



## V Series

# IP9165-HT-V2 (No-Lens)

2MP Box AI Camera



## Technical Specifications

### System Information

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

### Camera Specifications

|                               |                                                                                              |
|-------------------------------|----------------------------------------------------------------------------------------------|
| Image Sensor                  | 1/2" Progressive CMOS                                                                        |
| Max. Resolution               | 1920x1080                                                                                    |
| Iris Type                     | DC-iris, P-iris, i-CS                                                                        |
| Shutter Time                  | 1/5~1/32000                                                                                  |
| WDR Technology                | WDR Pro II                                                                                   |
| Day/Night                     | Yes                                                                                          |
| Removable IR-cut filter       | Yes                                                                                          |
| Minimum Illumination          | 0.01 lux @ F1.5 (Color)<br>0.005 lux @ F1.5 (B/W)                                            |
| Pan/Tilt/Zoom Functionalities | ePTZ:<br>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, CVBS, Micro USB (for additional USB Wireless Adapter)             |

### Video

|                    |                                                                 |
|--------------------|-----------------------------------------------------------------|
| Compression        | H.265,H.264, MJPEG                                              |
| Maximum Frame Rate | 60 fps @ 1920x1080 (WDR Pro)<br>30 fps @ 1920x1080 (WDR Pro II) |

|                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Streams | 3 simultaneous streams<br>(Up to 8 configurable profiles)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Main Stream     | 30fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)<br>60fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 2nd Stream      | 30fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)<br>60fps @ 1920x1080, 1600x904, 1360x768, 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 3rd Stream      | 30 fps @ 1280x720, 640x360 (16:9);<br>60 fps @ 1280x720, 640x360 (16:9)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| S/N Ratio       | 66.2 db                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dynamic Range   | 140 dB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Video Streaming | Adjustable resolution, quality and constrained bit rate control, Smart Stream III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Image Settings  | <p>General settings<br/>video title and time stamp overlay, video orientation (flip, mirror, rotation), day/night settings</p> <p>Illuminators<br/>illuminators, anti-overexposure</p> <p>Image settings<br/>white balance, image adjustment (brightness, contrast, saturation, sharpness, gamma curve), defog, 3DNR, EIS, scene mode (auto, deblur)</p> <p>Exposure<br/>BLC, HLC, exposure control (exposure level, iris adjustment, exposure time, gain control, iris mode), AE speed adjustment, WDR</p> <p>Focus<br/>zoom, Remote focus(i-CS), Remote back focus</p> <p>Privacy mask<br/>Scheduled profile settings</p> |

| Audio            |                                                   |
|------------------|---------------------------------------------------|
| Audio Capability | Two-way Audio                                     |
| Compression      | G.711, G.726, MPEG-2 AAC-LC                       |
| Interface        | External microphone input<br>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, HTTP, HTTPS, ICMP, IGMPv3, IPv4, IPv6, NTP, PPPoE, QoS (CoS/DSCP), RTSP/RTP/RTCP, SMTP, SNMP, SSL, SFTP, TCP/IP, TLS 1.2, UDP, UPnP                                                                                                                                         |
| Interface | 10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)<br>*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 <a href="http://www.onvif.org">www.onvif.org</a>                                                                                                                                                                                                                            |

| AI Analytics       |                                                      |
|--------------------|------------------------------------------------------|
| Compute Capability | SoC with built-in hardware deep learning accelerator |

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vision Object Analytics            | <p>Object Detection<br/>People, Vehicle (4-wheeled, 2-wheeled), Human / Vehicle Bestshot, Path Extraction</p> <p>Attribute Extraction<br/>People (gender, clothing color, bag, hat), Vehicle (bike, bus, car, motorcycle, truck, color)</p> <p>Human face Bestshot, Re-Search Extraction</p>                                                                                                                |
| Application                        | <p>Deep Learning VCA (Smart Motion Detection, Smart VCA)<br/>Smart VCA - Group 1<br/>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)</p> <p>Smart VCA - Group 2<br/>Unattended object detection, Missing object detection, Crowd detection</p> |
| Application available with license | <p>Smart VCA - Group 3<br/>Parking Violation Detection, Restricted Zone Detection</p> <p>*Support for more analytic applications and free trial, please visit VIVOTEK website.</p>                                                                                                                                                                                                                          |

## Solution Integration

|              |                                            |
|--------------|--------------------------------------------|
| VADP Package | Trend Micro IoT Security (Default 3 years) |
|--------------|--------------------------------------------|

## 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, Casing open detection |
| Event Action  | <p>Event notification via audio clip, camera link, digital output, email, HTTP, FTP/SFTP, NAS server, SD card</p> <p>File upload via email, HTTP, FTP/SFTP, NAS server, SD card</p>                                                                                                                          |

## General

|                       |                                                                                                                                                                                                                                                                                                 |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supported P/T/Z       | DynaDome/SmartDome, Pelco D, Pelco P, Lilin, Samsung scc643 and customized                                                                                                                                                                                                                      |
| Connectors            | <p>RJ-45 cable connector for 10/100/1000Mbps Network/PoE connection</p> <p>Audio input</p> <p>Audio output</p> <p>AC 24V power input *1</p> <p>DC 12V power input*1</p> <p>Digital input *2</p> <p>Digital output *2(DO+: 12V, 50mA; DO-: 30V, Open Drain, 1A)</p> <p>RS485*1</p> <p>BNC *1</p> |
| LED Indicator         | System power and status indicator                                                                                                                                                                                                                                                               |
| Power Input           | AC 24V, DC 12V, IEEE 802.3af PoE Class 0                                                                                                                                                                                                                                                        |
| Power Consumption     | <p>DC 12V: Max. 8.88 W</p> <p>AC 24V: Max. 17 W</p> <p>PoE: Max. 10 W</p>                                                                                                                                                                                                                       |
| Dimensions            | <p>155 (D) x 70 (W) x 61 (H) mm (w/o lens)</p> <p>210 (D) x 70 (W) x 66 (H) mm (w/ lens)</p>                                                                                                                                                                                                    |
| Weight                | <p>680 g (w/o lens)</p> <p>790 g (w/ lens)</p>                                                                                                                                                                                                                                                  |
| Certifications        | CE, LVD, FCC Class B, VCCI, C-Tick, UL/CUL, BIS, BSMI                                                                                                                                                                                                                                           |
| Operating Temperature | <p>Start Temperature: 0°C ~ 50°C (32°F ~ 122°F)</p> <p>Working temperature: -10°C ~ 60°C (14°F ~ 140°F)</p>                                                                                                                                                                                     |
| Humidity              | 90% (non-condensing)                                                                                                                                                                                                                                                                            |

## System Requirements

|                  |                                                  |
|------------------|--------------------------------------------------|
| Operating System | Microsoft Windows 8/7<br>Mac 10.12 (Chrome only) |
| Web Browser      | Chrome 58.0 or above<br>Internet Explorer 10/11  |
| Other Players    | VLC: 1.1.11 or above                             |

## Included Accessories

|                  |                                      |
|------------------|--------------------------------------|
| Packing Contents | Quick installation guide, screw pack |
|------------------|--------------------------------------|