

EXPLORER EXTREME

Ultra-low Light Monochrome Camera



underwater **vision** specialists

Features

- High Resolution Monochrome 576 TVL
- Ultra-low Light Sensitivity
1 x 10⁻⁵ Lux (faceplate)
- Solid State Better than SIT
Performance
- Low through Life Costs
- No Sensor Burn or Image Smear
- 95° Horizontal Angle of View
- 4,000 Metre Rated Titanium Housing



Description

The Bowtech Products EXPLORER EXTREME underwater CCD camera is the first to offer better than SIT performance, without the need for an image intensifier. The EXPLORER EXTREME uses a peltier cooled back thinned and back illuminated EMCCD sensor, for higher sensitivity, coupled with automatic image enhancement. This produces a significantly higher output signal and much lower noise floor, together with a superb quantum efficiency of 90%, in the vitally important blue/green area of the spectrum, thus making this camera ideally suited for underwater use.

As the EXPLORER EXTREME has no intensifier or fragile and sensitive tube, the life of the camera is dramatically improved, reducing the through life cost of ownership, compared to the now obsolete SIT and

other intensified CCD low-light cameras. Not only do you get better light sensitivity, but virtually nil maintenance costs.

The EXPLORER EXTREME camera is an ideal choice for ROV navigation, submarine applications, such as upward viewing and general monitoring and for marine scientific research. Its low magnetic signature also makes this an ideal camera for use in underwater mine countermeasures. The camera has almost no image lag, and generally fitted with a wide angle 95° horizontal, high speed lens and fully water corrected viewing port to drastically reduce distortion. The 576 TVL high resolution output, is suitable for recording direct to the latest high-quality digital recorders.



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Revision: 1

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Specification – EXPLORER EXTREME

ELECTRICAL

Resolution, Horizontal:	576 TV Lines
Minimum Illumination:	1 x 10 ⁻⁵ Lux (faceplate)
Sensor Type:	2/3" EMCCD
Signal to Noise Ratio:	35dB 1 x 10 ⁻³ Lux (faceplate)
Scanning:	625 Line 50Hz CCIR, 525 Line 60Hz EIA
Voltage:	12 to 24Vdc
Current:	500mA Typical, 1.5A max
Composite Video Output:	1.0V pk-pk @ 75ohm

ENVIRONMENTAL

Water Depth:	4,000m
Operating Temperature:	-10 to +40°C
Storage Temperature:	-30 to +70°C
Vibration/Shock:	DEF STAN 00-35 (Part 5)/3 Chapter 6-02 DEF STAN 00-35 (Part 3)/3 Chapter 2-03

OPTICAL

Lens:	4.8mm Wide Angle, High Speed, Aspherical
Iris Control:	Automatic
Focus:	Fixed 300mm to Infinity
Angle of View:	95° Horizontal in Water
Window:	Fully Water Corrected Optical Acrylic

MECHANICAL

Maximum Diameter:	110mm (4.3") Body, 130mm (5.1") Protector
Length:	252mm (9.9") Excluding Connector
Weight in Air:	5.5kg
Weight in Water:	3.1kg
Standard Housing:	Titanium Alloy Grade 5 6AL-4V ASTM B3 48
Standard Connector:	5506-1506 or MCBH-6MP
Optional Connectors:	Large Selection of Connectors Available

*Export Licence Required for Shipping Outside of the EU



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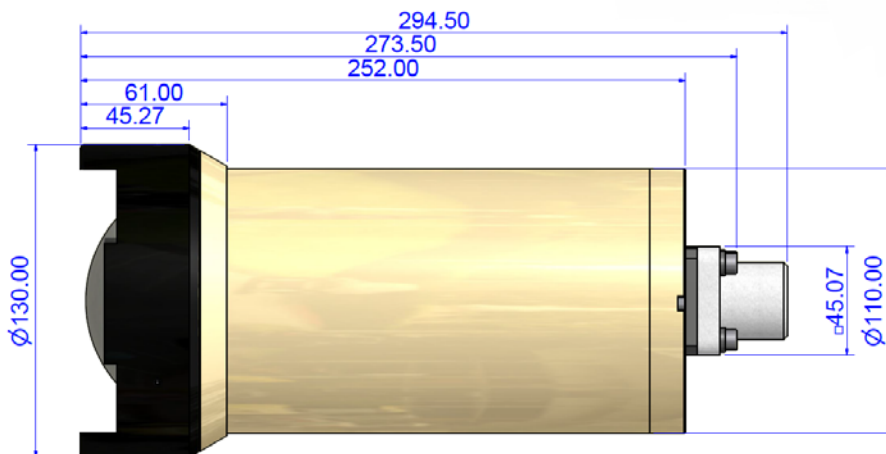
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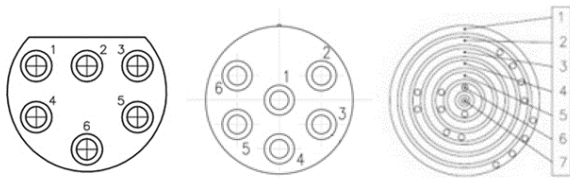


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Connector Options



55 Series 1506 MCBH-6MP Seagnet

(connector face patterns not to scale)



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