VIVOTEK
A Delta Group Company

S SERIES

FD9391-EHTV-v2

Fixed Dome Network Camera

4K 30fps • H.265 • SNV • WDR Pro • 50M IR • Smart IR III • Vision Object Analytics • NEMA 4X • -50°C ~ 60°C

Technical Specifications

System Information

Model	FD9391-EHTV-v2
CPU	Multimedia SoC (System-on-Chip)
Flash	8 GB
RAM	2 GB

Camera Features

Image Sensor	1/1.8" Progressive CMOS
Max. Resolution	3840x2160 (8MP)
Lens Type	Motorized, Vari-focal, Remote Focus
Focal Length	f = 4.4 ~ 10.2 mm (f = 2.8~10.3mm, equivalent focal length @ 1/2.8")
Aperture	F1.38 ~ F2.24
Iris Type	P-iris
Field of View	110° ~ 43° (Horizontal) 57° ~ 24° (Vertical) 133° ~ 49° (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, effective up to 50 meters with Smart IR II, IR LED*4
Minimum Illumination	0.01 lux @ F1.38 (Color) <0.005 lux @ F1.38 (B/W) 0 lux with IR illumination on
Pan Range	±175°
Tilt Range	80°

Rotation Range	±175°
Pan/Tilt/Zoom Functionalities	ePTZ: 48x digital zoom (4x on IE plug-in, 12x built-in)
Storage	Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)
Built-in Installation Aids	Remote focus, remote zoom, Micro USB*, pixel calculator *Requires Wi-Fi dongle and Micro B converter

Video

Video Compression	H.265, H.264, MJPEG
Maximum Frame Rate	30 fps @ 3840x2160
Maximum Streams	3 video streams (Up to 8 configurable profiles)
S/N Ratio	58 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, Smart IR (target zone); Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, LDC, 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: zoom, focus; Privacy mask; Pixel calculator; Scheduled profile settings

Audio

Audio Capability	Two-way audio (Full duplex)
Audio Compression	G.711, G.726, MPEG-2 AAC-LC
Audio Interface	Built-in microphone External microphone input External line output
Effective Range	5 meters

Network

Users	Live viewing for up to 10 clients
Security	Access list, Account block , Audit log, Configurable password strength protection, CSRF protection, Digest authentication, HTTPS , IEEE 802.1x, Secure boot, Session timeout, 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 *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 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); Attribute Extraction: People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color); Re-Search Extraction; Path Extraction
Application	Deep Learning VCA (Smart Motion Detection, Smart VCA) Smart Motion Detection (Five-window video motion detection, People detection, Vehicle detection, Time filter), Smart VCA (Intrusion detection, Loitering detection, Line crossing detection, Unattended object detection, Missing object detection, Face detection, Crowd detection
Application available with license	Running detection, Parking Violation Detection, Restricted Zone Detection Support for more analytic applications and free trial, please visit vivotek.com/video-analytics
AI-powered Image Enhancement	Smart IR III

Solution Integration

VADP Package	Stratocast, Trend Micro IoT Security (3-year free trial)

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

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	RJ-45 cable connector for 10/100 Mbps PoE network connection Built-in Microphone Audio line input Audio line output DC 12V power input/AC 24V power input Digital input*2 Digital output*2 Micro USB
LED Indicator	System power and status indicator
Power Input	AC 24V/DC 12V, IEEE 802.3at PoE Class 4 (Power Redundancy)
Power Consumption	PoE: Max. 14.25/10.81 W (IR on/off) DC 12V: Max. 14.40/10.96 W (IR on/off) AC 24V: Max. 11.64/8.20 W (IR on/off)
Dimensions	ø 174 x 123 mm
Weight	1.39 kg
Certifications	EMC: CE (EN 55032/EN 55035 Class B, EN 50121-4), FCC (FCC Part 15 Subpart B Class B), UKCA (BS EN 55032/BS EN 55035 Class B), RCM (AS/NZS CISPR 32 Class B), VCCI (VCCI-CISPR 32 Class B), IC (ICES-003 Issue 7); Safety: UL (UL 62368-1), CB (IEC/EN 62368-1, IEC/EN 60950-22, IEC/EN 62471), LVD, (EN 62368-1), UKCA (BS EN IEC 62368-1); Environment: IK10+ (IEC 62262), IP66/67 (IEC 60529), NEMA (NEMA 250 Type 4X), IEC 60068-2-11, IP6K9K (ISO 20653); IA: BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: -30°C ~ 60°C (-22°F ~ 140°F) Working Temperature: -50°C ~ 60°C (-58°F ~ 140°F) (IR off) -50°C ~ 50°C (-58°F ~ 122°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
Other Players	VLC: 1.1.11 or above

Included Accessories

Packing Contents	Quick installation guide, product labels, alignment sticker, L-shaped wrench, screw pack, waterproof accessory pack, sunshield, conduit bracket, I/O cable
Optional Accessories	Please refer to Accessory Selection Guide

DORI (EN 62676-4 Standard)

Detect (25PPM/ 8PPF)	Wide: 88.7 m (290.9 ft) Tele: 204.5 m (670.8 ft)
Observe (63PPM/ 19PPF)	Wide: 35.5 m (116.3 ft) Tele: 81.8 m (268.3 ft)
Recognize (125PPM/ 38PPF)	Wide: 17.7 m (58.1 ft) Tele: 40.9 m (134.1 ft)
Identify (250PPM/ 76PPF)	Wide: 8.8 m (28.9 ft) Tele: 20.4 m (67.0 ft)