





1080p 60 fps · 20x Zoom · 150M IR · NEMA 4X · IP66 · Defog · -50°C ~ 55°C · EIS · GbE Port

The SD9363-EHL is the latest professional speed dome camera from VIVOTEK, specifically designed to enhance low light surveillance in large coverage areas. Equipped with 150 M IR illuminators and a 20x optical zoom lens, the SD9363-EHL provides a superb low light image in the most challenging situations. The SD9363-EHL also adopts VIVOTEK's latest IR technology, VAIR (Vari-Angle IR). VIVOTEK'S VAIR provides smooth variangle adjustment of the IR illuminators, allowing broad coverage FOV and highly uniform IR intensity while avoiding hot-spots traditionally associated with IR illumination.

The SD9363-EHL is the PTZ surveillance camera with IR Illumination to utilize H.265 compression technology. When combined with VIVOTEK's Smart Stream II technology users can obtain bandwidth savings of up to 80%\* compared to traditional H.264. By combining 1080p full HD resolution with H.265, IR illuminators, VAIR, WDR, and 20x optical zoom, the SD9363-EHL is able to capture fine details at top-notch quality, 24 hours a day, 7 days a week. VIVOTEK

further strengthened the camera performance with an IP66- and NEMA 4X-rated housing to protect the camera against rain, dust, and corrosion. The SD9363-EHL has a wide operating temperature range from -50°C to 55°C, ensuring continuous operation under the most extreme weather conditions and hazardous environments. This makes the SD9363-EHL ideally suited to monitor wide open spaces such as ports, highways, cities, and parking lots where high-level precision is required.

As with all VIVOTEK true day/night cameras, the SD9363-EHL features a removable IR-cut filter, maintaining clear images 24 hours a day. Audio detection is included by recognizing changes in ambient noise. The SD9363-EHL also includes a SD/SDHC/SDXC card slot and supports up to 60 fps in 1080P full HD. For the most demanding outdoor surveillance application, there is nothing that compares to the VIVOTEK SD9363-EHL.

\* Depending on scene.

## **Key Features**

- · Real-time H.265, H.264 and MJPEG Compression (Triple Codec)
- · 1080p HD CMOS Sensor
- · 60 fps @ 1080p Full HD
- · 20x Zoom Lens, 150 M IR
- · VAIR (Vari-Angle IR)
- · Removable IR-cut Filter for Day & Night Function
- $\cdot$  360° Continuous Pan and 220° Tilt
- WDR Pro for Unparalleled Visibility in High Contrast Environments
- Weather-proof IP66-rated, Vandal-proof IK10 and NEMA 4X-rated Housing
- $\cdot$  -50°C  $\sim$  55°C Wide Temperature Range for Extreme Weather Conditions
- · Audio Detection for Instant Alerts
- · Auto Tracking for Moving Objects
- · Smart Stream II to Optimize Bandwidth Efficiency
- · 3D Privacy Masks for Additional Protection
- · Built-in SD/SDHC/SDXC Card Slot for On-board Storage
- · Defog
- · EIS



