V1631MN-T Series

HD 2MP Explosion-proof IP PTZ Camera System

Infinova®
The Integrator's Manufacturer

- Embedded with 20X/30X high-definition camera module
- Full HD IP video output with resolution up to 1920×1080@ 30fps
- 316 stainless steel construction, IP68 environmental rating
- Strong corrosion-resistant capabilities
- Use in flammable and explosive hazardous areas
- H.264 High profile/M-JPEG dual-stream encoding, three simultaneous video streams
- Two-way audio, G.711
- Support RS485 and analog video output for easy adjustment
- Support remote PTZ control
- Support area zoom and image PTZ
- Support graphic OSD display
- Multiple white balance modes
- Auto gain control
- Wide dynamic range
- Timed switch between color and B/W modes
- Local recording
- Support preset, pattern, auto-pan, tour and home return, etc.
- Support upgrade online
- 2 alarm inputs and 1 relay output
- Up to 4 motion detection areas
- Supports servo feedback mechanism and multiple ways to handle alarms, such as relay output, sending an email, FTP uploading and audible warning, etc.
- Onvif Profile S
- Built-in with wiper
- 0.1°~30°/s variable-speed of Pan/Tilt movement
- 360° continuous Pan/Tilt rotation

V1631MN-T series HD 2MP explosion-proof integrated IP PTZ camera is fully-developed and specially designed for use in flammable and explosive hazardous areas. The system uses 316 stainless steel to ensure its good explosion-proof performance in hazardous areas. It has an absolute operating temperature range of -40°F~140°F (-40°C~60°C). This camera is properly sealed to prevent the intake of flammable dust and ensure strong corrosion-resistant capabilities.

V1631MN-T supports H.264/M-JPEG dual-stream encoding and three simultaneous video streams. It's embedded with 20X/30X HD zoom camera module with resolution up to 1920×1080@30fps.

The user-friendly GUI interface is designed for easy PTZ control and convenient camera parameter settings. Thus, it makes easier to set the PTZ and perform operations with a mouse than traditional keyboard. In addition, area zoom and image PTZ are also offered. The intelligent motion detection and multiple alarm responses make it even safer to use.

V1631MN-T series cameras also provide functions such as preset, pattern, autopan, autoscan and normal tour, etc.

The series also supports analog video output, RS-485 control and baud rate switch, convenient for various networking requirements.

V1631MN-T series allows 360°continuous pan/tilt rotation at the speed of 0.1~30°/s. An optoelectronic device is embedded to detect the position of camera housing. It will send signals to the processor when the camera housing is turned upside down. Then, the processor sends an order to flip the image for normal view.

Technical specifications

Models

V1631MN-20TT, V1631MN-20TL, V1631MN-30TH

Lens

Optic Zoom	20X/30X
Aperture/ Focal Length	20TT/20TL: F1.6~F3.5, f=4.7~94mm 30TH: F1.4~F4.6, f=4.4~132mm
Angle of View	20TT: 59.6° (Wide) ~ 3.2° (Tele) 20TL: 59.5° (Wide) ~ 3.2° (Tele) 30TH: 63.4° (Wide) ~ 2.3° (Tele)
Min. Work Distance	20TT/20TL: 0.01m (Wide) ~ 1.0m (Tele) 30TH: 0.01m (Wide) ~ 1.5m (Tele)

Camera

Image Sensor	20TT/20TL/30TH: 1/2.8" CMOS
Scanning System	Progressive Scanning
Effective Pixels	2.0MP
Day/Night	IR-Cut Filter
S/N Ratio	>50dB
Sensitivity(20TT)	Color mode: 0.4 lux@ F1.6 (1/30s, 350mV equiv., AGC-Gain: 48dB) 0.1 lux@ F1.6 (1/8s, 350mV equiv., AGC-Gain: 48dB) B/W mode: 0.01 lux@ F1.6 (1/8s, 350mV equiv., AGC-Gain: 48dB)
Sensitivity(20TL)	Color mode: 0.04 lux @ F1.6 (AGC ON) B/W mode: 0.005 lux @ F1.6 (AGC ON)
Sensitivity (30TH)	Color mode: 0.4 lux @ F1.4 (1/30s, 350mV equiv., AGC-Gain: 48dB) 0.1 lux @ F1.4 (1/8s, 350mV equiv., AGC-Gain: 48dB) B/W mode: 0.01 lux @ F1.4 (1/8s, 350mV equiv., AGC-Gain: 48dB)
Sync System	Internal
Iris	Auto / Manual / M/A
Focus	Auto / Manual / M/A
Shutter Speed	20TT: Auto (1/1 ~ 1/30000s) 20TL: Auto (1/1 ~ 1/10000s) 30TH: Auto (1/2 ~ 1/30000s)
DSS	Available

