

V910 Impact-Resistant IP and Analog Camera Dome Series



ROUGHNECK™

- Rugged construction is ideal for harsh indoor or outdoor environments
- Color, Day/Night and Wide Dynamic Range models
- Choice of lenses to match range to your application
- On-screen menus with innovative joystick control make setup and operation easy
- 24 VAC or PoE power options for IP cameras
- Privacy masking provides the ability to mask out selected regions of the scene (non-WDR models)
- Highlight Mask Exposure feature masks bright spots in a scene providing better overall clarity
- 560 TV lines provide excellent resolution and high-quality images
- Digital Noise Reduction improves image quality in low-light environments
- Surface mounting on wall or ceiling and pendant mount option

Vicon's V910 Roughneck® Camera Dome series provide an ideal solution for a multitude of monitoring situations. Three models are offered: a high-resolution color model, day/night model and wide dynamic range (WDR) model. All models are indoor/outdoor cameras and are powered by 24 VAC or PoE (IP cameras) in accordance with IEEE 802.3af. NTSC and PAL models are offered. Each of the camera models offer unique features designed to maximize usability at a reasonable cost. The analog cameras offer coaxial, UTP or Fiber video transmission for most models.

Camera and Optics Provide Outstanding Performance and Value

The V910 includes an integral camera and lens. A choice of 3.3-12 mm, 2.6-6mm or 9-22 mm varifocal lens provides superb sharpness and excellent sensitivity. The camera is a 1/3-inch color CCD device with a resolution of 560 TV lines. The WDR model also offers 3.3-12 mm, 2.6-6 mm or 9-22 mm lenses and has a 1/3-inch CMOS camera with a resolution of 480 TV lines. Built in digital noise reduction improves image quality, minimizes video interference and triggering of false alarms and provides a better compression ratio, which decreases storage requirements. The WDR model improves detail in bright and low light areas of the image.

The WDR models use the Pixim® camera module. This camera provides enhanced dynamic range by making use of Pixim's patented, industry-leading Digital Pixel System® technology that provides pixel-by-pixel analysis and processing. Key features offered by the WDR model are a correction for color roll when capturing video under fluorescent lighting and an optional high-resolution mode that is controlled through the menu system.

Durable Construction and Easy Installation

The V910 is constructed of die-cast aluminum with a high-impact polycarbonate plastic dome. The camera package is designed to withstand the harshest conditions and destructive environments of correctional facilities, warehouses and loading docks. The units include O-ring seals and a heater. The heater requires 24 VAC. It allows operation in low temperature and in all weather conditions. Tamper-resistant screws make the unit resistant to vandalism.

The V910 is designed for easy installation. The extensive on-screen display menus allow set up of white balance, AGC, backlight compensation, exposure, privacy masks and many other functions. For the IP cameras, an analog video output is also provided for lens focusing on a local monitor. Vicon's exclusive VNsetup utility quickly finds the camera on the network and enables quick assignment of an IP address.

The V910 may be mounted on a wall, ceiling or a standard 4 x 4 electrical box. An adapter is available for pendant mounting as well. The camera mount offers adjustment to any view required. The camera position is adjustable horizontally, vertically and rotation about its axis (roll/azimuth), for any angle of view required. The mounting base screws directly to walls and ceilings, reducing installation time and cost. The unit features a standard threaded conduit fitting for cable protection.

Camera and Optics

Model Numbers (See Note)