Without VAIR



With VAIR

## **Technical Specifications**

System Information	Model	SD9363-EHL
CPU Multimedia SoC (System-on-Chip) Flash 128MB RAM 512MB Camera Features  Image Sensor 1/3" Progressive CMOS Maximum Resolution 1920x1080 Lens Type 20x Optical Zoom, Auto Focus Focal Length f= 4.7 ~ 94 mm (20x zoom) Aperture F1.6 ~ F3.5 Auto-iris DC-iris Field of View 2" ~ 33" (Vertical) 3" ~ 63" (Diagonal) Shutter Time 1/8 sec. to 1/30,000 sec. WDR Technology WDR Pro Day/Night Removable IR-cut filter for day & night function Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (S/W) Pan Speed 0.1" ~ 300" / sec Pan Range 360" endless Tilt Speed 0.1" ~ 300" / sec Filt Range 220" (-110" ~ +110") Preset Locations 128 presets per tour 128 villetina Auto pan mode Auto partor mode Maximum Frame Rate M-265 & H.264: 60 fps @ 1920x1080 Maximum Frame Rate H-265 & H.264: 60 fps @ 1920x1080 Maximum Frame		3D9303-EUF
Flash RAM 512MB RAM 512MB Camera Features Image Sensor 1/3" Progressive CMOS Maximum Resolution 1920x1080 Lens Type 20x Optical Zoom, Auto Focus Focal Length f = 4.7 ~ 94 mm (20x zoom) Aperture Fl.6 ~ F3.5 Auto-iris DC-iris Field of View 2' ~ 33' (Vertical) 3' ~ 63' (Diagonal) Shutter Time 1/8 sec. to 1/30,000 sec. WDR Technology WDR Pro Day/Night Removable IR-cut filter for day & night function Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W) Pan Speed 0.1' ~ 300' / sec Pan Range 360' endless Tilt Speed 0.1' ~ 300' / sec Tilt Range 220' (110' ~ +110') Preset Locations 128 presets per tour 128 k digital zoom (4x on IE plug-in, 32x built-in) Functionalities Auto part mode IR Illuminators 150 m On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording Video Compression H265, H264, MJPEG Maximum Frame Rate MyEG; 30 fps @ 1920x1080 Maximum Streams 4 simultaneous streams S/N Ratio 53 dB Dynamic Range 110 dB Video Streaming Maximum Streams Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC Network Users Live viewing for up to 10 clients PV4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTPC, LGMP, SMTP, FTP, DHCP, RTSP/RTPC, CoS, QoS, SNMP, 802 1X, UDP, ICMP, ARP, SSL, TLS, NTCIP Interface Live viewing for up to 10 clients PV4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTPC, CoS, QoS, SNMP, 802 1X, UDP, ICMP, ARP, SSL, TLS, NTCIP Interface Live viewing for up to 10 clients PV4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTPC, CoS, QoS, SNMP, 802 1X, UDP, ICMP, ARP, SSL, TLS, NTCIP Interface Live viewing for up to 10 clients PV4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTPC, CoS, QoS, SNMP, 802 1X, UDP, ICMP, ARP, SSL, TLS, NTCIP Interface UNDAME UNDAME Supported, Specification available at www.	•	Multimedia SoC (System-on-Chin)
Camera Features		
Camera Features  Image Sensor  1/3" Progressive CMOS  Maximum Resolution  1920x1080  Lens Type  20x Optical Zoom, Auto Focus Focal Length  f = 4.7 ~ 94 mm (20x zoom)  Aperture  F1.6 ~ F3.5  Auto-iris  DC-iris  3" ~ 55" (Horizontal) 3" ~ 63" (Diagonal)  Shutter Time  1/8 sec. to 1/30,000 sec.  WDR Technology  WDR Pro  Day/Night  Removable IR-cut filter for day & night function  Minimum Illumination  0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W)  Pan Speed  0.1" ~ 300" / sec  Pan Range  360" endless  Tilt Speed  0.1" ~ 300" / sec  Tilt Range  220" (110" ~ +110")  Preset Locations  128 presets per tour  128x digital zoom (4x on IE plug-in, 32x built-in) built-in) Auto pan mode Auto patrol mode  IR Illuminators  150 m  On-board Storage  Video  Compression  H265, H264, MJPEG  Maximum Frame Rate  H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams  4 simultaneous streams  5/N Ratio 53 dB  Dynamic Range  110 dB  Video Streaming  Two-way audio (full duplex)  Compression  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  Pv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTPC, IGMP, SMTP, ETP, DHCP, RTSP/RTPC, IGMP, SMTP, ETP, DHCP, RTSP/RTPC, IGMP, SMTP, ETP, DHCP, RTSP/RTP,		·
Image Sensor   1/3" Progressive CMOS		3.22
Maximum Resolution 1920x1080  Lens Type 20x Optical Zoom, Auto Focus Focal Length f = 4.7 ~ 94 mm (20x zoom) Aperture F1.6 ~ F3.5  Auto-iris DC-iris  Field of View 2" ~ 55" (Horizontal) 2" ~ 33" (Vertical) 3" ~ 63" (Diagonal)  Shutter Time 1/8 sec. to 1/30,000 sec.  WDR Technology WDR Pro  Day/Night Removable IR-cut filter for day & night function  Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W)  Pan Speed 0.1" ~ 300" / sec  Pan Range 360" endless Tilt Speed 0.1" ~ 300" / sec  Tilt Range 220" (110" ~ +110")  Preset Locations 128 presets per tour 28 kgigital zoom (4x on IE plug-in, 32x built-in) Functionalities Auto patrol mode Auto patrol mode  IR Illuminators 150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video  Compression H265, H264, MJPEG  Maximum Frame Rate MJPEG: 30 fps @ 1920x1080 MpEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Network  Users Live viewing for up to 10 clients  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  Interface 200 opto 10 opto 200 opto 20		1/3" Progressive CMOS
