

# SD9384-EHL

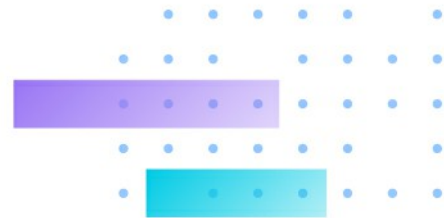
Speed Dome Network Camera

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5MP • H.265 • 30x Optical Zoom • WDR Pro • Smart Stream III • SNV

- 30 fps @ 2560x1920
- 30x Optical Zoom, Auto Focus
- 360° Continuous Pan, -20° to 90° (auto flip) Tilt
- 200M IR with Smart IR
- Weather-proof IP66-rated, Vandal-proof IK10 and NEMA 4X-rated Housing
- -40°C ~ 60°C Wide Temperature Range for Extreme Weather Conditions
- EIS (Electronic Image Stabilization) for Image Stability
- Trend Micro IoT Security
- Smart Tracking Advanced for Moving People with People-based Deep Learning Technology





# Technical Specifications

## System Information

|       |                                 |
|-------|---------------------------------|
| Model | SD9384-EHL                      |
| CPU   | Multimedia SoC (System-on-Chip) |
| Flash | 8 GB                            |
| RAM   | 2 GB                            |

## Camera Features

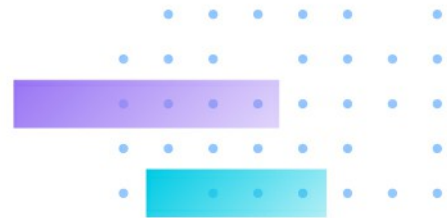
|                               |                                                                                                               |
|-------------------------------|---------------------------------------------------------------------------------------------------------------|
| Image Sensor                  | 1/2.8" Progressive CMOS                                                                                       |
| Max. Resolution               | 2560x1920 (5MP)                                                                                               |
| Lens Type                     | 30x Optical Zoom, Auto Focus                                                                                  |
| Focal Length                  | f = 4.94 ~ 148.24 mm                                                                                          |
| Aperture                      | F1.3 ~ F4.6                                                                                                   |
| Iris Type                     | DC-iris                                                                                                       |
| Field of View                 | 54.1° ~ 1.9° (Horizontal)<br>41.2° ~ 1.4° (Vertical)<br>65.7° ~2.4° (Diagonal)                                |
| Shutter Time                  | 1 sec. to 1/100,000 sec.                                                                                      |
| WDR Technology                | WDR Pro                                                                                                       |
| Day/Night                     | Yes                                                                                                           |
| Removable IR-cut Filter       | Yes                                                                                                           |
| IR Illuminators               | Built-in IR Illuminators up to 200 meters with Smart IR, IR LED*8                                             |
| Minimum Illumination          | 0.03 lux @ F1.3 (Color)<br>0.005 lux @ F1.3 (B/W)<br>0 lux with IR illumination on                            |
| Pan Speed                     | Preset speed: 450°/s                                                                                          |
| Pan Range                     | 360° endless                                                                                                  |
| Tilt Speed                    | Preset speed: 450°/s                                                                                          |
| Tilt Range                    | -20° to 90° (auto flip)                                                                                       |
| Preset Locations              | 256 preset locations                                                                                          |
| Pan/Tilt/Zoom Functionalities | 32x digital zoom (4x on IE plug-in, 8x built in)<br>Auto Pan mode<br>Auto Patrol mode<br>Mechanical Auto flip |
| Storage                       | Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)                  |
| Built-in Installation Aids    | Remote focus, remote zoom                                                                                     |

## Video

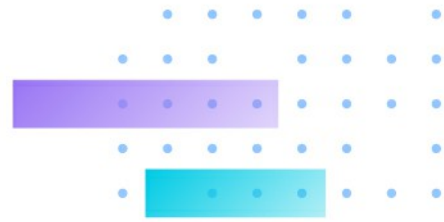
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|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Video Compression  | H.265, H.264, MJPEG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Frame Rate | 30 fps @ 2560x1920<br>30 fps @ 2560x1440<br>60 fps @ 1920x1080                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum Streams    | 3 video streams (Up to 8 configurable profiles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| S/N Ratio          | 74 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Dynamic Range      | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Video Streaming    | Adjustable resolution, quality and constant bitrate control, Smart Stream III                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Image Settings     | General settings: video title and time stamp overlay, video orientation (flip, mirror), day/night settings; Illuminators: illuminators, anti-overexposure; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, HLM, 3DNR, EIS, scene mode (auto, deblur); Exposure: BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR; Focus; Privacy mask; Scheduled profile settings; Pixel calculator |

## Audio

|                   |                             |
|-------------------|-----------------------------|
| Audio Capability  | Two-way audio (Full duplex) |
| Audio Compression | G.711, G.726                |



