VIVOTEK
A Delta Group Company

V Series

FD9189-H-V3
5MP Indoor Dome Camera

Technical Specifications

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

Camera Specifications	
Image Sensor	1/2.8" Progressive CMOS
Max. Resolution	2560x1920 (5MP)
Lens Type	Fixed-focal
Focal Length	f = 2.8 mm
Aperture	F2.0
Iris Type	Fixed iris
Field of View	103.4° (Horizontal) 75.3° (Vertical) 135.2° (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 30 meters with Smart IR, IR LED*2
Minimum Illumination	0.055 lux @ F2.0 (Color) 0.005 lux @ F2.0 (B/W) 0 lux with IR illumination on
Pan Range	350°
Tilt Range	80°
Rotation Range	350°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)

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 @ 2560x1920 (5MP)
Maximum Streams	3 video streams (Up to 8 configurable profiles)
Main Stream	30fps @2560x1920,2048x1536,1920x1440,1600x1200,1280x960,800x600,640x480 (4:3) 30fps @ 2560x1440, 1920x1080, 1600x904, 1360x768,1280x720, 640x360 (16:9) 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
2nd Stream	30fps @ 1920x1440, 1600x1200, 1280x960, 800x600, 640x480 (4:3); 30fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9) 60 fps @ 1280x720, 640x360 (16:9)
3rd Stream	30fps @ 1280x960, 800x600, 640x480 (4:3); 30 fps @ 1280x720, 640x360 (16:9); 60 fps @ 1280x720, 640x360 (16:9)
S/N Ratio	55 dB
Dynamic Range	120 dB
Video Streaming	Adjustable resolution, quality and constant bit rate control, Smart Stream III
Image Settings	General settings video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings Illuminators illuminators, anti-overexposure, VCA-based Smart IR III Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, EIS (built-in gyro sensor), scene mode (auto, deblur) Exposure BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR Focus zoom, focus Privacy mask pixel calculator Scheduled profile settings
Display Mode	HDMI output (type D; 1080p/720p @30/25fps(60/50Hz))

Audio

Audio Capability	Two-way audio (Full duplex)* * Requires AO-014 cable
Compression	G.711, G.726, MPEG-2 AAC-LC
Interface	Built-in microphone External microphone Input* External line output* * Requires AO-014 cable
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, secure boot, signed firmware, Trend Micro IoT Security (brute force attack event, cyberattack event, quarantine event), user access log, user account management, Built-in FIPS 140-2 Level 2 certified Trusted Platform Module (TPM)
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 1.2/1.3, 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, M supported, specification available at www.onvif.org

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.
RealSight Engine	Smart IR III, Deblur, WDR, White Balance, Exposure Control

Solution Integration

VADP Package	Trend Micro (Default, 3-year free trial)
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 * Requires AO-014 cable
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 * Requires AO-014 cable

General

Connectors	RJ-45 cable connector for 10/100 Mbps Network/PoE connection HDMI Output (Type D) Audio line input* Audio line output* Digital input: 1* Digital output *1 (DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A)* * Requires AO-014 cable
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 3
Power Consumption	Max. 12.4W/ 9.6W (IR on/off)
Dimensions	ø 120 x 89.6 mm
Weight	370 g
Certifications	EMC CE (EN55032, EN55035 Class A), UKCA (BS EN 55032/BS EN 55035 Class A), FCC (FCC Part 15 Subpart B Class A), RCM (AS/NZS CISPR32 Class A), VCCI (VCCI-CISPR 32 Class A) IC (ICES-003 Issue 7, Class A) Safety UL (UL62368-1), CB (IEC/EN 62368-1, IEC/EN 62368-1, IEC/EN 62471) UKCA (BS EN IEC 62368-1) Environment IA: BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: 0°C ~ 40°C (32°F ~ 104°F) Working Temperature: 0°C ~ 45°C (32°F ~ 113°F) (IR off) 0°C ~ 40°C (32°F ~ 104°F) (IR on)
Humidity	90% RH (non-condensing)

System Requirements

Operating System	Microsoft Windows 10/8/7 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, L-shaped wrench

DORI (EN 62676-4 Standard)

Detection (25PPM/ 8PPF)	60.4 m (198.1 ft)
Observation (63PPM/ 19PPF)	24.1 m (79.2 ft)
Recognition (125PPM/ 38PPF)	12 m (39.5 ft)
Identification (250PPM/ 76PPF)	6.0 m (19.6 ft)

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