Lens Type	-	· · · · · · · · · · · · · · · · · · ·
Focal Length f = 4.7 ~ 94 mm (20x zoom) Aperture F1.6 ~ F3.5 Auto-iris DC-iris  Field of View 3" ~ 55" (Horizontal) 2" ~ 33" (Vertical) 3" ~ 63" (Diagonal) Shutter Time 1/8 sec. to 1/30,000 sec.  WDR Technology WDR Pro  Day/Night Removable IR-cut filter for day & night function Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W) Pan Speed 0.1" ~ 300" / sec Pan Range 360" endless Tilt Speed 0.1" ~ 300" / sec Tilt Range 220" (110" ~ +110") Preset Locations 256 preset locations 128 presets per tour  Pan/Tilt/Zoom bull-tin) Functionalities IR Illuminators 150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video Compression H265, H264, MJPEG  Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams S/N Ratio 53 dB Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex) Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  PP4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTP/RTCP, ICMP, SMPP, ETP, DHCP, NTP, DMS, DDNS, PPP0E, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  Interface Supported, specification available at www.		
Aperture F1.6 ~ F3.5 Auto-iris DC-iris  Pield of View 2° - 33" (Vertical) 3° - 55" (Horizontal) 2° - 33" (Vertical) 3° - 63" (Diagonal)  Shutter Time 1/8 sec. to 1/30,000 sec.  WDR Technology WDR Pro  Day/Night Removable IR-cut filter for day & night function  Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W)  Pan Speed 0.1° - 300° / sec  Pan Range 360° endless  Tilt Speed 0.1° - 300° / sec  Pan Range 220° (110° ~ +110°)  Preset Locations 128 presets per tour 128 presets per tour 128 presets per tour 128 presets per tour 128 pull-tin)  Functionalities 2150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording 150 m  Video Compression H265, H264, MJPEG Maximum Frame Rate MJPEG: 30 fps @ 1920x1080 MJPEG		
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Field of View 2" ~ 33" (Vertical) 3" ~ 63" (Diagonal)  Shutter Time 1/8 sec. to 1/30,000 sec.  WDR Technology WDR Pro  Day/Night Removable IR-cut filter for day & night function  Minimum Illumination 0.26 Lux @ F1.6 (Color) 0.01 Lux @ F1.6 (B/W)  Pan Speed 0.1" ~ 300" / sec  Pan Range 360" endless  Tilt Speed 0.1" ~ 300" / sec  Tilt Range 220" (-110" ~ +110")  Preset Locations 128 presets per tour  Pan/Tilt/Zoom 256 preset locations 128 presets per tour  Pan/Tilt/Zoom 4 Lax digital zoom (4x on IE plug-in, 32x built-in) Auto pan mode Auto patrol mode  IR Illuminators 150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video  Compression H265, H264, MJPEG  Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex)  Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  Protocols 10 Base-Ty/100 Bas	Auto-iris	DC-iris
WDR Technology  Day/Night  Removable IR-cut filter for day & night function  Minimum Illumination  O.26 Lux @ F1.6 (Color) O.01 Lux @ F1.6 (B/W)  Pan Speed  O.1' ~ 300' / sec  Pan Range  360' endless  Tilt Speed  O.1' ~ 300' / sec  Tilt Range  220' (110' ~ +110')  Preset Locations  128 presets per tour  128x digital zoom (4x on IE plug-in, 32x built-in) Functionalities  Auto pan mode Auto patrol mode  IR Illuminators  150 m  On-board Storage  Video  Compression  H265, H264, MJPEG  Maximum Frame Rate  MJEG: 30 fps @ 1920x1080  MJPEG: 30 fps @ 1920x1080  MJPEG: 30 fps @ 1920x1080  Maximum Streams  S/N Ratio  53 dB  Dynamic Range  Video Streaming  Video Streaming  Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  Jetternal microphone input External line output  Network  Users  Live viewing for up to 10 clients  Protocols  Protocols  Protocols  Live viewing for up to 10 clients  Interface  Live viewing for up to 10 clients  Protocols  Protocols  Audio Base-Ty/100 Base-Ty/1000 Base-Tethernet (RJ-45)  **It is highly recommended to use standard CATSe & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	Field of View	2° ~ 33° (Vertical)
Day/Night   Removable IR-cut filter for day & night function	Shutter Time	1/8 sec. to 1/30,000 sec.
Minimum Illumination  Minimum Illumination  Minimum Illumination  Minimum Illumination  Minimum Illumination  Minimum Illumination  O.26 Lux @ F1.6 (B/W)  Pan Speed  O.1" ~ 300" / sec  Pan Range  360" endless  Tilt Speed  O.1" ~ 300" / sec  Tilt Range  220" (110" ~ +110")  Preset Locations  Preset Locations  128x digital zoom (4x on IE plug-in, 32x built-in)  Auto pan mode Auto patrol mode  R Illuminators  Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video  Compression  H265, H264, MJPEG  Maximum Frame Rate  MJPEG: 30 fps @ 1920x1080  MMPEG: 30 fps @ 1920x1080  Maximum Streams  S/N Ratio  53 dB  Dynamic Range  110 dB  Video Streaming  Adjustable image size, quality and bit rate Smart Stream Il  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (R)-45)  "It is highly recommended to use standard CATSe & CAT6 cables which are compliant with the 3P/ETL standard.  CANME  Supported, Specification available at www.	WDR Technology	
