



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: | 2608 (H) X 1964 (V) (5MP) |
| Image settings | Digital image effects: OSD (time, date, camera name, custom text, Image); Brightness/Contrast/Saturation/Sharpness/Hue; Exposure Management, WDR Corridor; Mirror (Flip Normal/Vertical/Horizontal/180°/90° Clockwise/90° Counterclockwise); Backlight control (BLC); White Balance (AWB/manual); Anti-flicker; Gain control (auto/manual); Digital noise reduction (2D/3D DNR); ROI (areas each for stream 1 and 2); Privacy Mask (5 areas); Motion Detection; Tamper Detection |
| Video Content Analysis (VCA) | Motion, Tampering, Line Crossing, Object in Zone, Crossline counting, Occupancy in zone, Loitering, Parking Violation, Wrong Way, People Gathering, Face Recognition, Face Detection, Auto Face Enrolment, Violence Detection, LPR, Vehicle Recognition, Abandoned Object, Object classification (Human, Vehicle) and Object Attributes (Gender, Age, Color, Type, Band), Removed Object, Heat Map, Safety: PPE Detection, Auto Tracking, Tagging. |
| Electronics Shutter Speed: | 1~ 1/1,35,000 sec |
| Day/Night Performance: | True day/night (Automatically Removable IR-cut filter) |
| High Dynamic Range | Gen3 Engine |
| EIS | Yes |
| LiDAR Support | Yes |
| Minimum Illumination: | Color: 0.02 lux; BW: 0.004 lux (IR On) |
| Signal-to-Noise Ratio: | ≥50 dB |
| IR Distance: | Smart IR; up to 820 ft (250 m) |
| Lenses | |
| Focal Length: | 4.25 - 170 mm |
| Max. Aperture: | F1.4 |
| 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: | 2592x1944, 2560x1440, 2048x1536, 2304x1296, 1920x1080 (1080P), 1600x1200, 1440x1080, 1600x900, 1280x960/720, 800x600, 640x480/360, 320x240/180 |
| Protocol: | ARP, PPPOE, IPv4/v6, ICMP, IGMP, QOS, TCP, UDP, DHCP, UPnP, SNMP, SMTP, RTP, RTSP, RTCP, HTTP, HTTPS, FTP, NTP, DDNS, 802.1X. ICMP, TCP/IP, Config, ONVIF Profile 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 | 30/25 fps |
| Data Rate: | Rate control: LBR/VBR/CBR |
| Mean Time Before Failure: | MTBF: 100,000 hours |
| Web Browser: | Microsoft® Edge®; Google® Chrome®, Mozilla® Firefox® |
| Security: | IP address filtering, HTTPS encrypted data transmission, SSL, multi-user authority, Password Security, User Authentication/HTTPS/ IP Filter/ IEEE 802.1x, TLS 1.0/1.2/1.3, DES, AES, User Access Log |
| 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 |
| 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 |

Specifications

| Model | V2005PTZ-40XIR-B |
|-----------------------------|---|
| Camera | |
| Alarm Relay: | 4 In and 2 Out |
| Storage: | Support for microSD/ microSDHC/ microSDXC card (up to 512 GB max) Support for recording to NAS |
| Mechanical | |
| Construction: | Plastic Body |
| Pan Range | Pan: 0-360° endless |
| Pan Speed | Auto: 0.05 - 720°/s, Manual: 0.1~100°/s |
| Tilt Range: | Tilt : -20~100° |
| Tilt Speed | Auto: 0.05 - 540°/s, Manual: 0.1~55°/s |
| Presets Speed | Pan: 300°/s, Tilt: 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: | 207x300 mm with Sunshield |
| Weight: | 8.60 lb (3.9kg) |
| Electrical | |
| Input Power | PoE IEEE802.3bt, Type 3, class6, max 51 watt AC24V, max 53.10 watt, max 74.80 VA |
| Power Consumption | 51 W (PoE), 53.1W(24V AC) |
| Controls and Connectors: | PoE, Video, Data: RJ-45; Power: 12 VDC plug; Audio In/Out: jacks; |
| Enviromental | |
| Operating Conditions | Operating Temp: -40° to 122° F (-40° to 50° C) with Heater Humidity: 10% to 90%, non-condensing |
| Storage Conditions | -20° to 70° C |
| Approvals: | UL, FCC, CE, IP66, IK10;RoHS; NDAA compliant; |
| Country of Origin: | Taiwan |

Ordering Information

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

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