Image

Max. Resolution	1920×1080 @ 30fps
Image Mirror	OFF/H-mirror/V-mirror/HV-mirror
Image Freeze	20TT/30TH: Available 20TL: N/A
DNR	20TT/30TH: OFF/Manual/Auto (level 1-3 adjustable) 20TL: OFF/1~5 adjustable
White Balance	20TT: AUTO/MANU/SODI/MERC 20TL: AUTO/MANU/INDOOR/OUTDOOR/ ATW/OUTDOOR AUTO/SODI AUTO 30TH: AUTO/MANU/SODI/MERC
AGC	Available
WDR	20TT: WDR/AD WDR 20TL: ON/OFF 30TH: OFF/WDR*/AD WDR*
BLC	ON/OFF
Defog	Available
Others	20TT: Sharpness adjustable, slow AE, brightness enhancing 20TL: Sharpness, contrast, brightness, saturation adjustable, slow AE, chroma suppress, edge color suppress 30TH: Sharpness adjustable, slow AE, brightness mode, brightness enhancing, HLC level

Operational

Presets	1~255
Patterns	4
Autopans	4
Normal Tours	6 (each tour can be associated with 14 acts, including Preset 1~32, Pattern 1~4, AutoPan 1~4)
Home Return	Available
Timed Tours	Available
Auto Scan	Available
Motion Detection	4 areas
Alarm	2 alarm inputs, 1 relay output
Area Zoom	Available
Web Server	Available
Upgrade Online	Available

Network

Data Rate	Variable bit rate (vbr); Constant bit rate (cbr): 256Kbps~10Mbps
Network Delay	<300ms
Network Protocol	IPv6, IPv4, TCP, UDP, IGMP, DHCP, FTP, SNMP(V3), SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, TSL, SSL, 802.1X, QoS, PPPoE, DNS, ARP, ICMP
Security	IEEE 802.1X, IP Address Filtering

Compression

Audio Compression	G.711
Video Compression	H.264 high profile/M-JPEG

Interface

Audio Port	1 input (linear level, resistance: 1kΩ) 1 output (linear level, resistance: 600kΩ)
Network Port	1 * 10M/100M self-adaptive Ethernet port, RJ-45

Mechanical

Pan Rotation Angle	360°
Tilt Rotation Angle	360°
Pan Rotation Speed	0.1°/s to 30°/s
Tilt Rotation Speed	0.1°/s to 30°/s

Electrical

Input Voltage	100~240VAC
Current Rating	500mA
Power Consumption	80W
Voltage Range	±10%

Environmental

Atmospheric Pressure	86kpa~110kpa
Operating Temp.	-40°F~140°F (-40°C~+60°C)
Storage Temp.	-40°F~158°F (-40°C~+70°C)
Relative Humidity	≤95%RH (77°F/+25°C)
Application Field	For Division 1 and 2 hazardous locations where fire or explosion hazards may exist due to the presence of flammable gases or vapors (Gas Groups: II A, II B, II C; Temperature Classes: T1-T6); For zone 21 and 22 hazardous locations where combustible dust clouds may occur

Physical

Material	316 stainless steel
Environmental Rating	IP68 (1.5m/2h)
Product Weight	84 lbs. (38±5%kg)
Shipping Weight	121 lbs. (55±5%kg)
Mounting	Surface, Wall, Corner, Pole Side, Pole Pendant, Pole Stand, Pole Top

Certifications and Approval

Product Certifications	CNEx, ExdIICT6 Gb, DIP A21 TA, T6 [1], IECEx, ExdIICT6 Gb, ExtIIICT80°C Db [2], CE/EMC: EN 55022, EN 55024, EN61000-3-2,61000-3-3 [3], FCC [4], CCOE [5], ISO 9001:2008

Certificate No.: [1] CNEx12.1920X; [2] IECEx CQM 12.0020X; [3] CTL1406251446-EC; [4] CTL1406251446-FC; [5] P338685/1

Ordering information

V1631MN-20T29T-2 HD 2MP Explosion-proof PTZ camera system, 2.0MP, 20X, 1/2.8" progressive scanning CMOS, H.264/M-JPEG, 316 Stainless Steel, audio alarm, 100~240VAC

V1631MN-20T29L-2 HD 2MP Explosion-proof PTZ camera system, 2.0MP, 20X, 1/2.8" progressive scanning CMOS, H.264/M-JPEG, 316 Stainless Steel, audio alarm, 100~240VAC

V1631MN-30T29H-2 HD 2MP Explosion-proof PTZ camera system, 2.0MP, 30X, 1/2.8" progressive scanning CMOS, H.264/M-JPEG, 316 Stainless Steel, audio alarm, 100~240VAC

Recommended Installation Mounts

V1664-W   Wall Mount, 316 Stainless Steel
V1664-C   Corner Mount, 316 Stainless Steel
V1664-S   Pole Mount, 316 Stainless Steel

Note: Mounting brackets shall be ordered.