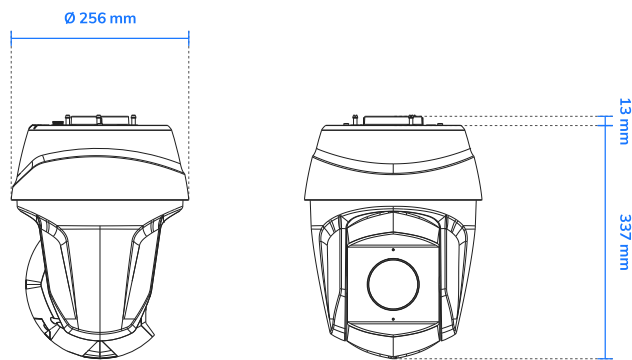
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|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Audio Interface             | External line input<br>External line output                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Network</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Users                       | Live viewing for up to 10 clients                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Security                    | Access list, digest authentication, HTTPS , IEEE 802.1x, password protection, secure boot, signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management                                                                                                                                                                                                                     |
| Protocols                   | 802.1X, ARP, Bonjour, CIFS/SMB, DDNS, DHCP, DNS, FTP/SFTP, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTCIP, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP                                                                                                                                                                                                                                                                    |
| Interface                   | 10 Base-T/100 Base-TX Ethernet (RJ-45)<br>*It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.                                                                                                                                                                                                                                                                                                              |
| ONVIF                       | Profile G, S, T supported, specification available at <a href="http://www.onvif.org">www.onvif.org</a>                                                                                                                                                                                                                                                                                                                                                             |
| <b>Solution Integration</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Video Motion Detection      | Five-window video motion detection                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Smart Tracking Advanced     | Smart tracking Advanced (Default, license embedded; including intrusion detection, loitering detection, line crossing detection, face detection)                                                                                                                                                                                                                                                                                                                   |
| VADP Package                | Smart Tracking Advanced, Trend Micro IoT Security (3-year free trial), Stratocast                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Alarm and Event</b>      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Event Trigger               | Audio detection, camera tampering detection, cybersecurity events (brute force attack event, cyberattack event, quarantine event), digital input, manual trigger, motion detection, periodical trigger, recording notification, SD card life expectancy, smart tracking advanced trigger, system boot, preset reached                                                                                                                                              |
| Event Action                | Event notification via audio clip, camera link, digital output, email, HTTP, FTP, NAS server, SD card<br>File upload via email, HTTP, FTP, NAS server, SD card; trigger track, trigger patrol, move to preset                                                                                                                                                                                                                                                      |
| <b>General</b>              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connectors                  | RJ-45 cable connector for 10/100 Mbps PoE network connection<br>Audio line input<br>Audio line output<br>DC 48V power input<br>AC 24V power input<br>Digital input*2<br>Digital output*1                                                                                                                                                                                                                                                                           |
| LED Indicator               | System power and status indicator                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Power Input                 | AC 24V, DC 48V, IEEE 802.3 bt Class 6 PoE<br>(Simultaneous Power Redundancy Supported)                                                                                                                                                                                                                                                                                                                                                                             |
| Power Consumption           | PoE:<br>Max. 51W/26W (IR on/off)<br>DC 48V:<br>Max. 51W/26W (IR on/off)<br>AC 24V:<br>Max. 51W/26W (IR on/off)                                                                                                                                                                                                                                                                                                                                                     |
| Dimensions                  | 256 x 336 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Weight                      | 7.1 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Certifications              | EMC: CE (EN 55032 Class A, EN55035, EN50121-4), UKCA (BS EN 55032: 2015 +A11: 2020 , BS EN 55035: 2017), FCC (FCC Part 15 Subpart B Class A), IC (ICES-003:2020 Issue7, Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A); Safety: UKCA (BS EN 62368-1:2014+A11:2017), UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471); Environment: IK10 (IEC 62262), IP66 (IEC 60529), NEMA (NEMA 250 Type 4X); IA: BIS (IS 13252), BSMI |
| Operating Temperature       | Starting Temperature:<br>-40°C ~ 55°C (-40°F ~ 131°F)<br>Working Temperature:<br>-40°C ~ 60°C (-40°F ~ 140°F) (IR on)                                                                                                                                                                                                                                                                                                                                              |
| Humidity                    | 98% RH (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Warranty                    | 36 months                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>System Requirements</b>  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Operating System            | Microsoft Windows 10/8/7<br>Mac 10.12 (Chrome only)                                                                                                                                                                                                                                                                                                                                                                                                                |
| Web Browser                 | Chrome 58.0 or above<br>Internet Explorer 10/11                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Other Players               | VLC: 1.1.11 or above                                                                                                                                                                                                                                                                                                                                                                                                                                               |



Included Accessories

|                  |                                                                                                                                                    |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Packing Contents | Wall mount bracket, Quick installation guide, alignment sticker, screw pack, desiccant bag, waterproof accessory bag, conduit ring, terminal block |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

Dimensions



## Compatible Accessories

### Mounting Kit



**AM-220**  
Wall Mount Bracket

### Mounting Kit



**AM-529**  
Mounting Adapter for Speed Dome

### Power Adaptor



**HLG-80H-48**  
80W Single Output Switching Power Supply - 48V

### Power Adaptor



**NDR-75-48**  
75W Single Output Industrial DIN RAIL - 48V

### PoE Kit



**AP-GIC-011A-060**  
Indoor 1xGE 60W High Power UPoE Injector

### PoE Kit



**AP-GIC-015B-095**  
Outdoor 1xGE 95W PoH/PoE Injector with Adaptor

### PoE Kit



**AW-GEH-043A-120**  
2xGE 95W PoH/PoE + 2xGE SFP Switch

### PoE Kit



**AW-IHH-0110**  
Industrial 1xGE 95W PoH/PoE Injector

### PoE Kit



**AW-IHH-0410**  
Industrial 2xGE 95W PoH/PoE + 2xGE SFP Switch