



V Series

FD9383-HV (2.8 mm)

5MP Outdoor Dome AI Camera



Technical Specifications

System Information	
CPU	Multimedia SoC (System-on-Chip)
Flash	4 GB (-L, general available) 8 GB (Limited qty)
RAM	1 GB (-L, general available) 2 GB (Limited qty)

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 Illuminator 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	75°
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
Maximum Streams	3 video streams (Up to 8 configurable profiles)
Main Stream	30 fps @ 2560x1920, 2048x1536, 1920x1440, 1600x1200, 1280x960, 800x600, 640x480 (4:3); 30 fps @ 2560x1440, 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9); 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
2nd Stream	30 fps @ 1920x1440, 1600x1200, 1280x960, 640x480 (4:3); 30 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9); 60 fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)
3rd Stream	30 fps @ 1280x960, 800x600, 640x480 (4:3); 30 fps @ 1280x720, 640x360 (16:9); 60 fps @ 1280x720, 640x360 (16:9)
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, anti-overexposure, Smart IR Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR Exposure BLC, HLC, exposure control (exposure level, exposure time, gain control), Image sharpener for motion blur, AE speed adjustment, WDR Privacy mask Pixel calculator Scheduled profile settings

Network	
Users	Live viewing for up to 10 clients
Security	Access list, Password protection, Digest authentication, CSRF protection, HTTPS, IEEE 802.1x, 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 1.2/1.3, 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 Attribute Extraction: People (gender, clothing color, bag, hat) Path Extraction Vehicle (bike, bus, car, motorcycle, truck, color) Human face Bestshot Re-Search Extraction
Applications	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	Motion detection, Camera tampering detection, Manual trigger, Periodical trigger, System boot, Recording notification, SD card life expectancy, Shock detection, Cybersecurity events (brute force attack event, cyberattack event, quarantine event)
Event Action	Event notification via email, HTTP, FTP/SFTP, NAS server, SD card, camera link File upload via email, HTTP, FTP/SFTP, NAS server, SD card

General	
Connectors	RJ-45 cable connector for 10/100 Mbps Network/PoE connection
LED Indicator	System power and status indicator
Power Input	IEEE 802.3af PoE Class 3
Power Consumption	Max. 8.5W/6.0W (IR on/off)
Dimensions	ø 117.2 x 89.6 mm
Weight	550 g

Certifications	EMC 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) Safety: 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)
	Environment IK10 (IEC 62262), IP66 (IEC 60529)
	IA BIS (IS 13252), BSMI (EMC: CNS 15936, Safety: CNS 15598-1)
Operating Temperature	Starting Temperature: -10°C ~ 50°C (14°F ~ 122°F) Working Temperature: -30°C ~ 55°C (-22°F ~ 131°F) (IR off) -30°C ~ 50°C (-22°F ~ 122°F) (IR on)
Humidity	90% RH

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, alignment sticker, screw pack, cable gland
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DORI (EN 62676-4 Standard)

Detection (25PPM/ 8PPF)	60.4 m (198.2 ft)
Observation (63PPM/ 19PPF)	24.1 m (79.1 ft)
Recognition (125PPM/ 38PPF)	12 m (39.4 ft)
Identification (250PPM/ 76PPF)	6.0 m (19.7 ft)

Ordering Information

Part Number	VIO100000742 FD9383-HV (L) (2.8mm) -- general available AI outdoor dome with 1GB RAM, eMMC 4GB, 5M@30fps, 2.8mm lens, VCA and attributes
	VIO100000095 FD9383-HV (2.8mm) -- limited qty AI outdoor dome with 2GB RAM, eMMC 8GB, 5M@30fps, 2.8mm lens, VCA and attributes