	V910-C312/V910-C26/ V910-C922	V910-N312/V910-N26/ V910-N922	V910-D312/V910-D26/ V910-D922
Type:	Color	Day/Night	WDR (Pixim)
Image Device:	1/3-inch color CCD		1/3-inch color CMOS
Picture Elements:	NTSC: 811 (H) x 508 (V), 410,000 pixels PAL: 795 (H) x 596 (V), 470,000 pixels		742 (H) x 552 (V), 409,000 pixels
Sensitivity:	0.01 fc (0.1 lux) with f/1.2 lens at 30 IRE	Color: 0.01 fc (0.1 lux) with f/1.2 lens at 30 IRE. B&W: 0.001 fc (0.01 lux) with f/1.2 lens at 30 IRE.	Color: 0.06 fc (0.6 lux), DSS on with f/1.2 lens at 30 IRE B&W: 0.008 fc (0.08 lux), DSS on with f/1.2 lens at 30 IRE
Video Output:	1.0 V p-p @75 ohms, composite		
Horizontal Resolution:	560 TV lines; 600 TV lines B&W		480 TV lines
S/N Ratio:	50 dB (AGC off)		48dB (AGC off)
Synchronization:	Internal/External		
Automatic Gain Control (AGC):	Selectable: Off, Low, Middle, High		On/Off
Backlight Compensation:	On/Off		N/A
Dynamic Range:	NA		Wide Dynamic Range 120 dB maximum; 95 dB typical
Flickerless:	On/Off		On/Off
Privacy Mask:	6 zones/size		N/A
Sense Up:	Off/Auto (X2 - X256)		N/A
Digital Noise Reduction:	Selectable: Off, Low, Middle, High		
Iris Control:	Automatic		
White Balance:	Automatic/Manual, Red/Blue Gain Level		
Shutter Speed:	NTSC: 1/60-1/100,000 sec./PAL: 1/50-1/100,000 sec		

Lenses

Focal Length :	3.3-12 mm, 2.6-6 mm or 9-22 mm
Aperture:	f/1.2
Field of View:	3.3-12 mm: Horizontal: 83.9°-23.91°/Vertical: 61.9°-17.93° 2.6-6 mm: Horizontal: 106°-47.6°/ Vertical: 78.2°-35.8° 9-22 mm: Horizontal: 31.2°-12.8°/Vertical: 22.8-9.6°

Note: Model numbers shown are for the analog coaxial models. For the IP versions, add a -V to the end of the model number. For example, V910-C312-V. For the UTP versions add a -T, for example V910-C312-T. For the Fiber models, add a -F, for example V910-C312-F. The WDR models are only available in coaxial and IP configurations.

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Electrical

	Model Numbers		
	V910-C312/V910-C26/ V910-C922	V910-N312/V910-N26/ V910-N922	V910-D312/V910-D26/ V910-D922
Input Voltage:	24 VAC ±20% or PoE, power over standard Ethernet cables IEEE 802.3af. For 24 VAC power, use only UL Listed Class 2 indoor/dry or Class 3 outdoor/wet rated power supply. Note: Heater must be powered by 24 VAC.		
Current:	Coaxial and UTP: 0.18 A nominal; 0.58 A nominal with heater. IP: 0.35 A nominal; 0.75 A nominal with heater. IP PoE: 0.19 A nominal. Fiber: 0.37 A nominal; 0.77 A nominal with heater.		Coaxial: 0.38 A nominal; 0.78 A nominal with heater. IP: 0.5 A nominal; 0.9 A nominal with heater. IP PoE: 0.25 A nominal.
Power Consumption:	Coaxial and UTP: 4.22 W nominal; 14 W nominal with heater. IP: 8.3 W nominal; 18 W nominal with heater. IP PoE: 9 W nominal. Fiber: 9 W nominal; 19 W nominal with heater.		Coaxial: 9.12 W nominal; 19 W nominal with heater. IP: 12 W nominal; 22 W nominal with heater. IP PoE: 12 W nominal.
Connectors:	Power: 2-pin connector. TCP/IP LAN/PoE: RJ-45. Alarm: 3-pin screw terminal (IP models only). Audio: 2 1/8-in. phono jacks. Video: BNC (coaxial), screw terminals (UTP) or ST (fiber). Heater: 2-pin connector.		
Certifications:	CE, UL and FCC Class A. IP66. NEMA 4.		

Network Video Transmission

Compression:	MPEG-4 Proprietary ViconNet® compression
Video Streams:	10 concurrent sessions maximum
Video Resolution:	NTSC: 160 x 112 to 720 x 488. PAL: 160 x 134 to 864 x 586.
Frame Rate:	NTSC: 30 fps at 720 x 488. PAL: 25 fps at 864 x 586.
Network Interface:	100 Mbps, TCP/IP Unicast
Bandwidth:	1.7 Mbps per video stream nominal
Audio:	1 line-level microphone input. 0 dbm, 32 KHz bandwidth, 600 ohm impedance, 2 V RMS (1 V p-p) out.

