

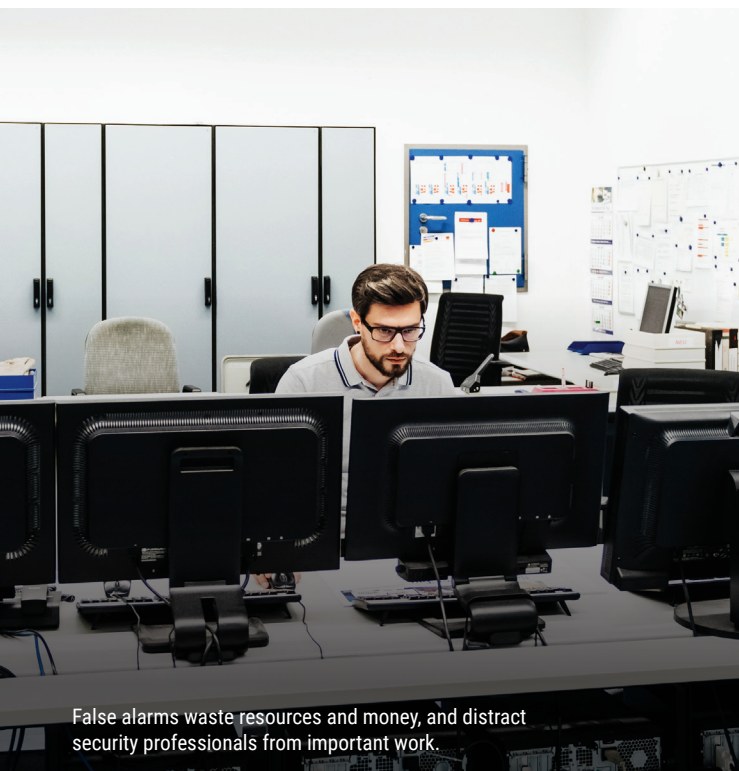


AcuSense

**PRECISE DETECTION &  
FALSE ALARM REDUCTION**

**HIKVISION®**

# Focus on Important Events with AcuSense: Precise Detection & False Alarm Reduction



False alarms waste resources and money, and distract security professionals from important work.



AcuSense enhances perimeter protection and intrusion detection.

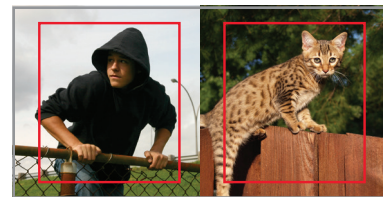
False alarms are a big industry problem, leading to time and money focused on unimportant events, since traditional motion detection often results in numerous false alarms. Implementing budget-conscious security systems to prevent loss and maximize efficiency is key. Hikvision AcuSense gives businesses the opportunity to tackle this issue in a cost-effective way, making the latest technology innovations affordable and easily accessible for first time.

Hikvision AcuSense cameras and NVRs provide precise detection of targets in any environment. By accurately sensing human and vehicle movement versus non-human objects such as rain, animals and leaves, AcuSense offers more effective intrusion detection and greatly reduces false alarms.

Customers can get the latest intelligent surveillance features without a full system upgrade. With AcuSense, they can enjoy the benefits of highly accurate, cutting-edge false alarm reduction.

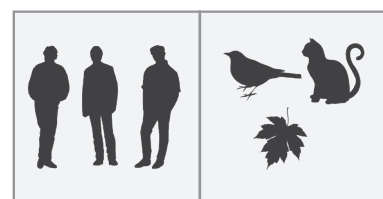
*Hikvision has released the AcuSense solution based on Deep Learning algorithms to improve user experience, especially for customers with limited budgets. Deep Learning technology is the latest innovation in VCA (video content analytics) that works hand-in-hand with today's high-speed processors (GPUs) to expand image recognition types and capability while improving accuracy.*

