Prama Hikvision Introduces AcuSense Video Security Cameras Empowered by Deep Learning Algorithm for Varied Application Scenarios

By Prama Hikvision India

Prama Hikvision has recently introduced its wide range AcuSense Cameras empowered by the Deep Learning Algorithm for various critical application scenarios. AcuSense technology enables security personnel to focus on human and vehicle events rather than insignificant objects, so they can act more efficiently, which helps save time and costs, while end-users can get full control of their security system anytime, from anywhere. Hikvision AcuSense products were introduced with the idea of making intelligent alarms and services available to small businesses and residential customers for the first time.

A sense of safety is one of the most basic human needs, personal and property safety are integrated into that sentiment as well. And this is exactly why people install security systems in their homes and businesses. Compared to conventional sensor-based alarm systems, a surveillance system that utilizes cameras has several advantages: the ability to watch events in real-time, obtaining key data around those events, and providing solid and accurate evidence for law enforcement. By adding a touch of intelligence to cameras and video recorders, AcuSense technology makes these products a perfect choice for an accessible and intelligent security system.

The Magic Behind It All - Deep Learning Algorithm
As its name implies, Hikvision AcuSense Technology provides accurate sensing in security hardware. Empowered by deep learning algorithms, AcuSense technology distinguishes people and vehicles from other moving objects.

Focus on the Right Events – Human and Vehicle Intrusion
The most common concerns in perimeter protection are trespassing and vehicle break-ins. AcuSense technology helps you to focus on human and vehicle events in two ways: the device will only trigger an alarm when the preset intrusion type (human or vehicle) takes place, and videos related to alarm events are sorted into human and vehicle categories for easier footage searches.

Accurate Alarms for Humans and Vehicles: A video security camera would usually "see" many events, ranging from people crossing a perimeter to animals that accidentally enter. What happens when you want to level-up your protection and get a notification when a perimeter-crossing event takes place?

For most security events, you will search for video clips that captured human or vehicle activities. With AcuSense devices, this gets easier. Video clips are already sorted into the "Human Files" and "Vehicle Files." Just simply click one of these categories and use time or location data to quickly locate the clip that you want. Compared to the conventional method which displays all video files at once, AcuSense makes searching more efficient. Users can focus on alarms triggered by humans and vehicles while false alarms triggered by small animals or other irrelevant objects are vastly reduced.

Visual and Auditory Warning: On-site response and deterrence methods using visual and customizable auditory warnings to add another layer of protection.

Search Targets Quickly by Type: Video clips are sorted by human and vehicle categories, and object classification vastly improves search efficiency.

Improved alarm accuracy: The latest Hikvision AcuSense devices are engineered with an upgraded deep learning algorithm, which analyzes live video streams and labels them as "human," "vehicle," or "other events." Those labeled as human and vehicle will trigger alarms for security staff, while other events such as rain drops, animals, or the movement of foliage, for example, will be drastically disregarded. The result is a striking reduction in false alarms – now with an accuracy approaching 98%. In this way, security personnel can focus on genuine security issues and take action. Additionally, related videos are automatically sorted by categories for easier search.

Enhanced motion detection with human / vehicle classification: Customers familiar with Motion Detection will appreciate the capabilities of AcuSense technology as well. Taking users' habits into full consideration, Hikvision designed

the motion detection function, they can enjoy the same level of alarm accuracy afforded by Hikvision's AcuSense technology.

Flashing light and two-way voice conversation: When real-time deterrence is needed, Hikvision also offers camera models with a flashing light and auditory warning. As soon as an alarm is triggered, the built-in light flashes. Simultaneously, security personnel can communicate with the person who triggered the alarm to confirm their authorization, thanks to the built-in speaker and microphone in the camera. Of note, the latest AcuSense cameras even support customized audio tracks, which can be pre-recorded to suit various environments.

Better performance in low-light environments: The latest AcuSense camera lenses are equipped with an aperture reaching up to F1.4. This technology allows more light to enter the lens, for optimized image brightness, and better performance in low-light environments.

Larger detection area: Compared with previous AcuSense cameras,

Application Scenarios

Alarm Receiving Center / Monitoring Center: Security monitoring is never an easy task, especially when you're responsible for watching over multiple locations at the same time. AcuSense products can help ramp up efficiency and improve workflow.

- **For Burglar Alarm Service**: Accurate alarm for human intrusion events only.

- **For Playback and Video Search:** Quick search for human or vehicle-related video through sorted folders.

Villas: Whether you choose to keep an eye on the house yourself or hire a professional service provider to look after your home, there are two functions you will surely want to have:

- **Prompt Notification via Smartphone:** Check alarm information and view live video feed.

- **Light and Sound Intruder Deterrence:** React to intrusion events with a flashing light and customizable siren.

AcuSense products to integrate human and vehicle classifications with motion detection. More specifically, when motion is detected, the system analyzes whether or not it is associated with a human or a vehicle, and whether an alarm should be triggered. So, when users enable

this new generation extends target classification distances from 10, 15, or 22 meters to 20, 25, or 30 meters, depending on the model.Customers can choose from 2 MP, 4 MP, or 4K resolutions, as well as a dome, turret and bullet housings to suit their specific installation requirements.

Factories and Warehouses: Factories and warehouses store high-value raw materials or commodities. Security here is crucial. However, there is usually only limited manpower to perform such tasks. AcuSense devices offer an alternative solution that's both effective and efficient.