



V2005PTZ-40XIR-B Roughneck Pro PTZ Dome Camera



Overview

The Vicon Roughneck® Pro 5MP PTZ Camera combines advanced imaging performance with a ruggedized design, making it ideal for demanding security applications. Featuring a powerful 40x optical zoom lens with motorized focus and P-iris control, the camera delivers exceptional detail and clarity across wide coverage areas and long distances.

Engineered for challenging environments, the camera is housed in an IP66 weatherproof and IK10 vandal-resistant enclosure, ensuring reliable protection against dust, water, high-pressure jets, and physical impacts. An integrated electronic image stabilizer (EIS) minimizes vibration and motion blur, maintaining image sharpness even at full zoom or in windy installations.

The camera incorporates the latest multi-exposure HDR engine, producing natural, high-quality images in scenes with both bright and dark areas, without blending artifacts. Smart/Adaptive IR technology provides illumination up to 820 ft (250 m), while the True Day/Night ICR function ensures accurate color reproduction during the day and clear monochrome imaging at night.

The Advanced AF technology, combines built-in LiDAR module with the machine learning contrast auto focus, greatly helps the camera to focus faster, achieve better accuracy and escalate focus performance to another level.

Intelligent functionality includes auto-tracking of people and servo feedback technology, ensuring precise positioning with zero drifting. The camera supports quad streaming with multi-codec compression, edge storage via microSD/SDHC/SDXC card, and high-quality audio code for integrated surveillance solutions. Fully compliant with ONVIF Profiles S, G, T, and M, the Roughneck® Pro 5MP PTZ integrates seamlessly with Vicon Valerus™ and other leading VMS platforms.

Product at a Glance

- ▶ 5MP Resolution
- ▶ 40X optical zoom
- ▶ Multi Exposure HDR
- ▶ Auto-tracking of people
- ▶ 820 ft/250 m IR range; Smart IR/ Adaptive IR
- ▶ Electrical Image Stabilizer (EIS) Support
- ▶ True Day/Night function (ICR) True WDR (120 dB)
- ▶ Servo Feedback - Zero Drifting
- ▶ 3D Motion Compensated Noise Reduction (MCTF)
- ▶ LiDAR or Wiper support*
- ▶ Audio codec for superb audio quality
- ▶ ONVIF Profile S/ G/ T/ M support
- ▶ Weatherproof (IP66) and Vandal proof (IK10 Rating)

Specifications

Model	V2005PTZ-40XIR-B
Camera	
Image Sensor:	1/2.8" Sony Progressive CMOS Sensor
Max Resolution:	2592 (H) X 1944 (V) (5MP)
Image settings	Digital image effects: OSD (time, date, camera name, custom text, Image); Brightness/Contrast/Saturation/Sharpness/Hue; Mirror ; Backlight control (BLC); White Balance (AWB/manual); Exposure Control, Defog; 3DNR, 2DNR, Color Noise Reduction; ROI (areas each for stream 1 and 2); Privacy Mask (5 areas);
Video Content Analysis (VCA)	Motion, Tampering, Audio Detection, Network Failure Detection, Line Crossing, Object in Zone, Crossline counting, Occupancy in zone, Loitering, Parking Violation, Wrong Way, People Gathering, Face Recognition, Auto Face Enrollment, LPR, Vehicle Recognition, Abandoned Object, Object classification and Object Attributes, Removed Object, Heat Map, Auto Tracking and Tagging and Safety:PPE Detection
Electronics Shutter Speed:	1~ 1/1,35,000 sec
Day/Night Performance:	True day/night (Automatically Removable IR-cut filter)
WDR	120 dB
High Dynamic Range	Yes, Gen3 Engine
EIS	Yes
LiDAR Support	Yes
Minimum Illumination:	Color: 0.02 lux; BW: 0 lux (IR On)
Signal-to-Noise Ratio:	≥55 dB
IR Distance:	Smart IR; up to 820 ft (250 m)
Lenses	
Focal Length:	4.25 - 170 mm, 40X Optical Zoom
Max. Aperture:	F1.6 (standard) / F1.4 (optional)
Image Rotation	90°, 180°, 270° rotation
Field-of-view: Horizontal/Vertical	1.9° (tele) - 62.6° (wide)/1.4° (tele) - 48.8° (wide)
Network Video Transmission	
Network:	10/100/1000 Mbps Base-T: RJ-45; TCP/IP-based Ethernet network
Image Compression:	H.264; H.265; M-JPEG
Resolution:	2592 × 1944, 2560 × 1440, 2048 × 1536, 1920 × 1080, 1280 × 1024, 1280 × 720, 1024 × 768, 800 × 600, 720 × 480, 640 × 480, 352 × 240, 320 × 240
Protocol:	RTP/RTSP/RTSP over HTTP, RTP over UDP/TCP, MJPEG over HTTP, HTTP/HTTPS, TCP/IP, UDP, IPv4/IPv6, WebSocket, MQTT, SNMP v1/v2/v3, UPnP, LLDP, DDNS, RTMP, SMTP, FTP, HTTP Notification, IEEE 802.1X, QoS, VLAN, PPPoE, Multicast, ARP, ICMP, IGMP, NTP, ONVIF: S, G, T, M
Streaming:	Unicast and Multicast streams. Quad streaming. Up to 4 individually configurable streams in H.265/H.264/MJPEG Configurable resolution/frame rate/bandwidth LBR/VBR/CBR in H.265/H.264
Frame Rate	Up to 30/25 fps (5MP) and 60/50 fps (2MP)
Data Rate:	Rate control: LBR/VBR/CBR
Mean Time Before Failure:	MTBF: 100,000 hours
Web Browser:	Microsoft® Edge®; Google® Chrome®, Mozilla® Firefox®
Security:	Multi-user authentication with role-based access control, HTTP/RTSP Digest authentication, Account lockout protection, HTTPS (SSL/TLS) encryption, IP filtering (IPv4/IPv6), IEEE 802.1X (EAP-MD5/TLS 1.3/TTLS/PEAP), SNMP v3 (MD5/SHA-512, DES/AES), Certificate management (Self-signed & CA), Secure event transmission (SMTP/FTP/HTTP), System logging & audit trail, VLAN & QoS support, TPM 2.0, FIPS 140 compliant
Event Trigger:	External Input, Analytics, Network Failure Detection, Periodical Event, Manual Trigger
Notifications:	Send message via Email/record to FTP/NAS/SD card, record JPG/mp4