## Enhanced Detection for Video Content Analytics

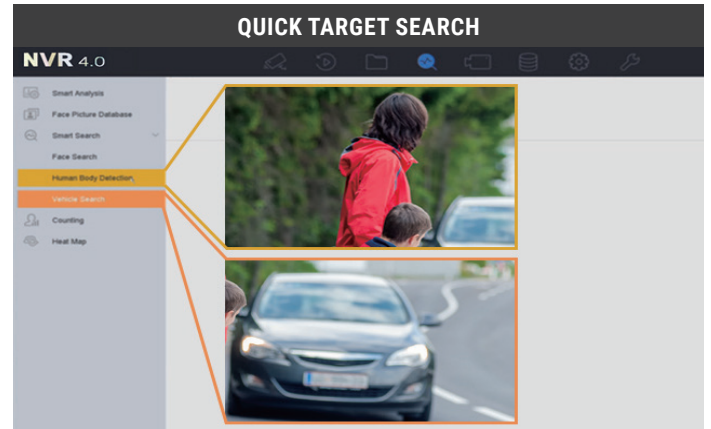


 **Alarm**

 **Discard**







## Hikvision AcuSense offers a wide array of benefits, including:

- AcuSense false alarm reduction saves time and money spent on non-threatening events with faster and more accurate intrusion detection.
- AcuSense Quick Target Search feature enables staff to automatically identify footage of people and vehicles, eliminating manual searches of video footage.
- AcuSense strobe light and audio alarm message enhances deterrence. Once a potential intruder has been accurately detected, the AcuSense camera triggers the built-in strobe light and audio alarm designed to warn the intruder before they act. (SL models)
- AcuSense Extended Monitoring Area makes it possible for one guard to handle multiple alarms, since AcuSense filters out false alarms of non-human objects, streamlining the monitoring process from a central station or a remote location. This improved accuracy means a large staff is not required to effectively monitor and respond to security threats.
- AcuSense Easy Configuration allows users to easily and quickly enable a video analysis rule to start enjoying the simplicity and effectiveness of AcuSense performance.

AcuSense and Conventional Alarm Monitoring Products Comparison Chart

|                                    | Visual | Intrusion Alarm | Categorizes Alarms as Human, Vehicle, or Other | Real-Time Reaction and Deterrence         |
|------------------------------------|--------|-----------------|------------------------------------------------|-------------------------------------------|
| AcuSense Products                  | Yes    | Yes             | Yes                                            | Yes: Built-in Visual and Auditory Warning |
| Conventional Surveillance Products | Yes    | Yes             | No                                             | Optional: External Siren or Light         |
| Alarm Products                     | No     | Yes             | No                                             | Optional: External Siren or Light         |

False Alarm Reduction

AcuSense false alarm reduction saves time and money spent on non-threatening events with faster and more accurate intrusion detection. Using Deep Learning algorithms, the AcuSense camera and/or NVR can greatly reduce false alarms that are triggered by non-human objects or vehicles, such as animals, tree branches, rain and light. AcuSense vastly improves alarm efficiency and cuts labor costs by reducing excess time spent searching for video or responding to false alarms.

Quick Target Search

The AcuSense system allows users to play back event video triggered by only human or vehicle targets. Consider this scenario: A suitcase was stolen from a car in a parking lot. No one knows the exact time of the crime and normally the guard has to play back long sections of video to find the suspect. With AcuSense, the guard spends significantly less time watching video, and instead can quickly find and review footage of the event that contains and is triggered by only humans and vehicles.



Increase Security System Efficiency  
More Accurate Perimeter Protection

People and vehicles are typically the most important factors to identify for perimeter surveillance. Conventional perimeter security systems generate false alarms by movement of non-human or non-vehicle objects such as animals, tree branches, light changes, and even rain.

Hikvision AcuSense accurately senses and distinguishes human and vehicle movements from other moving objects, reducing false alarms. Security staff receives more accurate alarm data to evaluate, enabling more efficient responses to incidents and reducing unnecessary responses to false alarms and unimportant events.





### Office Buildings, Warehouses and Factories

Office buildings, warehouses and factories can use AcuSense technology to monitor entrances and exits, including parking areas, loading docks, outdoor storage facilities and perimeter fencing. With better accuracy than traditional security solutions, your staff will only need to respond to relevant human or vehicle-generated alarms. Help your employees and clients feel safe with improved business protection for people and assets.



### Parking Lots

Parking lots are difficult to protect for many reasons. High traffic periods, public access and 24-hour monitoring can complicate surveillance efforts. AcuSense will focus attention on vehicles or humans within the programmed areas of concern. AcuSense cameras can be placed at key locations where subjects may trespass or loiter. Alarms will trigger when unwanted activity occurs. The AcuSense "SL" Strobe Light camera models can enhance deterrence by delivering a warning light and an audio message to deter thieves, unwanted visitors, or unauthorized vehicles.



