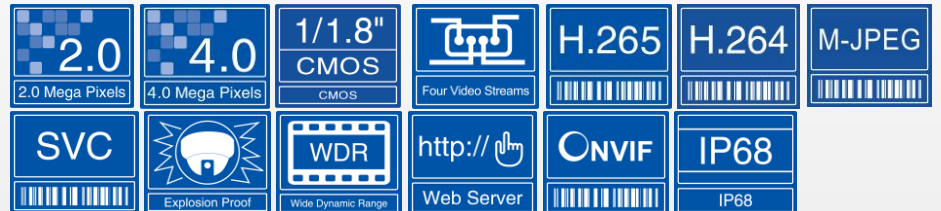


# VP160-A244-M SERIES

EXPLOSION-PROOF LASER PTZ CAMERA

**Infinova**<sup>®</sup>



## FEATURES

- The chip is integrated with TPU module, and supports video structuration function based on deep learning algorithm.
- 316/316L stainless steel construction, IP68 environmental rating
- Strong corrosion-resistant capabilities
- HD network video output: 1920x1080@60fps and 2560x1440@30fps
- 30X optical zoom, fast and accurate focusing
- 1/1.8" Large area progressive scanning CMOS sensor
- Ultra-low illumination: 0.0005 lux
- Supports frame integration WDR, with dynamic range up to 120dB
- H.265/H.264/M-JPEG/SVC video encoding, quad video streams
- Features rich smart functions such as video anomaly detection, behaviour-analysis detection, sound detection, statistics detection and intelligent grouping detection
- Support multi-target detection, tracking and snapshot; support optimum selection and duplicate removal for captured structured images; small face images and panoramic images are optional to be uploaded to platforms for secondary analysis and retrieval.
- Up to 8 ROI (Region of Interest) areas.
- Onvif Profile S/G/T and RTSP compliant
- Bi-directional audio, G.711-A/G.711-U/AAC /G.726 standard optional
- 1 alarm inputs, 1 on-off output
- Support remote PTZ control
- Support preset, tour and home return, etc.
- 360° continuous rotation in the horizontal direction, -90° to +90° in the vertical direction, no monitoring blind zone.
- Built-in with laser source, the night illumination distance reaches up to 500m.
- Built-in with wiper
- IP68 rating

# DESCRIPTION

VP160-A244-M series HD 2MP/4MP explosion-proof integrated IP PTZ camera is fully-developed and specially designed for use in flammable and explosive hazardous areas that has iia, iib, iic flammable gas, and the ignition temperature group is T6 group.

The flammable gas or the explosive mixture formed by steam and air is also applicable to the ignition temperature group. Such as: petroleum, chemical, mine, military, medicine, oil depot, ship, drilling platform, gas station, fireworks production, grain processing and storage. The system uses 316L stainless steel to ensure it's good, explosion-proof performance in hazardous areas. It has an absolute operating temperature range of -4°F~140°F (-20°C~60°C). This camera is properly sealed to prevent the intake of flammable dust and ensure strong corrosion-resistant capabilities.

All products shall meet the provisions of standard Ex db IIC T6 Gb (-40 °C ≤ Ta ≤ +60 °C)/ Ex tb IIIC T80°C Db (-40 °C ≤ Ta ≤ +60 °C) IP68 (For IPX8: 2 meter & 2 hours)

The user-friendly GUI interface is designed for easy PTZ control and convenient camera parameter settings. In addition, area zoom and image PTZ are also offered. The intelligent motion detection and multiple alarm responses make it even safer to use.

