

## V2002D and V2005D Roughneck AI Micro-Dome Series with Built-in Mic



### Overview

The Roughneck® AI Micro-Dome delivers high performance in a small, durable form factor—just four inches in diameter—with a built-in microphone. Choose from 2 MP and 5 MP models, each with Smart/Adaptive IR illumination, True WDR (120 dB), and Starlight low-light imaging. The camera is protected by a weatherproof (IP67), vandal-resistant (IK10) enclosure, and generates an alarm in the event someone attempts to obstruct or move the camera.

### AI ANALYTICS INSIDE

#### Perform more meaningful post-event forensic searches with object classification analytics

The camera's object classification analytics allow it to distinguish people and vehicles from other objects in a scene. Object-only recording, and the ability to filter out "environmental noise" that can trigger a motion detection alarm (e.g., shadows, swaying trees and bushes, etc.), significantly increases operational efficiencies. The result?

- Filter out non-relevant video for faster incident resolution
- Reduce storage requirements (by limiting recording to just object-based motion)
- Diminish nuisance alarms
- Respond to genuine threats quicker, and with fewer resources

### Product at a Glance

- ▶ Choose between 2 MP\* and 5 MP resolution
- ▶ 2.8 mm lens provides a nice wide-angle view of the entire area
- ▶ Built-in microphone eliminates the need to purchase and install a separate device for applications that require audio in
- ▶ Low-profile, compact design—just four inches in diameter—is ideal for discreet, aesthetic installations
- ▶ Corridor mode allows for 90° rotation of the camera so images are created vertically, which maximizes the field-of-view in narrow situations
- ▶ Starlight low-light technology provides clear color images in extreme low-light conditions
- ▶ Integrated IR provides uniform illumination in total darkness for high-quality video from 49 feet (15 m) away

\*Object classification analytics are available in the 5 MP (V2005D) model only.

## Specifications

Model	V2002D-W28IRM	V2005D-W28IRM
<b>Camera</b>		
Image Sensor:	1/2.8-in.	
Max Resolution:	1920 x 1080 (1080p)	2592x1944 (5 MP)
Image Settings:	Digital image effects: defog, flip and mirror and corridor. Configurable brightness, contrast, saturation, hue, sharpness. White balance. Backlight Compensation (BLC). HLC. Gain control. Gamma correction. Electronic shutter speed. Day/night mode. Dynamic Noise Reduction (3 DNR). Motion detection (4 programmable zones). Privacy masking (8 masks). Dynamic ROI. Event notification.	
Intelligent Video Analytics:	Motion, Tampering/Defocus, Intrusion, Loitering, Line Cross, Tailgating,* Object Left/Removed, Crowding*. Museum Search.	
AI-Based Object Classification Analytics:		Vehicles, people, animals
Electronic Shutter Speed:	Auto (1/2 ~ 1/10,000 sec), manual	
Day/Night Performance:	True day/night (IR cut filter)	
Wide Dynamic Range	True WDR; 120 dB	
Minimum Illumination (@ 30 IRE):	Color: 0.007 lux; BW: 0.003 lux, IR Off; 0 lux, IR On	Color: 0.03 lux; BW: 0.01 lux, IR Off; 0 lux, IR On
IR Distance:	Smart IR/Adaptive IR. 49 ft (15 m); 8 IR LEDs	
<b>Lenses</b>		
Focal Length:	2.8 mm	
Max. Aperture:	f/1.8	f/2.0
Zoom/Focus/Iris Adjust:	Fixed	
Field of View: Horizontal/Vertical/Depth	109°/59°/128°	104°/78°/134°
<b>Network Video Transmission</b>		
Network:	10/100Base-T/TX: RJ-45	
Image Compression:	H.264; H.265; M-JPEG	
Resolution:	1920x1080 (1080P), 1280x960/720, 800x600, 640x480, 640x360, 320x240	2592x1944/1520, 2560x1440, 2048x1536, 2304x1296, 1920x1080 (1080P), 1600x1200, 1440x1080, 1600x900, 1280x960/720, 800x600, 640x480/360, 320x240/180
Protocol:	ARP, DHCP, DNS, FTP, HTTP, HTTPS, HLS, ICMP, IGMP, IPv4/6, LDAP, NTP, RTSP/RTCP/RTP, RTMP, QoS, SMTP, SNMP v1/2c/3, TCP, TLS/TTLS, UDP, UPnP, 802.1X, UPnP, Bonjour, DDNS, PPPoE; ONVIF S/G/T/M	
Frame Rate:	30/25 fps max	
Streams:	Triple streaming. Single: 2 MP@30fps; Dual: 2 MP@30fps + 1280 x 720@30fps; Triple: 2 MP@30fps + 1280 x 720@30fps + 640 x 360@30 fps	Triple streaming. Single: 5 MP@30fps; Dual: 5 MP@30fps + 1600 x 1200@30fps; Triple: 5 MP@30fps + 1600 x 1200@30fps + 640 x 480@30 fps
Audio:	Built-in mic/1 audio output (line out); G.711 (a-law, μ-law); audio level alarm	
Users:	Live: 10 users	
Web Browser:	Internet Explorer® 11; Chrome®, Safari®, Firefox®, Microsoft® Edge	
Security:	IP address filtering, HTTPS encrypted data transmission, SSL, IEEE 802.1X, Digest Authentication, Advanced Security	

\*2 MP model (V2002D) does not include tailgating or crowding analytics.