### Residential

Hikvision AcuSense cameras can be deployed at physical perimeter walls and fence lines, walkways, stairwells, and other public areas to detect break-ins and protect residents and their belongings. AcuSense vehicle detection can ensure that non-parking areas such as emergency exits and pedestrian pathways are not blocked by illegal or unauthorized parking. Using the "SL" Strobe Light camera models here can provide warnings for trespassers. AcuSense delivers a safer environment for tenants and visitors, with more accurate surveillance in areas where incidents or accidents might occur.



### Commercial

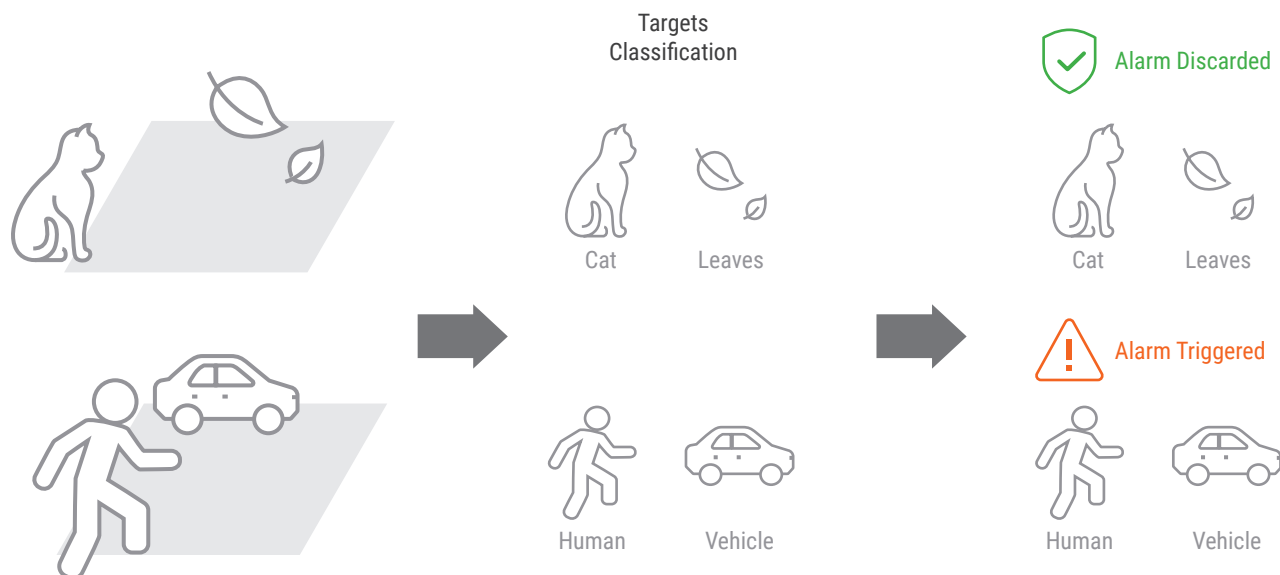
AcuSense helps security personnel detect and prevent perimeter break-ins and react in real-time to minimize loss. Hikvision AcuSense cameras and NVRs can be used to monitor and protect areas that contain valuable assets. A wide range of facilities can benefit from AcuSense technology, including car dealerships for fleet monitoring; asset protection for equipment rental companies or construction sites; storage facilities for visitor monitoring; towing facilities and lumber yards are protected against vandalism and theft.



### Retail Stores

By accurately detecting humans, AcuSense can help retail stores monitor key locations such as the cashier area, staff-only areas, and the stock room. Retail owners and managers can view video footage on their mobile device or laptop from remote locations using Hikvision's iVMS-4200 application. This allows for remote monitoring of incidents and employee activity when you are off-premise. Vehicle detection helps track authorized employee and patron parking within the store's parking area.