# TECHNICAL SPECIFICATIONS

<b>Lens (Visible)</b>	
Image Sensor	1/1.8" progressive scan CMOS
Optical Zoom	30X
Digital Zoom	12X
Focal Length	f=6 ~ 180mm
Iris	F1.6 ~ F4.8
Focus	Auto/Manual/Semi-Auto/One Button Focus
FOV(H/V/D)	2MP - H: 56.3°-2.2°; V: 32.9°-1.2°; D: 63.3°-2.5° 4MP- H: 57.5°-2.2°; V: 33.7°-1.3°; D: 64.5°-2.6°
Lens Mount	-
<b>Lens (Thermal)</b>	
Imager Type	-
Lens Type	-
Spectral Band	-
Pixel Size	-
NETD	-
Focal Length	-
FOV	-
<b>Video</b>	
Camera Resolution (Visible Lens)	2MP/4MP
Camera Resolution (Thermal Lens)	-
Max. Coding Capacity 2MP (Visible Lens)	Major stream: H.264/H.265 -60fps@1920x1080 Minor stream: H.264/H.265 -30fps@1920x1080 Third stream: H.264/H.265 -30fps@384x256 Fourth stream: H.264/H.265 -30fps@384x256
Max. Coding Capacity 4MP (Visible Lens)	Major stream: H.264/H.265 -60fps@1920x1080 Minor stream: H.264/H.265 -30fps@1920x1080 Third stream: MJPEG -30fps@1920x1080 Fourth stream: H.264/H.265 -30fps@384x256
Max. Coding Capacity 4MP (Visible Lens)	Major stream: H.264/H.265 -30fps@2560x1440 Minor stream: H.264/H.265 -30fps@1920x1080 Third stream: H.264/H.265 -30fps@384x256 Fourth stream: H.264/H.265 -30fps@384x256
Max. Coding Capacity (Thermal Lens)	-

Data Rate 2MP	Major stream: 128kbps~10240kbps Minor stream: 128kbps~4096kbps Third stream: 128kbps~512kbps Fourth stream: 128kbps~512kbps
Data Rate 4MP	Major stream: 128kbps~16384kbps Minor stream: 128kbps~8192kbps Third stream: 128kbps~512kbps Fourth stream: 128kbps~512kbps
Video Compression	H.265/H.264/MJPEG/SVC independent coding
Multi-Streaming	Four-stream independent output
Video Rotation	Video can be rotated by 0°, 90°, 180°, 270°
<b>Audio</b>	
Audio Compression	G.711-A/ G.711-U/ AAC
Sample Rate	8KHz (for G.711-A/G.711-U) 16KHz, 32KHz, 44.1KHz or 48KHz (for AAC)
Audio Interface	1 Input, 1 Output
Two-way Audio	Available
Mic & Speaker	-
<b>Image</b>	
Shutter	Auto/Manual (1/1s~1/32000s)
WDR	Up to 120dB
Exposure	Auto/Manual/Shutter
Sensitivity	Color mode: 0.005lux (IR OFF); B/W mode: 0.0005lux (IR OFF); 0 Lux (IR ON)
White Balance	Auto/Manual/Outdoor
Video Adjustment	Brightness, sharpness, saturation, contrast
Noise Reduction	3D
S/N Ratio	>62dB
Defog	Available
EIS	Available
Mirror	Horizontal, vertical
Corridor Mode	-
Day/Night Switching	ICR
AGC	Available
BLC	Available
HLC	Available
Privacy Mask	Up to 4 definable zones
ROI	Up to 8 definable zones
OSD	Supported
<b>Pan/Tilt Functions</b>	
Preset	255
Pattern	12
Autopan	12

# TECHNICAL SPECIFICATIONS

Normal Tour	16 groups (each tour can link to 14 actions, optional with Presets 1~32)
Home Return	Available
Timing Tour	Available
Autoscan	-
Area Zoom	Available
<b>IR Illumination</b>	
Smart-IR/Laser	Available
Wave Length	Laser
Night Vision Distance	500m
<b>Temperature Measurement</b>	
Screening Function	-
Measurement	-
Measurement Distance	-
Measurement Range	-
Accuracy	-
<b>Smart Analytics</b>	
Video Analytics	<p>Video Anomaly Detection- Camera tampering, camera shifting, defocus detection, high brightness detection, low brightness detection, video loss detection, color cast detection, and motion detection</p> <p>Behaviour Analysis Detection- Wire crossing detection, intrusion detection, object abandoned detection, object lost detection, loitering detection, crowd detection, fast moving detection and target fall detection</p> <p>Sound Detection- Abnormal sound detection</p> <p>Statistics Detection- Counting, density detection, queue length detection and dwelling detection</p> <p>Intelligent Grouping Detection- Face detection grouping, behaviour analysis grouping, people and vehicle coexistence detection grouping</p> <p>Multi-object detection- Support face, pedestrian, motor vehicle, and non-motor vehicle detection</p> <p>Capture- Support target detail capture</p> <p>Optimum Selection- Support optimum selection and duplicate removal for captured images to deliver the best-quality images</p> <p>Video Structurization- Support structurized object attributes: -Face attributes: gender, glasses, eyes open, mask, mouth open and facial expression (angry, disgusted, fearful, happy, sad, surprised or neutral)</p> <p>-Pedestrians attributes: gender, age (youth, middle-aged, elderly or teenager), top style (long sleeve, short sleeve, robe or trench coat, stripe, logo, plaids, matching or splicing), top color (white, black, red, yellow, grey, blue, green, dark grey or purple), bottom style (long pants, shorts, skirt, stripes or patterns), bottom color (white, black, red, yellow, grey, blue, green, dark grey or purple), glasses, hat, backpack, shoulder bag, holding kids, objects in hand, protective clothing, safety helmet, direction (front, back, side)</p> <p>-Motor vehicle attributes: Types (car, tricycle, truck, pickup trucks, van, bus), vehicle brands, vehicle body color (black, blue, brown, green, grey, white, red, yellow, pink, purple, dark grey, silver, orange, cyan and other), license plate number, license plate color (yellow, blue, black, white and green), license plate types (small car plate, large car plate, new energy vehicle license</p>

