



V Series

SD9161-H-V2

2MP AI PTZ 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 | 1920x1080 (2MP) |
| Lens Type | 10x Optical Zoom, Auto Focus |
| Focal Length | 5.1~51mm (10x zoom) |
| Aperture | F1.6~1.8 |
| 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 |
| 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° /sec |
| Pan Range | 360° endless |
| Tilt Speed | 0.05° ~ 360° /sec |
| Tilt Range | 180° |
| Preset Location | 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 (1TB capacity supported) and recording to network-attached storage (NAS) |
| Built-in Installation Aids | Remote focus, remote zoom |

| Video | |
|--------------------|---|
| Compression | H265, H264, MJPEG |
| Maximum Frame Rate | 30 fps @ 1920x1080 (WDR on) 60 fps @ 1920x1080 (WDR off) |
| 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 constrained bit rate control, Smart Stream III |
| Image Settings | <p>General settings video settings, video orientation (flip, mirror), day/night settings</p> <p>Overlay settings Illuminators Illuminators, anti-overexposure</p> <p>Image settings white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, HLM, EIS(built-in gyro sensor), scene mode (auto)</p> <p>Exposure exposure strategy (measurement window, metering mode)</p> <p>exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR</p> <p>Focus zoom, focus</p> <p>Privacy mask Pixel calculator Scheduled profile settings</p> |

| Audio | |
|------------------|---|
| Audio Capability | Two-Way Audio (full duplex) |
| Compression | MPEG-2 AAC-LC, G.711, G.726 |
| Interface | External line input External line output |

| 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, NTCIP, 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 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 | |
|----------------------|--|
| 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 *Requires AO-009 cable |
| Event Action | Event notification via audio clip*, camera link, digital output*, email, HTTP, FTP/SFTP, NAS server, SD card, push notification File upload via email, HTTP, FTP/SFTP, NAS server, SD card *Requires AO-009 cable |

| 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* * Requires AO-009 cable |
| 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 | Starting Temperature: -10°C ~ 55°C (14°F ~ 131°F) Working Temperature: -10°C ~ 55°C (14°F ~ 131°F) |
| 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 10/11 |
| Other Players | VLC: 1.1.11 or above |

Included Accessories

| | |
|------------------|---|
| Packing Contents | Mounting Adapter, quick installation guide, alignment sticker, L-wrench, Torx driver, power cable |
|------------------|---|

DORI (EN 62676-4 Standard)

| | |
|--------------------------------|--|
| Detection (25PPM/ 8PPF) | Wide: 76.9 m (252.2 ft) Tele: 587.7 m (1928.1 ft) |
| Observation (63PPM/ 19PPF) | Wide: 30.5 m (100 ft) Tele: 233.2 m (765.1 ft) |
| Recognition (125PPM/ 38PPF) | Wide: 15.8 m (51.8 ft) Tele: 117.5 m (385.5 ft) |
| Identification (250PPM/ 76PPF) | Wide: 7.9 m (25.9 ft) Tele: 58.0 m (190.3 ft) |