Pan Speed  O.1' ~ 300' / sec  Pan Range  360' endless  Tilt Speed  O.1' ~ 300' / sec  Tilt Range  220' (-110' ~ +110')  Preset Locations  128 presets per tour  128x digital zoom (4x on IE plug-in, 32x built-in)  Functionalities  Auto pan mode Auto patrol mode  IR Illuminators  On-board Storage  Video  Compression  H265, H264, MJPEG  Maximum Frame Rate  MJPEG: 30 fps @ 1920x1080  Maximum Streams  4 simultaneous streams  S/N Ratio  53 dB  Dynamic Range  110 dB  Video Streaming  Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  Interface  Interface  Supported, Specification available at www.	Day/Night	function
Pan Range 360' endless  Tilt Speed 0.1' ~ 300' / sec  Tilt Range 220' (-110' ~ +110')  Preset Locations 128 presets locations 128 presets per tour  128x digital zoom (4x on IE plug-in, 32x built-in) Functionalities Auto pan mode Auto patrol mode  IR Illuminators 150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video  Compression H265, H264, MJPEG  Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex)  Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SMMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  I0 Base-T7/100 Base-TX/1000 Base-T Ethernet (R)-45)  "It is highly recommended to use standard CATS & CAT6 cables which are compliant with the 3P/ETL standard.		0.01 Lux @ F1.6 (B/W)
Tilt Speed 0.1' ~ 300' / sec  Tilt Range 220' (-110' ~ +110')  Preset Locations 256 preset locations 128 presets per tour  128x digital zoom (4x on IE plug-in, 32x built-in) Auto pan mode Auto patrol mode  IR Illuminators 150 m  On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording  Video  Compression H265, H264, MJPEG  Maximum Frame Rate MJPEG: 30 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex)  Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SMMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  Interface 'It is highly recommended to use standard CATS & CAT6 cables which are compliant with the 3P/ETL standard.  ONNIE Supported, specification available at www.	•	
Tilt Range 220' (-110' ~ +110')  Preset Locations 256 preset locations 128 presets per tour 128x digital zoom (4x on IE plug-in, 32x built-in) Auto pan mode Auto patrol mode 150 m  On-board Storage 5lot type: SD/SDHC/SDXC card slot Seamless Recording Video  Compression H265, H264, MJPEG  Maximum Frame Rate MJPEG: 30 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1		
Preset Locations    256 preset locations   128 presets per tour	•	
Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Functionalities Pan/Tilt/Zoom Pan/Tilt/Zoom Pan/Tilt/Zoom Punctionalities Punctionalities Pon-board Storage Pon-board	i iit kange	
Pan/Tilt/Zoom Functionalities Auto pan mode Auto patrol mode IR Illuminators 150 m On-board Storage Slot type: SD/SDHC/SDXC card slot Seamless Recording Video Compression H265, H264, MJPEG Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080 Maximum Streams 4 simultaneous streams S/N Ratio 53 dB Dynamic Range 110 dB Video Streaming Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio Audio Audio Capability Two-way audio (full duplex) Compression G.711, G.726 Interface External microphone input External line output  Network Users Live viewing for up to 10 clients IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTPC, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP 10 Base-T/100 Base-TX/1000 Base-T Ethernet (R)-45) "It is highly recommended to use standard CATSe & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	Preset Locations	128 presets per tour
On-board Storage       Slot type: SD/SDHC/SDXC card slot Seamless Recording         Video       Compression       H265, H264, MJPEG         Maximum Frame Rate       H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080         Maximum Streams       4 simultaneous streams         S/N Ratio       53 dB         Dynamic Range       110 dB         Video Streaming       Adjustable resolution, quality and bit rate Smart Stream II         Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC         Audio       Audio Capability       Two-way audio (full duplex)         Compression       G.711, G.726         Interface       External microphone input External line output         Network       Users         Users       Live viewing for up to 10 clients         IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP         Interface       Interface       It is highly recommended to use standard CATSe & CAT6 cables which are compliant with the 3P/ETL standard.         ONIVIE       Supported, specification available at www.		built-in) Auto pan mode