Specifications

Model	V2005PTZ-40XIR-B
Users:	Live viewing for up to 10 clients
Audio I/O:	1/1 (line in/line out)
Audio Streaming:	G.711/G.726/ AAC/ LPCM; 2 Way
Camera	
Alarm Relay:	4 In and 2 Out
Storage:	Support for microSD/ microSDHC/ microSDXC card (up to 1.5 TB max) Support for recording to NAS
Mechanical	
Construction:	Metal Body
Pan Range	0~360° endless
Pan Speed	0.1~300°/s
Tilt Range:	-20~100°
Tilt Speed	0.1~300°/s
Preset	256; Accuracy: 0.01°
PTZ Mode:	8 Sequence, 8 cruise, 4 auto pan
Auto-Tracking	People
Camers Angle of Adjustment:	Adjusted using external mount
Wiper Support	Yes
Mounting:	1.5" NPT Pipe Interface
Diamensions:	Ø241x349 mm with Sunshield
Weight:	12.12 lb (5.5kg)
Electrical	
Input Power	IEEE802.3bt, Type 3, class 6, max 51.00 watt AC24V, max 53.10 watt, max 74.80 VA
Power Consumption	51.00W (PoE++), 53.10W / 75.80VA (24V AC)
Controls and Connectors:	PoE, Video, Data: RJ-45; Power: 24 VAC plug; Audio In/Out: jacks;
Enviromental	
Operating Conditions	Operating Temp: -40° to 140° F (-40° to 60° C) with Heater Humidity: 10% to 95%, non-condensing
Storage Conditions	-20° to 70° C
Approvals:	UL, FCC, CE, IK10, IP66;RoHS; NDAA compliant; IS 13252(PART 1):2010/ IEC 60950-1 : 2005 & ER 01: 2024
Country of Origin:	Taiwan

Ordering Information

Model	V2005PTZ-40XIR-B
Description	OUTDOOR PTZ Dome Camera; 5 MP; HDR; 4.25-170 mm, 40X Zoom; IR; NDAA/GSA/TAA compliant;

Model	V2005PTZ-40XIR-B				
Standard Pendant Wall Mount (Pelco Thread) V200XPTZ-WM01	Mini Pendant Wall Mount (Pelco Thread) V200XPTZ-WM02	Outdoor Mounting Kit + Grommet + Anti-drop Chain V200XPTZ-PC01	Corner Plate Mini V200XPTZ-CM01	Corner Standard Mounting Plate V200XPTZ-CM02	Pole Direct Mounting V200XPTZ-PM01
					

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