

VIPER

Low-Light Hazardous Environment Video Camera



3×10^{-4} Lux Minimum Illumination for Exceptional Low Light Performance

Embedded Digital Video Processing Technology Yields High Signal to Noise Ratio

Fully Submersible Housing for Harsh Environments

High Performance, low-light monochrome video camera for harsh environments.

The VIPER low-light monochrome camera can operate in both extreme low light levels and high-intensity sunlight without incurring any damage. Optimum performance is achieved with high resolution (570 TVL) and outstanding low light level sensitivity (3×10^{-4} lux minimum illumination). The camera features a 56° horizontal x 43° vertical field of view to accommodate most applications.

Utilizing the latest advancements in digital video processing, the VIPER low-light video camera exhibits a high signal-to-noise ratio. It is available with 6061 hard anodized aluminum housing, and threaded stainless steel inserts for mounting holes.

ROS has been manufacturing an array of harsh environment cameras, lights, positioners, and specialized systems designed for oceanographic, nuclear, industrial, and military applications for over 30 years.



VIPER - Nocturnal Hazardous Environment Video Camera

PERFORMANCE

Horizontal Resolution:	570 TV lines (center) - EIA RS-170A
Minimum Illumination:	3.10^{-4} lux @ F1.4
Sensor Type:	1/2" CCD image sensor
Sensing Area:	768 (H) x 494 (V)
Total Number of Pixels:	811 (H) x 508 (V)
Frame Rate:	30 fps
Power Input:	11-30 VDC, 0.19 A max
Scanning:	2:1 interlaced
Video Output:	1.0V peak to peak 75 ohms (unbalanced)
Electronic Iris:	1/60 ~ 1/100,000s
Automatic Gain Control (AGC)	5 ~ 50dB

MECHANICAL

Housing Material:	anodized 6061-T6 aluminum
Length (w/o connector):	140 mm (5.50 in)
Diameter:	75.2 mm (2.96 in)
Weight in Air:	0.58 kg (1.3 lbs)
Viewing Port:	optical grade acrylic
Standard Connectors:	LPMBH-6-MP
Mounts:	two 1/4-20 tapped holes with stainless steel helicoils

OPTICAL

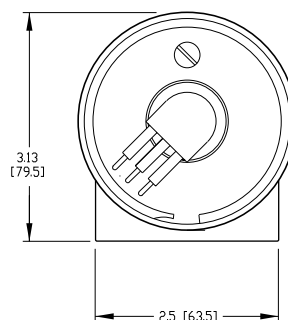
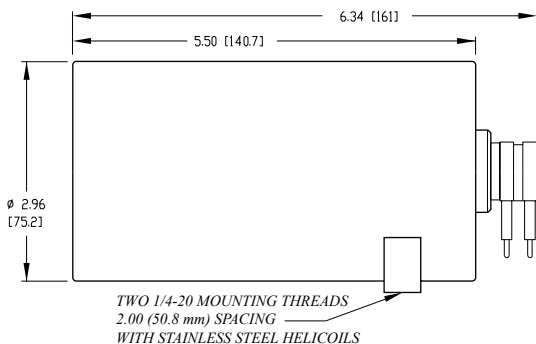
Field of View in Air:	fixed, 56° Horizontal x 43° Vertical
Focus:	fixed, optimized for target at 32" from front of camera
Iris:	fixed F1.4

ENVIRONMENTAL

Operating Depth:	70m (230 ft)
Operating Temperature:	-34.4° C to +60° C (-30° to 140° F)
Storage Temperature:	-34.4° C to +70° C (-30° to 158° F)
MTBF	

STANDARD PIN-OUT

1 = Common	4 = Not Connected
2 = Video	5 = Not Connected
3 = Power	6 = Not Connected



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Specifications subject to change without notice