VIVOTEK
A Delta Group Company

V SERIES

SD9161-H-v2

Speed Dome Network Camera

2MP 60fps • 10x Zoom • Vision Object Analytics • Smart Tracking Advanced • WDR Pro • Smart Stream III • EIS

Technical Specifications

System Information

Model	SD9161-H-v2
CPU	Multimedia SoC (System-on-Chip)
Flash	8 GB
RAM	2 GB

Camera Features

Image Sensor	1/2.8" Progressive CMOS
Max. Resolution	1920x1080 (2MP)
Lens Type	10x Optical Zoom, Auto Focus
Focal Length	f = 5.1 ~ 51 mm
Aperture	F1.6 ~ F1.8
Iris Type	DC-iris
Field of View	55.2° ~ 7.1° (Horizontal) 31.8° ~ 4.1° (Vertical) 62.4° ~ 8.1° (Diagonal)
Shutter Time	1/8 sec. to 1/30,000 sec.
WDR Technology	WDR Pro
Day/Night	Yes
Removable IR-cut Filter	Yes
Minimum Illumination	0.14 lux @ F1.6 (Color) 0.005 lux @ F1.6 (B/W)
Pan Speed	0.05° ~ 360°/s
Pan Range	360° endless
Tilt Speed	0.05° ~ 360°/s
Tilt Range	180°

Preset Locations	256 preset locations 128 presets per tour
Pan/Tilt/Zoom Functionalities	32x digital zoom (4x on IE plug-in, 8x built in) Auto pan mode Auto patrol mode
Storage	Seamless Recording to MicroSD/SDHC/SDXC card and recording to network-attached storage (NAS)

Video

Video Compression	H.265, H.264, MJPEG
Maximum Frame Rate	60 fps @ 1920x1080
Maximum Streams	3 video streams (Up to 8 configurable profiles)
S/N Ratio	73 dB
Dynamic Range	100 dB
Video Streaming	Adjustable resolution, quality and constant bitrate control, Smart Stream III
Image Settings	General settings: video title and time stamp overlay, video orientation (flip, mirror), day/night settings; Illuminators: external illuminators; Image settings: white balance, image adjustment (brightness, contrast, saturation, sharpness), defog, 3DNR, EIS; Exposure: HLC, exposure control (exposure level, iris adjustment, exposure time, gain control),WDR; Focus; Privacy mask; Scheduled profile settings; Pixel calculator

Audio

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

Network

Users	Live viewing for up to 10 clients
Security	Access list, 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, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTCIP, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, TCP/IP, TLS 1.2, UDP, UPnP
Interface	10 Base-T/100 BaseTX 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 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 Tracking Advanced) Smart Tracking Advanced (Intrusion detection, Loitering detection, Line crossing detection, Face detection, Unattended object detection, Missing object detection)
Application available with license	Parking Violation Detection, Restricted Zone Detection Support for more analytic applications and free trial, please visit vivotek.com/video-analytics

Solution Integration

Video Motion Detection	Motion Detection (Five-window video motion detection)
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, smart tracking advanced trigger, system boot, preset reached, VADP
Event Action	Event notification via audio clip, camera link, digital output, email, HTTP, FTP, NAS server, SD card File upload via email, HTTP, FTP, NAS server, SD card; trigger track, trigger patrol, move to preset

General

Connectors	RJ-45 cable connector for 10/100Mbps Network/PoE connection Audio line input Audio line output AC/DC 24V power input Digital input *2 Digital output *1
LED Indicator	System power and status indicator
Power Input	AC 24V, DC 24V, IEEE 802.3at PoE Class 4 (Simultaneous Power Redundancy Supported)
Power Consumption	PoE Max: 17W AC/DC 24V Max: 17W
Dimensions	Ø 172 x 157 mm
Weight	1 kg
Certifications	EMC: CE (EN 55032 Class A, EN55035), UKCA (BS EN 55032 Class A, BS EN 55035), FCC (FCC Part 15 Subpart B Class A), IC (ICES-003 Issue7:2020 Class A), RCM (AS/NZS CISPR 32 Class A), VCCI (VCCI-CISPR 32 Class A); Safety: UKCA (BS EN 62368- 1:2020+A11:2020), UL (UL 62368-1), CB (IEC/EN 62368-1); IA: BIS (IS 13252), BSMI
Operating Temperature	-10°C ~ 55°C (14°F ~ 131°F) Working Temperature: -10°C ~ 55°C (14°F ~ 131°F)
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 Internet Explorer 10/11
Other Players	VLC: 1.1.11 or above

Included Accessories

Packing Contents	Indoor pendant mount, quick installation guide, alignment sticker, L-wrench, power cable

DORI (EN 62676-4 Standard)

Detect (25PPM/ 8PPF)	Wide: 76.9 m (252.2 ft) Tele: 587.7 m (1928.1 ft)
Observe (63PPM/ 19PPF)	Wide: 30.5 m (100 ft) Tele: 233.2 m (765.1 ft)
Recognize (125PPM/ 38PPF)	Wide: 15.8 m (51.8 ft) Tele: 117.5 m (385.5 ft)
Identify (250PPM/ 76PPF)	Wide: 7.9 m (25.9 ft) Tele: 58.0 m (190.3 ft)

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