



V2005D-VF312-B

Roughneck Pro Network Dome Camera



Overview

The Vicon Roughneck® Pro V2005D-VF312-B HD IP Dome Camera is a high-performance 5MP network camera engineered for professional commercial security installations. Powered by the AI Engine Gen 2, it delivers advanced analytics and reliable detection for modern surveillance requirements.

The camera is equipped with a motorized varifocal lens with remote zoom and focus control, ensuring sharp image quality and installation flexibility. Multi-exposure HDR technology enhances image detail in challenging lighting conditions, while the True Day/Night ICR function guarantees accurate color reproduction during the day and clear monochrome imaging at night. Smart/Adaptive IR LEDs provide illumination up to 164 ft (50 m), ensuring excellent visibility in low-light environments.

With support for quad streaming and multiple codecs (H.265/H.264/M-JPEG), the camera optimizes bandwidth and storage efficiency. Local edge recording is supported via microSD/SDHC/SDXC card slot. Additional features include Zero-Down-Time (ZDT) power switching, ensuring uninterrupted operation during power source changes.

Built for durability, the V2005D-VF312-B is housed in an IP66 weatherproof and IK10 vandal-resistant enclosure, making it suitable for both indoor and outdoor installations. It is fully compatible with Vicon Valerus™ VMS and other popular ONVIF Profile S/G/T/M-compliant video management systems

Product at a Glance

- ▶ 5MP Resolution
- ▶ AI Engine Gen 2 (Deep Neural Network Accelerated Engine)
- ▶ Multi Exposure HDR
- ▶ H.265/H.264 compression; M-JPEG compression
- ▶ 164 ft/50 m IR range; Smart IR/ Adaptive IR
- ▶ Motorized zoom and focus varifocal lens
- ▶ Quad Streaming
- ▶ True Day/Night function (ICR)
- ▶ Micro SD/ SDHC/ SDXC Card support
- ▶ ONVIF Profile S/ G/ T/ M support
- ▶ Zero-Down-Time(ZDT) Power Switching
- ▶ Weatherproof (IP66) and Vandal Proof (IK10 Rating)

Specifications

Model	V2005D-VF312-B
Camera	
Image Sensor:	1/2.7" Progressive CMOS
Max Resolution:	2720 (H) X 1976 (V) (5MP)
Image settings	Digital image effects: OSD (time, date, camera name, custom text, Image); Brightness/Contrast/Saturation/Sharpness/Hue; 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, Auto Face Enrolment, Violence Detection, LPR, Vehicle Recognition, Abandoned Object, Removed Object, Heat Map, Safety:PPE Detection
Electronics Shutter Speed:	1~ 1/37,440 sec
Day/Night Performance:	Removable IR Cut Filter
High Dynamic Range	Yes
Minimum Illumination:	Color: 0.08 lux; BW: 0.008 lux (IR On)
Signal-to-Noise Ratio:	≥50 dB
IR Distance:	Smart IR; up to 164 ft (50 m)
Lenses	
Focal Length:t	2.7-12 mm
Max. Aperture:	F1.6
Iris:	P-Iris
Zoom/Focus Adjust:	Motorized zoom and smart focus, Optical zoom, Digital zoom
Field-of-view: Horizontal/Vertical	31.5° (tele) - 102.1° (wide)/22.7° (tele) - 70.3° (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:	2560x1976,2688x1944, 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, HTTP, HTTPS, FTP, NTP, DDNS, 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, User Authentication/ HTTPS/ IP Filter/ IEEE 802.1x
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

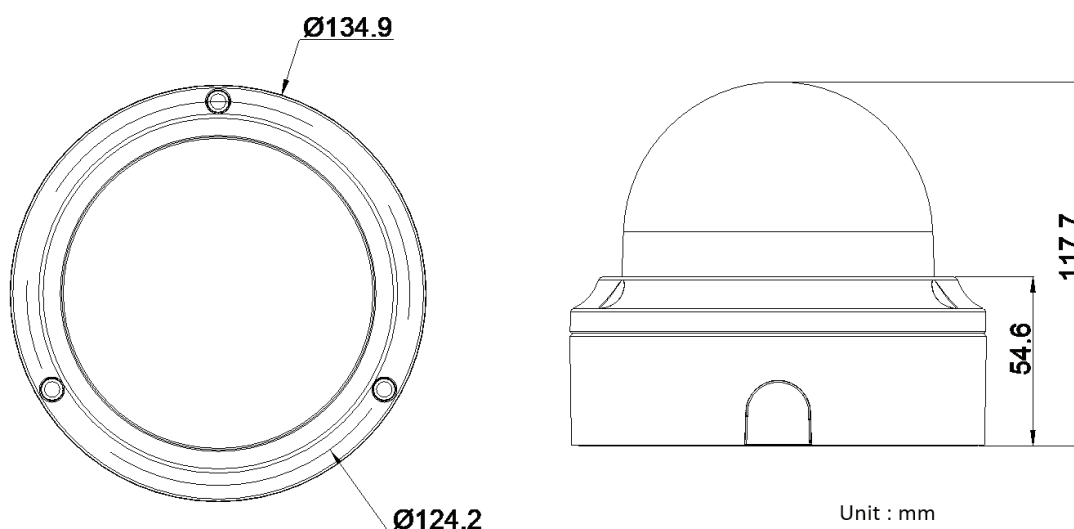
Specifications

Model	V2005D-VF312-B
Camera	
Alarm Relay:	1 In and 1 Out
Storage:	Support for microSD/ microSDHC/ microSDXC card (up to 512 GB max) Support for recording to NAS
Mechanical	
Construction:	Metal
Camers Angle of Adjustment:	Adjusted using integral ceiling mount
Mounting:	Surface mount
Dimensions:	133.8x117.4 mm
Weight:	1.68 lb (0.76 kg)
Electrical	
Input Power	POE IEEE802.3af, class 0, max 12.90 watt DC12V, max 15.24 watt AC24V, max 13.19 watt, max 25.20
Power Consumption	12.9W (PoE), 15.2W (12V DC), or 13.2W / 25.2VA (24V AC)
Controls and Connectors:	PoE, Video, Data: RJ-45; Power: 12 VDC plug; Alarm In/Out: terminal block; Audio In/Out: jacks(3.1mm); USB-C Port; Reset button
Enviromental	
Operating Conditions	Operating Temp: -22° to 131° F (-30° to 55° C) without Heater, -131° to 131° F (-55° to 55° C) with Heater Humidity: 10% to 90%, non-condensing
Storage Conditions	-20° to 70° C
Approvals:	UL,FCC, CE, IK10, IP66, RoHS, NDAA compliant
Country of Origin:	Taiwan

Ordering Information

Model	V2005D-VF312-B
Description	OUTDOOR Dome CAMERA; 5 MP; HDR; 2.7-12 mm motorized varifocal lens; IR; NDAA/GSA/TAA compliant;

Dimensional Drawing



Data Sheet Number: V326-75-00A-0525

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