# How it Works

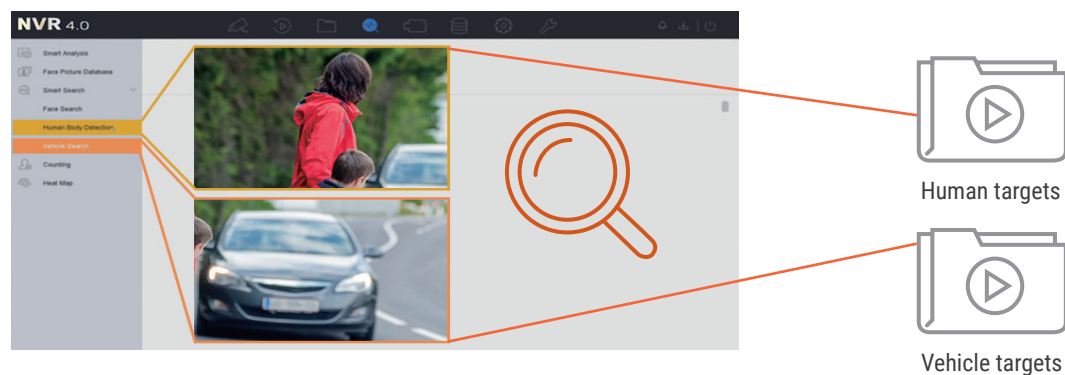


## False Alarm Reduction:

By selecting certain targets such as people or vehicles, the AcuSense system can filter out unselected target types to reduce false alarms, shortening time spent on unimportant events.

AcuSense cameras can be used with Hikvision "I" series NVRs or the AcuSense NVR series.

Smart Search and False Alarm Search features are only available with AcuSense NVRs.



## Quick Target Search:

The AcuSense Quick Target Search feature automatically identifies footage of people and vehicles, saving time by eliminating manual search of video footage by security staff. Video files are pre-sorted into "Human Files" or "Vehicle Files," making it easy to access the video clip you want using these categories and time or location. AcuSense makes searching for important events easier and more efficient than conventional methods that display all video files at once.

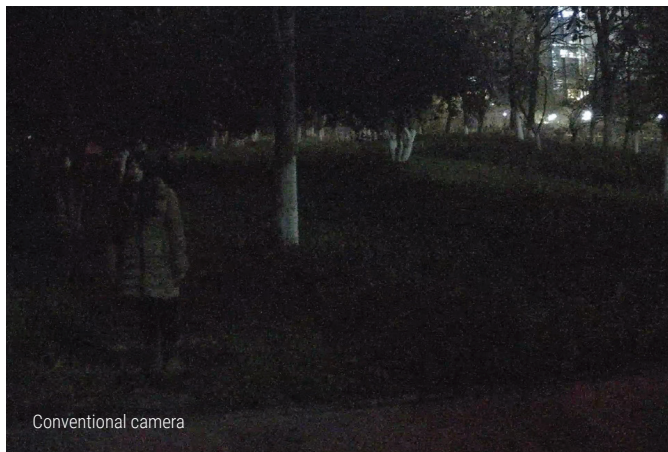


# How it Works *cont'd*



## **Strobe Light and Audio Alarm (SL Models Only):**

The AcuSense SL model cameras offer a strobe light and audio alarm feature. When a human or vehicle target is detected and triggers a VCA (video content analysis) event, the strobe light and audio alarm can warn the intruder. Audio volume and strobe light brightness are adjustable and can be adapted to the environment.



## **Ultra-Low Light Performance "Powered by DarkFighter":**

AcuSense cameras incorporate Hikvision's "Powered by DarkFighter" ultra-low light illumination technology, which provides superior surveillance images, even at night. Combined with ultra-high definition video capabilities, "Powered by DarkFighter" helps identify and react to security threats effectively, and provides more extensive video evidence in the event of a security incident.