## Specifications







Electrical	
Input Power:	PoE IEEE 802.3af class 3
Current:	0.28 A
Power Consumption:	IR On: 13.5 W; IR Off: 8.5 W
Mechanical	
Construction:	Dome housing: white aluminum. Dome bubble: polycarbonate.
Camera Angle of Adjustment:	3-axis adjustment. Pan: 0° - 180°; Tilt: 0° - 80°; Rotate: ±355°
Mounting:	Surface mount, wall or ceiling
Dimensions:	4.3 in. (110 mm) (Diam) x 2.2 in. (57 mm) (H)
Weight:	1.65 lb (0.75 kg)
Controls and Connectors	
Connectors:	Pigtail cable provided; optional backbox required for cabling. PoE/Network: RJ-45 CAT 5; Built-in Mic/Audio Output: terminal block. Reset button; Default button; Micro SD card slot for SDHC/SDXC card (128 G max; customer-supplied)
Environmental	
Operating Conditions:	Temperature: -22° to 131° F (-30° to 55° C) Humidity: up to 90%, non-condensing
Approvals:	UL, FCC Class A, CE, IP67, IK10; ONVIF Profile S/T/G/M, RoHS
Country of Origin:	Taiwan
Warranty:	5 years

## Ordering Information

### Cameras

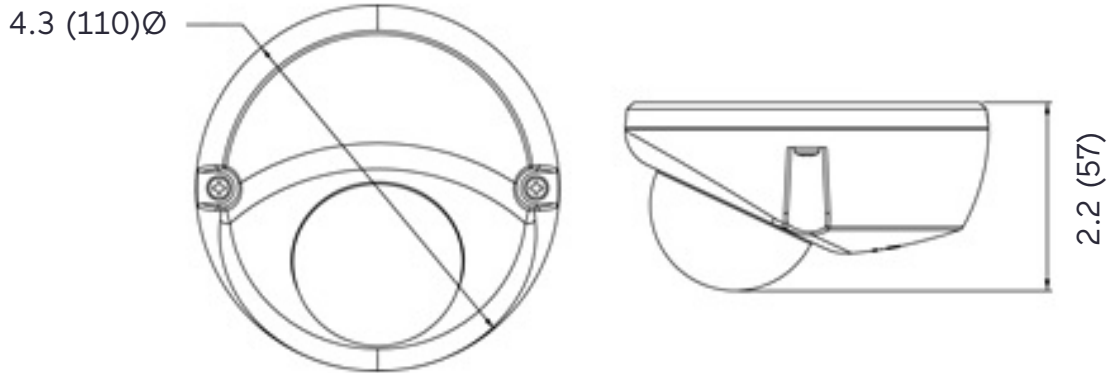
Model Number	Description
V2002D-W28IRM	2 MP resolution, 2.8 mm fixed lens
V2005D-W28IRM	5 MP resolution, 2.8 mm fixed lens; includes object classification analytics

### Accessories

Model Number		Description
V2000D-MICRO-PLATE		4x4 electrical box mounting plate
V2000D-MICRO-BOX		Backbox
V2XXXD-PM		Pendant mount
V2XXX-WDG		Wedge mount
V2XXX-WDG-PLATE		4x4 electrical box mounting plate for wedge mount
V2XXXD-ADAPT		Adapter Plate; allows the V200XD-W28IR micro dome to be mounted to the V2XXXD-PM

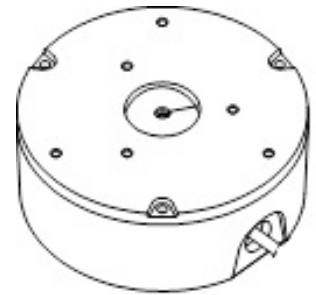
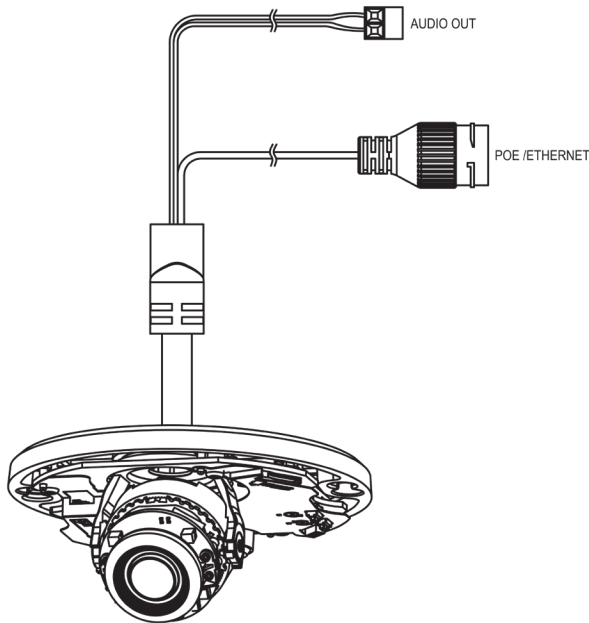
## Dimensional Drawing

[in. (mm)]



## Pigtail Cable:

Use optional V2000D-MICRO-BOX (sold separately)



V2000D-MICRO-BOX

Data Sheet Number: V320-20-03  
 Vicon Data Sheet Number: 8009-7320-20-03

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