



## C Series

# FD9380-HTV-V2

5MP Outdoor Fixed Dome AI  
Camera



## Technical Specifications

### System Information

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

### Camera Specifications

|                         |                                                                                     |
|-------------------------|-------------------------------------------------------------------------------------|
| Image Sensor            | 1/2.7" Progressive CMOS                                                             |
| Max. Resolution         | 2880x1616 (5MP)                                                                     |
| Lens Type               | Motorized, Vari-focal, Remote Focus                                                 |
| Focal Length            | f = 2.7 ~ 13.5mm                                                                    |
| Aperture                | F1.6 ~ F3.1                                                                         |
| Iris Type               | Fixed iris                                                                          |
| Field of View           | 111.0° ~ 32.2° (Horizontal)<br>57.0° ~ 18.0° (Vertical)<br>136.0° ~ 37.0°(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 Illuminator up to 30 meters with Smart IR, IR LED*2                     |
| Minimum Illumination    | 0.04 lux @ F1.6 (Color)<br>0.005 lux @ F1.6 (B/W)<br>0 lux with IR illumination on  |
| Pan Range               | 353°                                                                                |
| Tilt Range              | 75°                                                                                 |
| Rotation Range          | 350°                                                                                |

|                            |                                                                                                                       |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Storage                    | Seamless Recording to MicroSD/SDHC/SDXC card (1TB capacity supported) and recording to network-attached storage (NAS) |
| Built-in Installation Aids | Pixel Calculator                                                                                                      |

| Video              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compression        | H.265, H.264, MJPEG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum Frame Rate | 30 fps @ 2880x1616                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Maximum Streams    | 3 video streams (Up to 7 configurable profiles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Main Stream        | 30fps @2880x1616, 2688x1512, 2560x1440, 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2nd Stream         | 30fps @1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 3rd Stream         | 30 fps @ 1280x720, 640x360, 480x272 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| S/N Ratio          | 52 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Dynamic Range      | 120 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Video Streaming    | Adjustable resolution, quality and constant bit rate control, Smart Stream III                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Image Settings     | <p>General settings<br/>video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings</p> <p>Illuminators<br/>illuminators, anti-overexposure/smart IR</p> <p>Image settings<br/>white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR</p> <p>Exposure<br/>BLC, HLC, exposure control (exposure level, exposure time, gain control), AE speed adjustment, WDR<br/>Focus: zoom, focus</p> <p>Privacy mask<br/>Pixel calculator<br/>Scheduled profile settings</p> |

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

| Network   |                                                                                                                                                                                                                                                    |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Users     | Live viewing for up to 10 clients                                                                                                                                                                                                                  |
| Security  | Access list, CSRF protection, digest authentication, HTTPS , IEEE 802.1x, Password protection, 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/RTMP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2/1.3, 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, Onvif 21.06 |
|-------|----------------------------------------|

| AI Analytics            |                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Compute Capability      | SoC with built-in hardware deep learning accelerator                                                                                                                                                                                                                         |
| Vision Object Analytics | Object Detection<br>People, Vehicle (4-wheeled), Human / Vehicle Bestshot, Path Extraction                                                                                                                                                                                   |
| Application             | Deep Learning VCA (Smart Motion Detection, Smart VCA)<br>Smart VCA - Group 1<br>Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart VCA (Intrusion detection, Loitering detection, Line crossing detection) |

| Solution Integration   |                                                       |
|------------------------|-------------------------------------------------------|
| VADP Package           | Trend Micro (Default, 1-year free trial)              |
| Video Motion Detection | Motion Detection (Five-window video motion detection) |

| Alarm and Event |                                                                                                                                              |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Event Trigger   | Periodically trigger, system boot, manual trigger, digital input, motion detection, tampering detection, recording notification              |
| Event Action    | Event notification via camera link, email, HTTP, FTP/SFTP, NAS server, SD card<br>File upload via email, HTTP, FTP/SFTP, NAS server, SD card |

| General               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connectors            | RJ-45 cable connector for 10/100/100 Mbps Network/PoE connection<br>Audio line input<br>Audio line output<br>DC 12V power input<br>Digital input *1<br>Digital output *1 (DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A)                                                                                                                                                                                                                                                                   |
| LED Indicator         | System power and status indicator                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Power Input           | IEEE 802.3af PoE Class 3<br>DC 12V                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Power Consumption     | DC12V: Max. 7.44W<br>PoE: Max. 7.77W, typical 3.6W                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dimensions            | ø133.7mm x 103.8mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Weight                | 758 g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Certifications        | EMC<br>CE (EN 55032/EN 55035 Class A), UKCA (BS EN 55032/BS EN 55035 Class A), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), IC (ICES-003 Issue 7, Class A)<br>Safety:<br>UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471), LVD (IEC/EN 62368-1), UKCA (BS EN 62368-1)<br><br>Environment<br>IK10 (IEC 62262)*, IP66,IP67 (IEC 60529)*<br><br>IA<br>BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1) |
| Operating Temperature | Starting Temperature:<br>-30°C ~ 60°C (-22°F ~ 140°F)<br>Working Temperature:<br>-30°C ~ 60°C (-22°F ~ 140°F)                                                                                                                                                                                                                                                                                                                                                                         |
| Humidity              | 90% RH (non-condensing)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| 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 pack, cable gland |

| DORI (EN 62676-4 Standard)     |                                                     |
|--------------------------------|-----------------------------------------------------|
| Detection (25PPM/ 8PPF)        | Wide: 67.0 m (219.9 ft)<br>Tele: 205.7 m (674.8 ft) |
| Observation (63PPM/ 19PPF)     | Wide: 26.7 m (87.5 ft)<br>Tele: 81.6 m (267.8 ft)   |
| Recognition (125PPM/ 38PPF)    | Wide: 13.3 m (43.7 ft)<br>Tele: 41.0 m (134.4 ft)   |
| Identification (250PPM/ 76PPF) | Wide: 6.6 m (21.7 ft)<br>Tele: 20.5 m (67.1 ft)     |