# AcuSense Cameras

|                                               | OUTDOOR DOME                                                                                                                           | TURRET                                                                                                                                 | OUTDOOR BULLET                                                                                                                                                                                                               |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                               | Powered by<br><b>DarkFighter.</b><br><b>EXIR 2.0</b>  | Powered by<br><b>DarkFighter.</b><br><b>EXIR 2.0</b>  | Powered by<br><b>DarkFighter.</b><br><b>EXIR 2.0</b>   |
| Product no.                                   | DS-2CD2146G1-IS                                                                                                                        | DS-2CD2346G1-I   DS-2CD2346G1-I/SL                                                                                                     | DS-2CD2T46G1-4I   DS-2CD2T46G1-4I/SL                                                                                                                                                                                         |
| Megapixels                                    | 4 MP                                                                                                                                   | 4 MP                                                                                                                                   | 4 MP                                                                                                                                                                                                                         |
| Min. Illumination (lux)                       | Color: 0.012 @ f/1.6<br>B/W: 0 with IR                                                                                                 | Color: 0.012 @ f/1.6<br>B/W: 0 with IR                                                                                                 | Color: 0.012 @ f/1.6<br>B/W: 0 with IR                                                                                                                                                                                       |
| Lens                                          | Fixed, 2.8 mm, 4 mm, 6 mm                                                                                                              | Fixed, 2.8 mm, 4 mm, 6 mm                                                                                                              | Fixed, 2.8 mm, 4 mm, 6 mm, 8 mm                                                                                                                                                                                              |
| Day/Night, BLC, WDR                           | True, Yes, 120 dB                                                                                                                      | True, Yes, 120 dB                                                                                                                      | True, Yes, 120 dB                                                                                                                                                                                                            |
| IR Range Max (meters)                         | 30                                                                                                                                     | 50/30                                                                                                                                  | 80                                                                                                                                                                                                                           |
| Video Compression                             | H.265/H.264/MJPEG                                                                                                                      | H.265/H.264/MJPEG                                                                                                                      | H.265/H.264/MJPEG                                                                                                                                                                                                            |
| Max. Image Resolution (pixels) and Frame Rate | 2688x1520,30                                                                                                                           | 2688x1520, 30                                                                                                                          | 2688x1520, 30                                                                                                                                                                                                                |
| Audio Input/Output                            | IN: 1 line<br>OUT: 1 line                                                                                                              | -I/SL: Pre-recorded message on alarm                                                                                                   | -4I/SL: Pre-recorded message on alarm                                                                                                                                                                                        |
| Alarm Input/Output                            | 1/1                                                                                                                                    | -I/SL: Strobe Light on alarm                                                                                                           | -4I/SL: Strobe Light on alarm                                                                                                                                                                                                |
| Ratings                                       | IP67, IK10, UL/cUL Listed                                                                                                              | -I: IP67, UL/cUL Listed<br>-I/SL: Indoor, UL/cUL Listed                                                                                | -4I: IP67, UL/cUL Listed<br>-4I/SL: IP66, UL/cUL Listed                                                                                                                                                                      |
| Operating Temperature Range                   | -30° C to 50° C<br>(-22° F to 122° F)                                                                                                  | -I: -30° C to 50° C (-22° F to 122° F)<br>-I/SL: -30° C to 60° C (-22° F to 140° F)                                                    | -30° C to 50° C<br>(-22° F to 122° F)                                                                                                                                                                                        |
| Power Requirements (max.)                     | 12V DC, PoE (802.3af), 10 W                                                                                                            | -I: 12V DC, PoE (802.3af), 10 W<br>-I/SL: 12V DC, PoE (802.3af), 7.5 W                                                                 | -4I: 12V DC, PoE (802.3af), 17 W<br>-4I/SL: 12V DC, PoE (802.3af), 7.5 W                                                                                                                                                     |
| Brackets                                      | PC120, WMS, CM, CPM, SRSM                                                                                                              | PC140, CPM, WML, CB135                                                                                                                 | CB130, PM, CM                                                                                                                                                                                                                |

|                                               | OUTDOOR VF BULLET                                                                                                                        | OUTDOOR VF DOME                                                                                                                            |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                                               | Powered by<br><b>DarkFighter.</b><br><b>EXIR 2.0</b>  | Powered by<br><b>DarkFighter.</b><br><b>EXIR 2.0</b>  |
| Model                                         |                                                                                                                                          |                                                                                                                                            |
| Product no.                                   | DS-2CD2646G1-IZS                                                                                                                         | DS-2CD2746G1-IZS                                                                                                                           |
| Megapixels                                    | 4 MP                                                                                                                                     | 4 MP                                                                                                                                       |
| Min. Illumination (lux)                       | Color: 0.01 @ f/1.4<br>B/W: 0 with IR                                                                                                    | Color: 0.01 @ f/1.4<br>B/W: 0 with IR                                                                                                      |
| Lens                                          | 2.8 to 12 mm @ f/1.4, motorized                                                                                                          | 2.8 to 12 mm @ f/1.4, motorized                                                                                                            |
| Day/Night, BLC, WDR                           | True, Yes, 120 dB                                                                                                                        | True, Yes, 120 dB                                                                                                                          |
| IR Range Max (meters)                         | 50                                                                                                                                       | 30                                                                                                                                         |
| Video Compression                             | H.265/H.264/MJPEG                                                                                                                        | H.265/H.264/MJPEG                                                                                                                          |
| Max. Image Resolution (pixels) and Frame Rate | 2688x1520, 30                                                                                                                            | 2688x1520, 30                                                                                                                              |
| Audio Input/Output                            | IN: 1 line<br>OUT: 1 line                                                                                                                | IN: 1 line<br>OUT: 1 line                                                                                                                  |
| Alarm Input/Output                            | 1/1                                                                                                                                      | 1/1                                                                                                                                        |
| Ratings                                       | IP67, IK10, UL/cUL Listed                                                                                                                | IP67, IK10, UL/cUL Listed                                                                                                                  |
| Operating Temperature Range                   | -30° C to +60° C (-22° F to +140° F)                                                                                                     | -30° C to +60° C (-22° F to +140° F)                                                                                                       |
| Power Requirements (max.)                     | 12V DC, PoE (802.3af), 18 W                                                                                                              | 12V DC, PoE (802.3af), 12.9 W                                                                                                              |
| Brackets                                      | CB130, CBS, PM, CM                                                                                                                       | WML, PC155, PM1, CM1, SRSL                                                                                                                 |