Dimensions

Front View   Side View
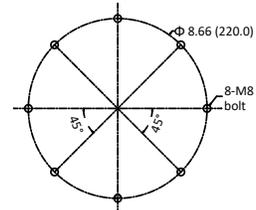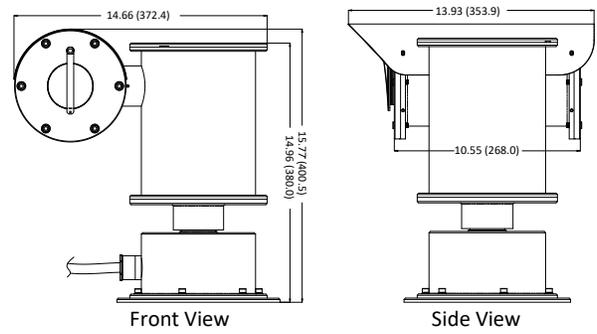
Base

(Unit: inch, in the parentheses is mm)

Mounting
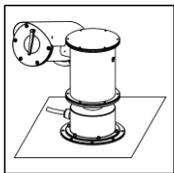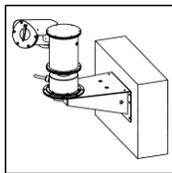
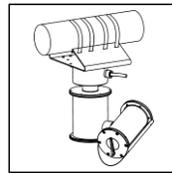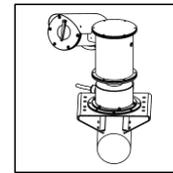

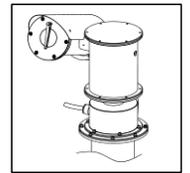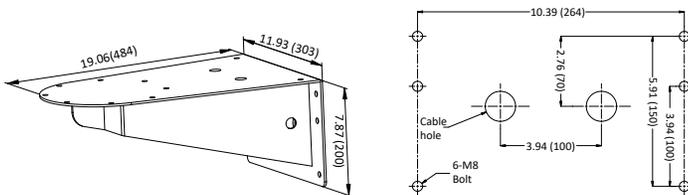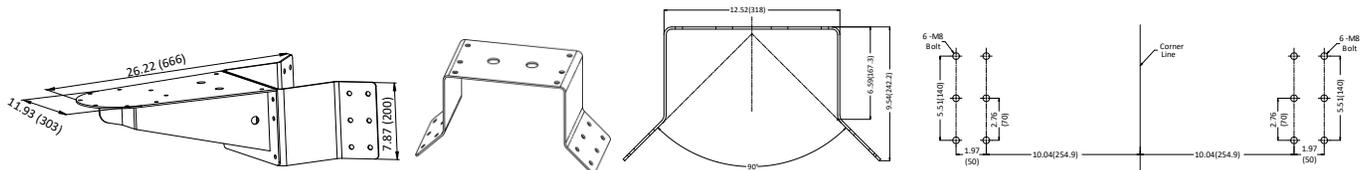Surface Mounting   Wall Mounting   Corner Mounting   Pole Side Mounting   Pole Pendant Mounting   Pole Stand Mounting   Pole Top Mounting
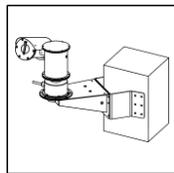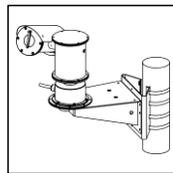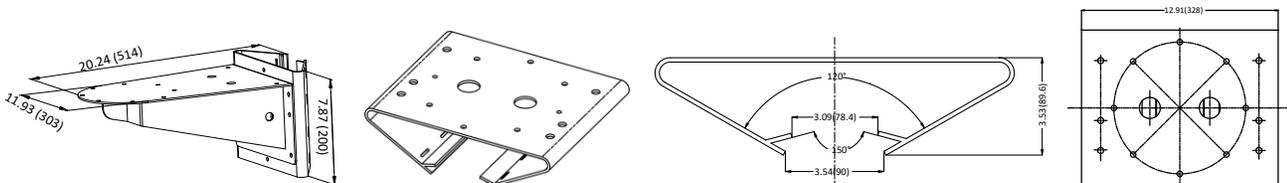
Mounts & adapters dimensions

V1664-W Mount:

Corner Mount Adapters for V1664-C:

Pole Side Mount Adapters for V1664-S:

(Unit: inch, in the parentheses is mm)