Video  Compression H265, H264, MJPEG  Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex)  Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  IPV4, IPV6, TCP/IP, HTTP, HTTPS, UPPP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoŚ, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	IR Illuminators	150 m
Compression H265, H264, MJPEG  Maximum Frame Rate H.265 & H.264: 60 fps @ 1920x1080 MJPEG: 30 fps @ 1920x1080  Maximum Streams 4 simultaneous streams  S/N Ratio 53 dB  Dynamic Range 110 dB  Video Streaming Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability Two-way audio (full duplex)  Compression G.711, G.726  Interface External microphone input External line output  Network  Users Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  ONNUE Supported, specification available at www.		
Maximum Frame Rate       H.265 & H.264: 60 fps @ 1920x1080         Maximum Streams       4 simultaneous streams         S/N Ratio       53 dB         Dynamic Range       110 dB         Video Streaming       Adjustable resolution, quality and bit rate Smart Stream II         Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC         Audio       Audio Capability         Audio Capability       Two-way audio (full duplex)         Compression       G.711, G.726         Interface       External microphone input External line output         Network       Users         Live viewing for up to 10 clients         IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoŚ, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP         Interface       Interface (RJ-45)         *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.         ONIVIE       Supported, specification available at www.	Video	
Maximum Streams  4 simultaneous streams  5/N Ratio  53 dB  Dynamic Range  110 dB  Video Streaming  Adjustable resolution, quality and bit rate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPV4, IPV6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoŚ, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	Compression	
S/N Ratio  Dynamic Range  110 dB  Video Streaming  Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.		MJPEG: 30 fps @ 1920x1080
Dynamic Range  Video Streaming  Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPV4, IPV6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, DPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.		
Video Streaming  Adjustable resolution, quality and bitrate Smart Stream II  Adjustable image size, quality and bit rate Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	•	
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Image Settings  Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR, EIS, HLC  Audio  Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	Video Streaming	Smart Stream II
Audio Capability  Two-way audio (full duplex)  Compression  G.711, G.726  Interface  External microphone input External line output  Network  Users  Live viewing for up to 10 clients  IPV4, IPV6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTTP, TRYP, TPT, DHCP, NTP, DNS, DDNS, PPP0E, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  ONNUE  Supported, specification available at www.	Image Settings	Time stamp, text overlay, flip & mirror Configurable brightness, contrast, saturation, sharpness, white balance, exposure control, gain, backlight compensation, privacy masks (Up to 24) Scheduled profile settings, Defog, 3DNR,
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Users  Live viewing for up to 10 clients  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPOE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  ONNIE  Supported, specification available at www.	Interface	
Protocols  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45)  *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  ONNUE  Supported, specification available at www.	Network	
Protocols  RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, SSL, TLS, NTCIP  10 Base-T/100 Base-TX/1000 Base-T Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  ONNIE  Supported, specification available at www.	Users	
Interface  Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant with the 3P/ETL standard.  Supported, specification available at www.	Protocols	RTSP/RTP/RTCP, IGMP, SMTP, FTP, DHCP, NTP, DNS, DDNS, PPPoE, CoS, QoS, SNMP,
	Interface	Ethernet (RJ-45) *It is highly recommended to use standard CAT5e & CAT6 cables which are compliant
onvif.org	ONVIF	Supported, specification available at www. onvif.org