Analog Video Transmission

Maximum Transmission Distance:	Coaxial: 1100 ft (335 m), cable dependant. UTP: 500 ft (passive receiver) to 1000 ft (active receiver) (152 to 305 m). Fiber: Up to 1.6 miles (2.5 km) pending optical cable loss.
Video Output Impedance:	75 ohms

Operational

Alarm Capabilities (IP Cameras):	1 in, 1 out. Alarm out, logic out. 3.2 V 0.5 mA sink (maximum), 30 uA source (maximum).
Control Display:	On-screen, menu-driven system allowing full configuration of the camera. Camera can be set up remotely using a DVR or NVR workstation.
Tilt and Horizontal Adjustment:	3-axis adjustment: pan, tilt and roll.

Environmental

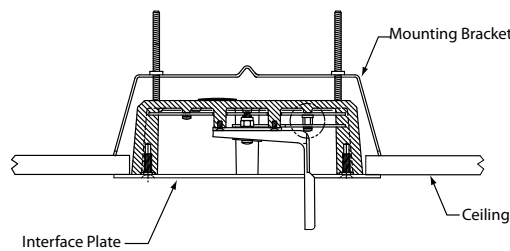
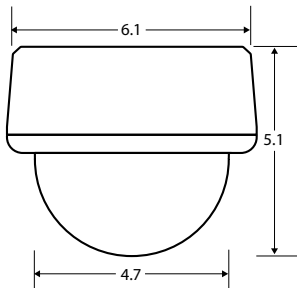
	Model Numbers		
	V910-C312/V910-C26/ V910-C922	V910-N312/V910-N26/ V910-N922	V910-D312/V910-D26/ V910-D922
Operating Temperature Range:	Without Heater (PoE): 7 to 122° F (-5 to 50°C). With Heater: -22 to 140° F (-30 to 60°C).		
Operating Humidity Range:	Up to 95% relative, non-condensing.		
Storage Temperature Range:	-40 to 150° F (-40 to 65° C)		
Storage Humidity Range:	Up to 95% relative, non-condensing.		
Wind Load:	Heavy rain or snow at winds up to 80 mph.		

Warranty

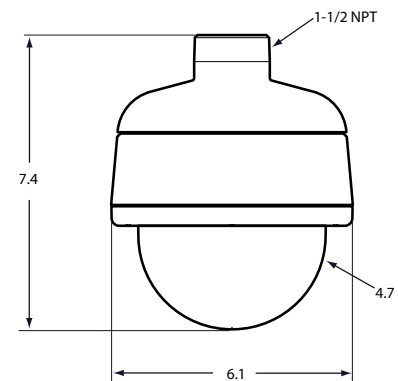
3 years parts and labor

Dimensional Data

- Ruggedized die-cast aluminum construction. Dome is smoked polycarbonate plastic.
- Indoor or outdoor mounting. Wall or ceiling mounting including mounting to a standard 4 x 4 electrical box. Pendant mounting with optional V910-PH adapter.
- Housing Diameter: 6.1 inches (155 mm)
- Dome Diameter: 4.7 inches (119 mm)
- Height: 5.1 inches (130 mm). 7.4 inches (188 mm) with pendant mount.
- Weight: 4 lb. (1.8 kg)



*In-Ceiling Mounting Kit
for Hard Ceiling*



*V910 Camera with
V910-PH Pendant Mount*

V910 Series Camera Dome

Type	Lens	Model Number (See Notes)
Color	3.3-12 mm	V910-C312
	2.6-6 mm	V910-C26
	9-22 mm	V910-C922
Day/Night	3.3-12 mm	V910-N312
	2.6-6 mm	V910-N26
	9-22 mm	V910-N922
WDR	3.3-12 mm	V910-D312
	2.6-6 mm	V910-D26
	9-22 mm	V910-D922

Notes:

- Model numbers shown are for the analog coaxial models. For the IP versions, add a -V to the end of the model number. For example, V910-C312-V. For the UTP versions add a -T, for example V910-C312-T. For the Fiber models, add a -F, for example V910-C312-F. The WDR models are only available in coaxial and IP configurations.
- For PAL models add a -P to the Model Number. For example: V910-C312-V-P would be a color, IP camera for the PAL standard.

Accessories

Description	Model Number
Pendant housing used to convert V910 to pendant mounting	V910-PH
In-ceiling mounting kit for dropped ceiling	V910-ICD
In-ceiling mounting kit for hard ceiling	V910-ICH