	plate, large truck or trailer license plate), direction (front, rear, left, right, left front, right front, left rear and right rear) -Non-motor vehicle attributes: type (bicycle, motorcycle), equipped with umbrella, helmet, overload, direction (front, rear, left, right, left front, right front, left rear and right rear).
<b>Storage</b>	
Storage Slots	Support a single card
Built-in Storage	512GB
NAS Storage	-
Local PC Recording	Available
<b>Alarm</b>	
Alarm Ports	1 Alarm input, 1 Alarm output
Alarm Input	I/O input, motion detection, smart analysis, SD card removal, network disconnection, heartbeat loss
Alarm Association	I/O output, email, FTP upload, audio, SD card snapshot, SD card recording
<b>System Functions</b>	
Operating System	Win7 and higher versions
Browser	IE8 and higher versions
Access Protocol	ONVIF Profile S/G/T, CGI 2.7
Multiple Access	Up to 20-ch simultaneous access
Web Server	Available
Remote Upgrade	Available
Password Protection	Available
RS485 Port	Adopt half-duplex mode, support adaptive Pelco -P and Pelco-D
Analog Video Output	-
Maximum Number of Users	64, with 3 types of users available: administrator, normal user, and operator
Wiper	Available
<b>Network</b>	
Network Interface	1*RJ45 10/100M self-adaptive Ethernet port
Network Protocols	IPv4/IPv6, TCP, UDP, IGMP, ICMP, IGMPv2/3, DHCP, SNMP (V1, V2, V3), FTP, SMTP, NTP, RTP, RTSP, RTCP, HTTP, HTTPS, SSL, 802.1x, QoS, PPPoE, DNS, DDNS, ARP, UPnP, IP Filter, TLS, Multicast, SIP
IP Address Filtering	Support blacklist and whitelist filtering
Network Delay	<200ms
<b>Environmental</b>	
Anti-Static	Air discharge: 8KV, contact protection: 6KV
Surge Protection	Difference mode: ±4KV, common mode: ±4KV (for network port and power port)
Operating Temperature	-4°F~140°F (-20°C~60°C)
Storage Temperature	-4°F~140°F (-20°C~+60°C)
Operating Humidity	≤95% RH
Environmental Rating	IP68
Impact Resistance	-
<b>Mechanical</b>	
Manual Speed	Pan: 0.1°/s ~ 40°/s; Tilt: 0.1°/s ~ 40°/s
Preset Speed	0.1°/s ~ 40°/s
Rotation Angle	H: 0°-360°; V: -90°+90°
Preset Accuracy	±0.1°
Electric Motor	Stepping motor
<b>Electrical</b>	
Power Supply	85 ~ 260VAC

Power Consumption	≤75W
<b>Physical</b>	
Product Dimension (L×W×H) or (H x D)	449*303*445mm (length * width * height)
Package Dimension (L x W x H)	540mm×540mm×330mm (length * width * height)

