highly scalable video safety and security operations. Perform real-time, simultaneous classification with more than 100 characteristics across 12 types of appearance and 10 categories of movement, in addition to searches based on camera location and time.

Accurate Person Tracking

Once a suspect is confirmed in the search results, track them across multiple cameras to quickly assess their location and direction. Track suspects across more than 1,000 cameras, regardless of change in body angle or lighting, thanks to deep-learning neural networks trained to help you find the right suspect. Use Multifeature Video Search functions (see Figure 1) to:

- Track objects and vehicles.
- Adjust floor plan with cameras.
- Search frames from selected camera.
- Tag person of interest for tracking.
- Show matches in Search Results with timeline and camera.
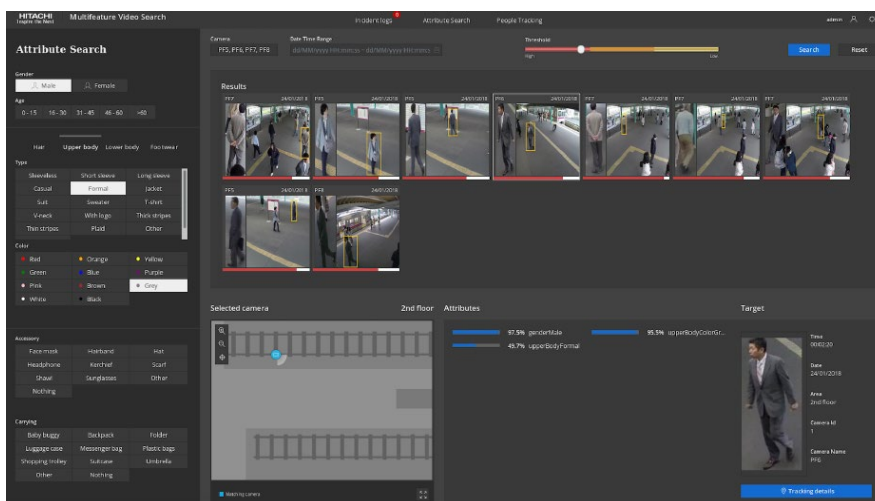- Adjust match confidence to fine-tune results.

Figure 1. Multifeature Video Search functions

Incident Management

Search results can be managed as incidents, which include details about the results themselves along with alerts from external systems. These incidents can assist in organizing and auditing investigations, while providing valuable evidence about suspect locations, actions and attributes (see Figure 2). Incident management features include:

- Incident list.
- Incident details.
- Person tracking.

Open Approach to Integration

Hitachi's open approach to delivering customer outcomes means there is no need to rip and replace existing technology and video management systems (VMSs). Instead, organizations can leverage their existing investments to do more with their data.

Lumada Video Insights

Multifeature Video Search is part of an end-to-end portfolio of video intelligence and IoT solutions offered by Hitachi Vantara, such as Lumada Video Insights, to enable safer, smart spaces.
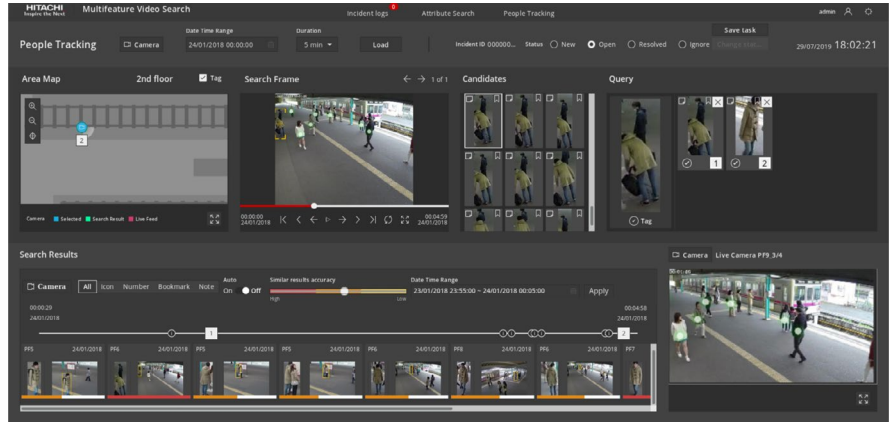

Figure 2. Tracking and Incident Management Features

Hitachi Multifeature Video Search leverages advanced neural networks to provide market-leading features and value, including:

- High-speed, accurate video search analyzes 80 hours of footage per second.
- Suspect tracking across 1000+ cameras.
- Search based on over multiple appearance categories and over 100 characteristics, such as clothing, age, accessories and hair.
- Open approach to work with existing VMSs.
- Combine with Lumada Video Insights, an end-to-end solution for smart spaces.

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Hitachi Vantara solves digital challenges by guiding you from what's now to what's next. Our unmatched industrial and digital capabilities benefit both business and society.

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Learn how you can transform video into insights, combined with IoT and business data, to gain comprehensive intelligence for your business with Lumada Video Insights.

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