



V900 Series Impact Resistant Miniature Camera Dome

- **Rugged cast aluminum construction**
- **High-resolution monochrome or color camera**
- **24 VAC/VDC**
- **Line lock on color cameras**
- **Fixed-focal-length or varifocal**
- **Easy installation**

The Roughneck Series of Outdoor Impact-Resistant Cameras offers high-security cameras in a compact domed housing. Constructed from rugged cast aluminum and a high-impact polycarbonate plastic dome, these outdoor camera packages are designed to withstand the harshest conditions and destructive environments of correctional facilities, warehouses and loading docks. Neoprene sealing and heaters are included to allow operation in low temperature and in all weather conditions. Tamper-resistant screws make the unit resistant to vandalism.

The Roughneck series has an integral camera, high-resolution monochrome or high-resolution color, with a choice of lenses. Refer to Table 1. A unique camera mount offers 3-axis adjustment to any view required. Roughneck's mounting base screws directly to walls and ceilings, reducing installation time and cost. The unit features a standard threaded conduit fitting for cable protection.

The Roughneck series complies with the requirements for an FCC Class A rating. This product complies with European Community EMC Directive 89/336. The product was subjected to the testing outlined in European Normalization Standard EN 50081-1 (Electromagnetic Compatibility - General Emissions Standard Part 1: Residential, Commercial and Light Industry), and EN 50082-1 (Electromagnetic Compatibility - Generic Immunity Standard Part 1: Residential, Commercial and Light Industry). The Roughneck has an IP rating of IP66.

Contractors' Specification

Impact Resistant Miniature Camera Domes

The impact-resistant camera dome shall incorporate a fixed camera and lens (fixed-focal-length or varifocal) combination. The camera domes shall be available for outdoor applications. High-resolution color or monochrome cameras shall be available with a choice of lenses. A clear polycarbonate dome shall be included.

The camera position shall have a unique 3-axis position adjustment, allowing for adjustment of pan, tilt and camera/lens adjustment, for any angle of view required. Both monochrome and color camera versions shall accept 24 VAC or 24 VDC, while color cameras shall also feature line lock capability. The monochrome camera shall be a 1/3-inch format camera with 580 TV lines resolution and 0.0028 fc (0.03 lux) sensitivity; the color camera shall be a 1/4-inch format

camera with 480 TV lines resolution and 0.28 fc (3 lux) sensitivity. Both cameras shall have electronic shutter. The monochrome camera shall be available with either a 2.8 mm fixed-focal-length or 3.5 - 8 mm varifocal lens; the color camera shall be available with either a 2.9 mm fixed-focal-length or 2.8 - 6 mm varifocal lens.

The camera dome's dimensions shall not exceed: height, 4.8 in. (122 mm); total diameter, 6.12 in. (155 mm); dome diameter, 3.5 in. (89 mm). The unit shall weigh approximately 4 lb (1.8 kg).

The impact-resistant miniature camera dome system shall be Vicon Roughneck (V900) camera dome series. Refer to Table 1 for specific model numbers.

Technical Information

ELECTRICAL

Input Voltage: 24 VAC/VDC \pm 20%.

Connectors:Power: 3-pin screw terminal.

Video: BNC on pendant cable or special video screw terminal.

Heaters: 2-pin connector.

Power

Consumption: 24 W.

Heat Equivalent: 1.4 btu/min (0.3 cal/min).

NOTE: These figures represent the conversion of 100% of the electrical energy to heat. Actual percentage of heat generated will be less and will vary from product to product. These figures are provided as an aid in determining the extent of cooling required for an installation.

Radio Frequency

Emission Rating: FCC Class A.

European Community

(CE) Standard: EN 50081-1 generic emissions.

EN 50082-1 generic immunity.

Camera/Lens

Specification: Refer to Table 2.

OPERATIONAL

Tilt and Horizontal

Adjustment: 3-axis adjustment, pan, tilt and azimuth (camera/lens may be adjusted 10°).

MECHANICAL

Application: Outdoor.

Mounting: Ceiling or wall.

Dimensions: Height (H): 4.8 in. (122 mm).

Total Diameter (D1): 6.12 in. (155 mm).

Dome Diameter (D2): 3.5 in. (89 mm).

Weight: Approximately 4 lb (1.8 kg).

Construction: Base/Cover: cast aluminum.

Dome: polycarbonate plastic.

Finish: Base/Cover: painted light gray.

Dome: clear.

Shipping

Dimensions: Height: 9.25 in. (235 mm).