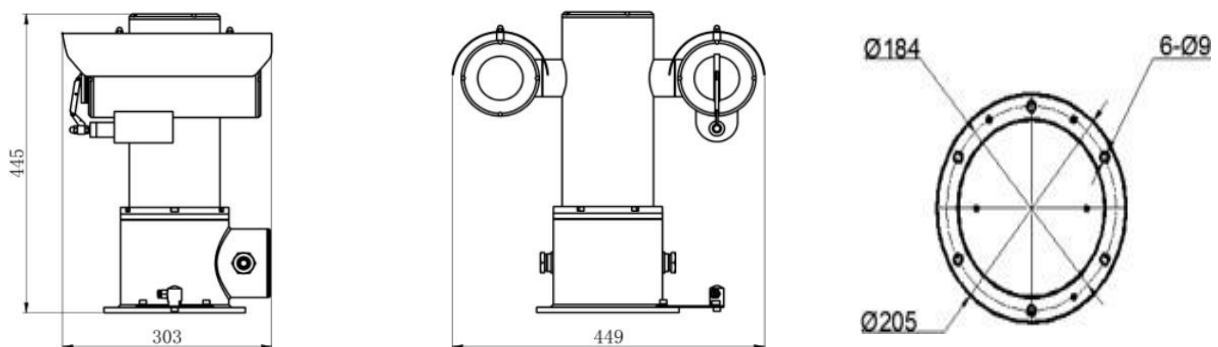
Unit Weight	≤34Kg
Shipping Weight	≤35Kg
<b>Certifications</b>	
Product Certifications	IECEX KLCS 21.0016X

## ORDERING INFORMATION

VP160-A244-MH	HD Megapixel Smart Laser Explosion-proof Integrated IP PTZ Camera System, 4MP, 30X, 1/1.8" CMOS, Day/night, H.265/H.264/M-JPEG/SVC, Laser illumination distance up to 500m, With optical port, AISI 316L Stainless Steel, AC85V-260V
VP160-A244-MG	HD Megapixel Smart Laser Explosion-proof Integrated IP PTZ Camera System, 4MP, 30X, 1/1.8" CMOS, Day/night, H.265/H.264/M-JPEG/SVC, Laser illumination distance up to 500m, AISI 316L Stainless Steel, AC85V-260V
VP160-A244-M5	HD Megapixel Smart Laser Explosion-proof Integrated IP PTZ Camera System, 2MP, 30X, 1/1.8" CMOS, Day/night, H.265/H.264/M-JPEG/SVC, Laser illumination distance up to 500m, AISI 316L Stainless Steel, AC85V-260V
VP160-A244-M6	HD Megapixel Smart Laser Explosion-proof Integrated IP PTZ Camera System, 2MP, 30X, 1/1.8" CMOS, Day/night, H.265/H.264/M-JPEG/SVC, Laser illumination distance up to 500m, With optical port, AISI 316L Stainless Steel, AC85V-260V
<b>Mount</b>	
V1571-20L-W	Wall mount for VP160-A244-M Series Ex-proof IR PTZ Camera, 316L stainless steel, weight 5Kg

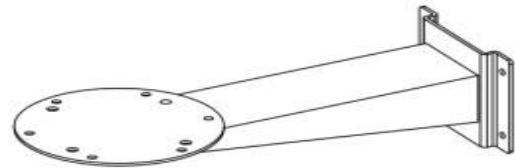
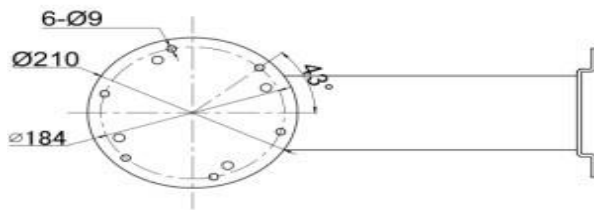
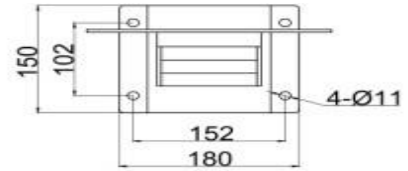
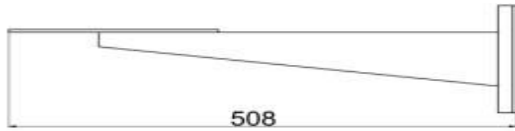
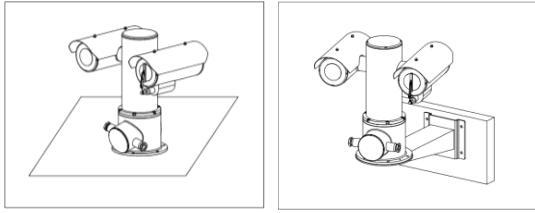
**\*Note:** - "Confirmation of SD Card installation has to be notified with the Camera Purchase Order. Such confirmation if received on Order Readiness will attract additional cost. Please contact Infinova to know more".

## DIMENSIONS



Unit: mm

# MOUNTING



Unit: mm