



## S Series

# MD9560-DH-V2 (2.8 mm)

2MP Mobile Dome Network  
Camera



## Technical Specifications

### System Information

|       |                                 |
|-------|---------------------------------|
| CPU   | Multimedia SoC (System-on-Chip) |
| Flash | 256 MB                          |
| RAM   | 512 MB                          |

### Camera Specifications

|                         |                                                                                   |
|-------------------------|-----------------------------------------------------------------------------------|
| Image Sensor            | 1/2.8" Progressive CMOS                                                           |
| Max. Resolution         | 1920x1080                                                                         |
| Lens Type               | Fixed-focal                                                                       |
| Focal Length            | f = 2.8 mm                                                                        |
| Aperture                | F2.0                                                                              |
| Iris Type               | Fixed Iris                                                                        |
| Field of View           | 114.0° (Horizontal)<br>61.0° (Vertical)<br>135.0° (Diagonal)                      |
| Shutter Time            | 1/5 sec. to 1/32,000 sec.                                                         |
| WDR Technology          | WDR Pro                                                                           |
| Day/Night               | Yes                                                                               |
| Removable IR-cut filter | Yes                                                                               |
| Illuminators            | Built-in IR illuminators, effective up to 20 meters with Smart IR, IR LED*2       |
| Minimum Illumination    | 0.13 lux @ F1.8 (Color)<br>0.01 lux @ F1.8 (B/W)<br>0 lux with IR illumination on |
| Pan Range               | ±30°                                                                              |

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| Tilt Range                    | 90°                                               |
| Rotation Range                | ±180°                                             |
| Pan/Tilt/Zoom Functionalities | 48x digital zoom (4x on IE plug-in, 12x built in) |
| Storage                       | Seamless Recording to MicroSD/SDHC/SDXC card      |
| Built-in Installation Aids    | Pixel calculator                                  |

| Video              |                                                                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compression        | H.265, H.264, MJPEG                                                                                                                                  |
| Maximum Frame Rate | 60 fps @ 1920x1080                                                                                                                                   |
| Maximum Streams    | 4 simultaneous streams                                                                                                                               |
| Main Stream        | 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360, 480x272                                                                                   |
| 2nd Stream         | 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360, 480x272                                                                                   |
| 3rd Stream         | 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360, 480x272                                                                                   |
| S/N Ratio          | 60 dB                                                                                                                                                |
| Dynamic Range      | 120 dB                                                                                                                                               |
| Video Streaming    | Adjustable resolution, quality and bitrate, Smart Stream III                                                                                         |
| Image Settings     | General settings<br>video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings                               |
|                    | Illuminators<br>illuminators, anti-overexposure                                                                                                      |
|                    | Image settings<br>white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, scene mode (auto, deblur) |
|                    | Exposure<br>BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR           |
|                    | Focus<br>zoom, focus                                                                                                                                 |
|                    | Privacy mask<br>Pixel calculator<br>Scheduled profile settings                                                                                       |

| Audio            |                                                  |
|------------------|--------------------------------------------------|
| Audio Capability | One-way Audio                                    |
| Compression      | G.711, G.726, MPEG-2 AAC-LC                      |
| Interface        | Built-in microphone<br>External microphone input |
| Effective Range  | 5 meters                                         |

| Network   |                                                                                                                                                                                               |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Users     | Live viewing for up to 10 clients                                                                                                                                                             |
| Security  | Access list, Password protection, Digest authentication, HTTPS, IEEE 802.1x, Trend Micro IoT Security (brute force attack event, cyberattack event), User access log, User account management |
| Protocols | 802.1X, ARP, CIFS/SMB, CoS, DDNS, DHCP, DNS, FTP, HTTP, HTTPS, ICMP, IGMP, IPv4, IPv6, NTP, PPPoE, QoS, RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS, UDP, UPnP                                |

|           |                                                           |
|-----------|-----------------------------------------------------------|
| Interface | 10BASE-T/100BASE-TX Ethernet (M12, Female, 4-pin D-coded) |
| ONVIF     | Profile G, S, T, M supported                              |

## Solution Integration

|                        |                                    |
|------------------------|------------------------------------|
| VADP Package           | Trend Micro (3-year free trial)    |
| Video Motion Detection | Five-window video motion detection |

## Alarm and Event

|               |                                                                                                                                                                                                                                                    |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Event Trigger | Motion detection, Camera tampering detection, Audio detection, Digital input, Manual trigger, Periodical trigger, System boot, Recording notification, SD card life expectancy, Cybersecurity events (brute force attack event, cyberattack event) |
| Event Action  | Event notification via email, HTTP, FTP, NAS server, SD card, digital output<br>File upload via email, HTTP, FTP, NAS server, SD card                                                                                                              |

## General

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectors            | M12 for Network connection *1<br>Audio input *1<br>Digital input *1 (30V)<br>Digital output *1 (12V, 50mA)<br>DC power input *1                                                                                                                                                                                                                                                                                                                                                                                   |
| LED Indicator         | System power and status indicator                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Power Input           | DC 7.5~48V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power Consumption     | Max. 5.4W (IR on)<br>Max. 3.56W (IR off)                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Dimensions            | 98 (D) x 54 (W) x 110 (H) mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Weight                | approx. 384 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Certifications        | EMC<br>CE (EN 55032, EN 55024 Class B, EN 50121-4, EN 50121-3-2), FCC (FCC Part 15 Subpart B Class B), RCM (AS/NZS CISPR 32 Class B), VCCI (VCCI-CISPR 32 Class B)<br>Safety<br>UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471)<br>Environment<br>IK10, IP66/67, NEMA 4X<br>Railway<br>EN 50155: 2021 (OT1, 24V DC), EN 50121-3-2:2016, EN 60068-2-1:2007, EN 60068-2-2:2007, EN 61373:2010, EN 45545-2, IEC 60571 Ed 3.0, IEC 62236-3-2 Ed 3.0, EN 50121-4:2016<br>Vehicles<br>ECE R118, R10 |
| Operating Temperature | Starting Temperature:<br>-25°C ~ 55°C (-13°F ~ 131°F)<br>Working Temperature:<br>-25°C ~ 60°C (-13°F ~ 140°F) (IR off)<br>-25°C ~ 55°C (-13°F ~ 131°F) (IR on)                                                                                                                                                                                                                                                                                                                                                    |
| Humidity              | 98% RH (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Storage Temperature   | -40°C ~ 70°C (14°F ~ 158°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Warranty              | 60 months                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## System Requirements

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Operating System | Microsoft Windows 10/8/7<br>Mac 10.12 (Chrome only) |
| Web Browser      | Chrome 58.0 or above                                |
| Other Players    | VLC: 1.1.11 or above                                |

## Included Accessories

|                  |                                                           |
|------------------|-----------------------------------------------------------|
| Packing Contents | Quick installation guide, alignment sticker, screw driver |
|------------------|-----------------------------------------------------------|