Width: 9.25 in. (235 mm).

Depth: 10.375 in. (264 mm).

Shipping Weight: Approximately 5 lb (2.3 kg).

Shipping Volume: 0.5 ft³ (0.014 m³).

ENVIRONMENTAL

Operating

Temperature Range: -40 to 140° F (-40 to 60° C).

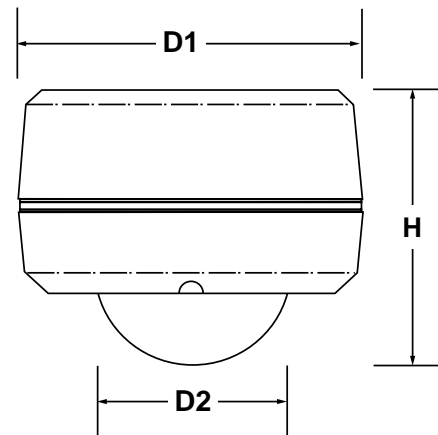
Operating Humidity: Up to 100% relative, noncondensing.

Storage

Temperature Range: -40 to 150° F (-40 to 65° C).

Storage Humidity: Up to 90% relative, noncondensing.

Wind Load: Heavy rain or snow driven by winds up to 80 mph.



Model	Product Code	Description
V900-2.8HB-24	6524-04	1/3-in. high-resolution monochrome camera and 2.8 mm lens; 24 VAC/VDC; heater. EIA.
V900-358HB-24/ V900-358HB-24C	6526-04/ 6526-03	1/3-in. high-resolution monochrome camera and 3.5-8 mm varifocal lens; 24 VAC/VDC; heater. EIA/CCIR.
V900-2.9HC-24	6514-04	1/4-in. high-resolution color camera and 2.9 mm lens; 24 VAC/VDC; heater. NTSC.
V900-286HC-24/ V900-286HB-24C	6516-04/ 6516-03	1/4-in. high-resolution color camera and 2.8-6 mm varifocal lens; 24 VAC/VDC; heater. NTSC/PAL.
V900-286HC-AI-24/ V900-286HB-24C	6517-04/ 6517-03	1/4-in. high-resolution color camera and 2.8-6 mm varifocal autoiris lens; 24 VAC/VDC; heater. NTSC/PAL.

Table 1: Models, Product Codes and Descriptions

Technical Information (cont'd)

Model	V900-2.8HB-24	V900-358HB-24/24C	V900-2.9HC-24	V900-286HC-24/24C	V900-286HC-AI-24/24C
Camera					
Image Device	1/3-inch CCD, 2:1 interlace, EIA	1/3-inch CCD, 2:1 interlace, EIA/CCIR	1/4-inch CCD, 2:1 interlace, NTSC	1/4-inch CCD, 2:1 interlace, NTSC/PAL	1/4-inch CCD, 2:1 interlace, NTSC/PAL
Color/Monochrome	Mono	Mono	Color	Color	Color
Resolution (TV lines)	580	580	480	480	480
Sensitivity fc (lux)	0.0028 (0.03)	0.0028 (0.03)	0.28 (3)	0.28 (3)	0.28 (3)
Synchronization	Internal	Internal	Internal (24 VDC)/ Line lock (24 VAC); auto	Internal (24 VDC)/ Line lock (24 VAC); auto	Internal (24 VDC)/ Line lock (24 VAC); auto
Electronic Iris (sec)	1/60-1/100,000	1/60-1/100,000	1/60-1/100,000 linear or 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000, selectable	1/60-1/100,000 linear or 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000, selectable	1/60-1/100,000 linear or 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000, selectable
BLC	—	—	On/Off, selectable	On/Off, selectable	On/Off, selectable
AGC	—	—	On/Off, selectable	On/Off, selectable	On/Off, selectable
Signal-to-Noise Ratio	>50 dB (AGC off)	>50 dB (AGC off)	>48 dB (AGC off)	>48 dB (AGC off)	>48 dB (AGC off)
Lens					
Focal Length (mm)	2.8	3-5.8 varifocal with manual iris	2.9	2.8-6 varifocal with manual iris	2.8-6 varifocal with autoiris
Field-of-View	Horizontal: 120°	Horizontal: 77.6°-35.4° Vertical: 57.6°-26.6°	Horizontal: 69°	Horizontal: 74.9°-33° Vertical: 58.2°-26.1°	Horizontal: 74.9°-33° Vertical: 58.2°-26.1°

Table 2: Camera/Lens Specifications