Intelligent Video	
Video Motion Detection	Five-window video motion detection
Auto-Tracking	Auto-tracking on moving object
Alarm and Event	
Alarm Triggers	Motion detection, manual trigger, digital input, periodical trigger, system boot, recording notification, audio detection
Alarm Events	Event notification using digital output, HTTP, SMTP, FTP, NAS server and SD CardFile upload via HTTP, SMTP, FTP, NAS server and SD card
General	
Connectors	RJ-45 cable connector for Network 10/100/1000Mbps PoE connection Audio input Audio output DC 48V power input Digital input*4 Digital output*2 RS-485 for PTZ control (PelcoD protocol, Baud rate 2400)
LED Indicator	System power and status indicator
Power Input	95W PoH/PoE DC 48V
Power Consumption	Max. 81.8 W (Heater on) Max. 28.5 W (Heater off)
Dimensions	Ø 204 x 285 mm
Weight	Net: 6,030 g
Casing	Weather-proof IP66, Vandal-proof IK10 and NEMA 4X-rated housing
Safety Certifications	CE, FCC Class A, VCCI, C-tick, NEMA 4X, UL
Operating Temperature	Starting Temperature: -40°C ~ 55°C (-40°F ~ 131°F) Working Temperature: -50°C ~ 55°C (-58°F ~ 131°F)
Humidity	90%
Warranty	36 months
<b>System Requirements</b>	
Operating System	Microsoft Windows 8/7/Vista/XP/2000
Web Browser	Mozilla Firefox 7~43 (streaming only) Internet Explorer 7/8/9/10/11
Other Players	VLC: 1.1.11 or above Quicktime: 7 or above
<b>Included Accessories</b>	
CD	User's manual, quick installation guide, Installation Wizard 2, VAST
Others	Wall mount bracket, screws, waterproof connectors, terminal blocks, quick installation guide, warranty card, alignment sticker, ground wire, T25 stardriver, software CD, desiccant bags, AO-003 I/O cable
Dimensions	



