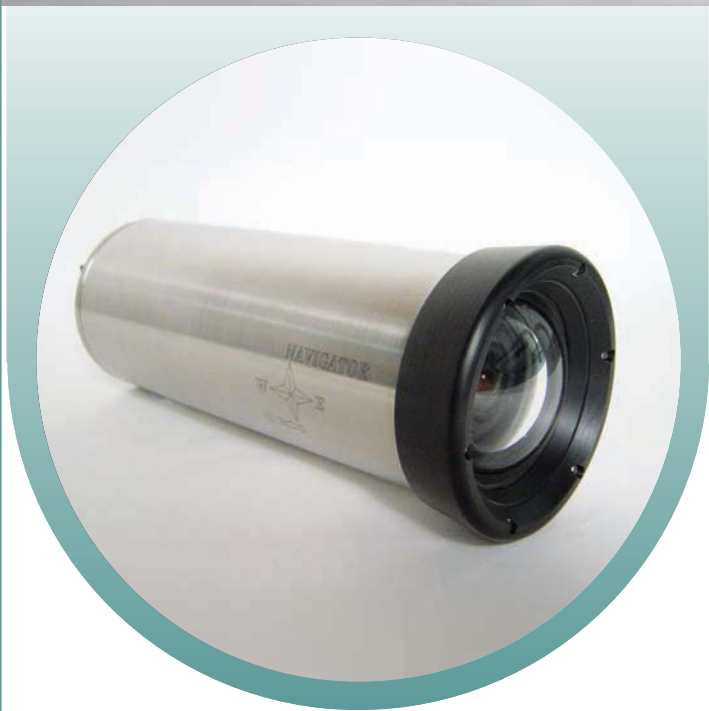


# NAVIGATOR

## LOW LIGHT MONOCHROME CAMERA



**3.4 x 10<sup>-4</sup> lux faceplate sensitivity  
for exceptional low-light performance**

**82° diagonal field of view in water  
for superior wide-angle viewing**

**Digital video processing technology  
yields high signal to noise performance**

***High performance, low light monochrome camera for deep underwater inspection and navigation.***

The NAVIGATOR can operate in both extreme low-light levels and high-intensity sunlight without incurring any damage. Optimum underwater performance is achieved with high resolution (570 TVL) and outstanding low-light-level sensitivity (3.4 x 10<sup>-4</sup> lux faceplate sensitivity). Utilizing a water corrected front viewing port the camera provides an exceptional 82° diagonal field of view in water.

Utilizing the latest advancements in digital video processing, the camera exhibits a high signal to noise ratio. The NAVIGATOR is a fraction of the cost of a traditional SIT camera and is field proven for low-light inspection. It is available with three corrosion-resistant housing options: 6AL4V titanium, 6061 hard anodized aluminum, or 316 stainless steel.

The NAVIGATOR low-light-level camera is the perfect companion to the INSPECTOR underwater color zoom camera. Used together, all aspects of underwater viewing are covered.

*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.*



# NAVIGATOR - Low Light Monochrome Camera

## ELECTRICAL

Horizontal Resolution:	570 TV Lines - EIA RS-170	560 TV Lines - CCIR
Faceplate Sensitivity:	3.4 x 10 <sup>-4</sup> lux - usable display (typical) 3.0 x 10 <sup>-3</sup> lux - full resolution (typical)	
Scene Illumination:	1.5 x 10 <sup>-2</sup> lux - full resolution	
Sensor Type:	1/2" Interline Transfer CCD	
Signal to Noise:	> 46 dB (AGC off)	
Power Input:	12-30 VDC, 250 mA (max)	
Scanning:	525 line / 60 Hz - EIA RS-170	625 line / 50 Hz - CCIR
Video Output:	Composite, 1.0V peak to peak into 75 ohm Balanced video output available	
Long Line Compensation:	Internally adjustable (RS-485 control optional)	
Electro-Magnetic Compatibility:	EN50081-1 Emission / EN50082-1 Immunity	

## OPTICAL

Standard Lens:	3.8mm, f/0.8 (other lens options available)
Iris Control:	Automatic, f/0.8 - f/360
Focus Control:	Fixed, 152 mm (6 in) to infinity
Field of View in Air:	93° diagonal
Field of View in Water:	82° diagonal

## MECHANICAL

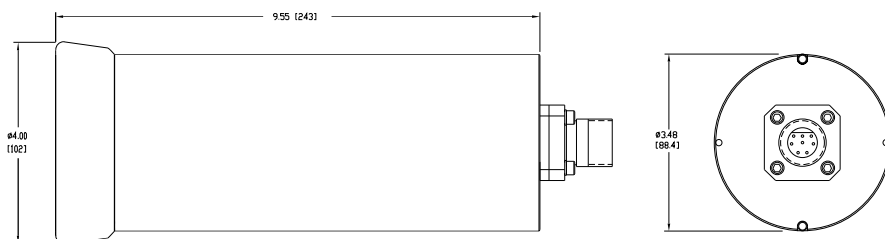
Housing Material:	6AL4V Titanium	Anodized 6061-T6 Aluminum	Electropolished 316 Stainless Steel
Length (w/o connector):	243 mm (9.55 in)	229 mm (9.00 in)	229 mm (9.00 in)
Diameter Main Body:	88.4 mm (3.48 in)	102 mm (4.00 in)	102 mm (4.00 in)
Diameter Front End:	102 mm (4.00 in)	105 mm (4.12 in)	105 mm (4.12 in)
Weight in Air:	2.6 kg (5.7 lbs)	2.2 kg (4.8 lbs)	7.3 kg (16.0 lbs)
Weight in Water:	1.1 kg (2.3 lbs)	0.2 kg (0.5 lbs)	5.4 kg (11.8 lbs)
Viewing Port:	Polished acrylic, water corrected		
Standard Connectors:	22 connector options available		

## ENVIRONMENTAL

Operating Depth:	3,000 m (10,000 ft) standard 6,000 m (20,000 ft) available
Operating Temperature:	-5°C to 50°C (23°F to 122°F) in water
Storage Temperature:	-20°C to 60°C (-4°F to 140°F) in air

## ROS STANDARD PIN-OUT

- 1 = Common
- 2 = Video
- 3 = Power



Certificate Number: 160263  
BS EN ISO 9001 : 2000

Specifications subject to change without notice 11/06

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