# AcuSense NVRs

| ACUSENSE - HUMAN/VEHICLE DETECTION |                                                                                   |                      |                                                                                                 |                                                                                                 |
|------------------------------------|-----------------------------------------------------------------------------------|----------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                                    |  |                      |               |              |
| Product no.                        | DS-7608NXI-I2/8P/4S                                                               | DS-7616NXI-I2/16P/4S | DS-7716NXI-I4/16P/4S                                                                            | DS-7732NXI-I4/16P/4S                                                                            |
| Max. Recording Resolution          | 12 MP                                                                             |                      | 12 MP                                                                                           | 12 MP                                                                                           |
| Video Compression                  | H.265/H.265+/H.264/H.264+/MPEG4                                                   |                      | H.265/H.265+/H.264/H.264+/MPEG4                                                                 | H.265/H.265+/H.264/H.264+/MPEG4                                                                 |
| HDMI/VGA Output                    | 4K (3840x2160)/1920x1080 independent output                                       |                      | 2x HDMI - 3840x2160/1920x1080, 1x VGA - 1920x1080/1920x1080, independent output, 1x CVBS output | 2x HDMI - 3840x2160/1920x1080, 1x VGA - 1920x1080/1920x1080, independent output, 1x CVBS output |
| IP Video Input                     | 8/16-ch: IPC with integrated 8/16-port 802.3af/at PoE switch                      |                      | 16-ch: IPC with integrated 16-port 802.3af/at PoE switch                                        | 32-ch: IPC with integrated 16-port 802.3af/at PoE switch                                        |
| Audio Input/Output                 | 1/1                                                                               |                      | 1/1                                                                                             | 1/1                                                                                             |
| Alarm Input/Output                 | 4-ch/1-ch                                                                         |                      | 16-ch/8-ch                                                                                      | 16-ch/8-ch                                                                                      |
| Internal SATA                      | 2 SATA interfaces (up to 12 TB each)                                              |                      | 4 SATA interfaces (up to 12 TB each)                                                            | 4 SATA interfaces (up to 12 TB each)                                                            |
| Max. Internal Storage              | 24 TB                                                                             |                      | 48 TB                                                                                           | 48 TB                                                                                           |
| Max Incoming Bandwidth (Mbps)      | 8-ch: 80, 16-ch: 160                                                              |                      | 256                                                                                             | 256                                                                                             |
| Maximum Outgoing Bandwidth (Mbps)  | 256                                                                               |                      | 200                                                                                             | 200                                                                                             |
| Max. Remote Connections            | 128                                                                               |                      | 128                                                                                             | 128                                                                                             |
| Rack Units                         | 1                                                                                 |                      | 1.5                                                                                             | 1.5                                                                                             |
| Ratings                            | UL/cUL Listed                                                                     |                      | UL/cUL Listed                                                                                   | UL/cUL Listed                                                                                   |
| PoE Budget                         | 8-ch: 120 W, 16-ch: 200 W                                                         |                      | 200 W                                                                                           | 200 W                                                                                           |
| Power Requirements                 | 100 to 240V AC, ≤15 W without HDD                                                 |                      | 100 to 240V AC, ≤30 W without HDD                                                               | 100 to 240V AC, ≤30 W without HDD                                                               |



## Contact

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