



## S Series

# CD9381-HNVF2 (2.4 mm)

5MP Corner Dome AI Camera



## Technical Specifications

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	eMMC 8 GB
RAM	DDR4 2 GB

  

Camera Specifications	
Image Sensor	1/2.7" Progressive CMOS
Max. Resolution	2560*1920 (5MP)
Lens Type	Fixed-focal
Focal Length	f = 2.4 mm
Aperture	F2.1
Iris Type	Fixed-iris
Field of View	124° (Horizontal) 92° (Vertical) 156° (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 940nm IR illuminators, effective up to 10 meters with Smart IR, IR LED*2 (50IRE)
Minimum Illumination	0.07 lux @ F2.1(Color) (30IRE) 0.18 lux @ F2.1(Color) (50IRE) <0.005 lux @ F2.1(B/W) 0 lux with IR illumination on
Tilt Range	0°

Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
Storage	Seamless Recording to MicroSD/SDHC/SDXC card slot (1TB Capacity Supported) and recording to network-attached storage (NAS)
Built-in Installation Aids	Micro USB* *Requires Wi-Fi dongle and Micro B converter

## Video

Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ 2560*1920 (WDR Pro on) 30 fps @ 2560*1440 (WDR Pro on) 60 fps @ 1920x1080 (WDR Pro off)
Maximum Streams	3 video streams (Up to 8 configurable profiles)
Main Stream	30fps @ 2560x1920, 1600x1200, 1280x960, 640x480 (4:3); 30fps @ 2560x1440, 1920x1080, 1600x904, 1280x720,1360x768, 640x360 (16:9) 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
2nd Stream	30fps @ 2560x1920, 1600x1200, 1280x960, 640x480 (4:3); 30fps @ 2560x1440, 1920x1080, 1600x904, 1280x720,1360x768, 640x360 (16:9) 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
3rd Stream	30fps @ 1280x960, 640x480 (4:3); 30 fps @ 1280x720, 640x360 (16:9); 60 fps @ 1280x720, 640x360 (16:9)
S/N Ratio	54 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	<p>General settings video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings</p> <p>Illuminators illuminators, anti-overexposure</p> <p>Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, EIS, scene mode (auto, deblur)</p> <p>Exposure BLC, HLC, exposure control (exposure level, flickerless, exposure time, gain control), AE speed adjustment, WDR</p> <p>Privacy mask Pixel calculator Scheduled profile settings</p>

## Audio

Audio Capability	Two-way audio (Full duplex)
Compression	G.711, G.726
Interface	Built-in microphone External Audio Input External Audio output
Effective Range	10 meters

## Network

Users	Live viewing for up to 10 clients
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Security	Access list, CSRF protection, 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, 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) *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>

## AI Analytics

Compute Capability	SoC with built-in hardware deep learning accelerator
Vision Object Analytics	Object Detection People, Vehicle (4-wheeled, 2-wheeled), Human / Vehicle Bestshot, Path Extraction  Attribute Extraction People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color)  Human face Bestshot, Re-Search Extraction
Application	Deep Learning VCA (Smart Motion Detection, Smart VCA) Smart VCA - Group 1 Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart VCA (Intrusion detection, Loitering detection, Line crossing detection, face detection)  Smart VCA - Group 2 Unattended object detection, Missing object detection, Crowd detection
Application available with license	Smart VCA - Group 3 Running detection, Parking Violation Detection, Restricted Zone Detection  *Support for more analytic applications and free trial, please visit VIVOTEK website.
AI-powered Image Enhancement	Smart IR III

## Solution Integration

VADP Package	Trend Micro IoT Security (Default 3 years)
Video Motion Detection	Motion Detection (Five-window video motion detection)

## Alarm and Event

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, shock detection, system boot, Casing open detection
Event Action	Event notification via audio clip, camera link, digital output, email, HTTP, FTP/SFTP, NAS server, SD card File upload via email, HTTP, FTP/SFTP, NAS server, SD card

## General

Connectors	Default I/O RJ-45 cable connector for 10/100 Mbps PoE network connection Micro USB Audio output (Optional) Mic in (Optional) DC 12V power input (Optional) AC 24V power input (Optional) Digital input*1 (Optional) Digital output*1 (Optional) ((DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A))
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LED Indicator	System power and status indicator
Power Input	AC 24V*, DC 12V*, IEEE 802.3af PoE Class 0 (Power Redundancy) *I/O cable Required, and accessories I/O cable inside of the Box
Power Consumption	PoE: Max. 10.36/8.36 W (IR on/off) DC 12V: Max. 9.96/7.96 W (IR on/off) AC 24V: Max. 18/16 W (IR on/off)
Dimensions	226 x 221 x 112 mm
Weight	1.5 kg
Certifications	EMC CE (EN 55032 Class A, EN 55035), UKCA (BS EN 55032: 2015 +A11: 2020, BS EN 55035: 2017 +A11: 2020), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A), ICES-003 Issue 7  Safety UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471)  Environment IK10+ (IEC 60529), IP67 (IEC 60529), IP6K9K (ISO 20653)  IA BIS (IS 13252), BSMI (EMC: CNS 13438, Safety: CNS 14336-1)
Operating Temperature	Starting Temperature: 0°C ~ 50°C (32°F ~ 122°F) Working Temperature: -10°C ~ 55°C (14°F ~ 122°F) (IR off) -10°C ~ 40°C (14°F ~ 113°F) (IR on)
Humidity	98% RH (non-condensing)

## System Requirements

Operating System	Microsoft Windows 10/8/7 Mac 10.12 (Chrome only)
Web Browser	Chrome 58.0 or above Internet Explorer 11
Other Players	VLC: 1.1.11 or above

## Included Accessories

Packing Contents	Quick installation guide, L-shaped wrench, screw pack, waterproof accessory pack, I/O cable, Ethernet cable with RJ45 female connector cable, Mounting bracket
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## DORI (EN 62676-4 Standard)

Detection (25PPM/ 8PPF)	47.9 m (157.20 ft)
Observation (63PPM/ 19PPF)	19.2m (62.80 ft)
Recognition (125PPM/ 38PPF)	9.5 m (31.30 ft)
Identification (250PPM/ 76PPF)	4.7 m (15.50 ft)