

# SURVEYOR-HD PRO

## Ultra-wide Angle Colour Zoom Camera



underwater **vision** specialists

## Features

- High Definition 1080p
- Fully Geometric and Chromatic Aberration Water Corrected Optics
- Component, HD-SDI or HD-SDI Over Fibre Output
- 100° Ultra-wide Diagonal Angle of View
- 4,000 or 6,000 Metre Rated Titanium Housing



## Description

The Bowtech Products SURVEYOR-HD PRO ultra-wide angle underwater HDTV camera is designed to provide the viewer a greater angle of view, from the standard Surveyor HD, whilst remaining compact and very competitively priced. The camera is ideal for ROV inspection tasks, scientific observation and broadcast applications. Video output is available as HD or HD-SDI over fibre.

Video output is available as component (Y/Pb/Pr), utilising standard connectors or HD-SDI on hybrid 75Ω coaxial or fibre optic connectors, a composite video output is also available.

The camera is available in a variety of control formats, including the Bowtech Products' GUI, which facilitates

the control of all features including white balance, auto tracking and back light compensation, which can be switched on or off using the GUI.

Excellent images are obtained, through the fused silica hemispherical window and the camera is ideal for overall scenes and close-up inspection. The camera uses a Bluetooth tablet for control setup. The optics are fully corrected for geometric and chromatic aberration.

The camera is housed within a 4,000 metre rated titanium housing, with a 6,000 metre option and has a fused silica hemispherical window.



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Last updated 22<sup>nd</sup> December 2014  
Revision: 5

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## Specification – SURVEYOR-HD PRO

### ELECTRICAL

Image Size:	1920 H x 1080 V, 1280 H x 720 V, 720 V x 576
Sensor Type:	1/2.8-Type Exmor CMOS
Limiting Scene Illumination:	1.7 Lux
Signal to Noise Ratio:	>50dB
Power Consumption:	12V to 24Vdc
Current:	300mA
HD Video Output:	Component, HD-SDI or HD-SDI Over Fibre Out
HD Format:	1080p/59.94, 1080i/50, 1080p/29.97, 1080p/25, 720p/59.94, 720p/50, 1080p/50, 1080p/59.94
SD Video Output:	PAL & NTSC Composite
Control Options:	Single Wire Tristate, Two Wire Bipolar, RS-232 or RS-485 Input, Bluetooth Tablet Control

### ENVIRONMENTAL

Water Depth:	4,000m (13,123ft) or 6,000m (19,685ft) Option
Storage Temperature:	-20 to +60°C
Operating Temperature:	-5 to +60°C
Shock 3 Axis: (operating)	30g Peak, 6ms Half-sine Pulse
Vibration 3 Axis: (operating)	10g, 20 to 150Hz

### OPTICAL

Optical Zoom:	30:1 4.6mm to 138.0mm focal length
Iris:	Automatic, f1.6 to Close
Focus Control:	10mm to Infinity (wide), 1500mm to Infinity (zoom)
Diagonal Angle of View in Air:	100°
Diagonal Angle of View in Water:	100°
Window:	Fused Quartz Hemisphere

### MECHANICAL

Housing Diameter:	138.0mm (5.43") Front Retainer
Length:	232.62mm (9.16") Excluding Connector
Weight in Air:	5.5kg (12lbs)
Weight in Water:	2.56kg (5.65lbs)
Standard Housing:	Titanium Alloy Grade 5 6AL-4V ASTM B3 48
Standard Connector:	Large Selection of Connectors Available



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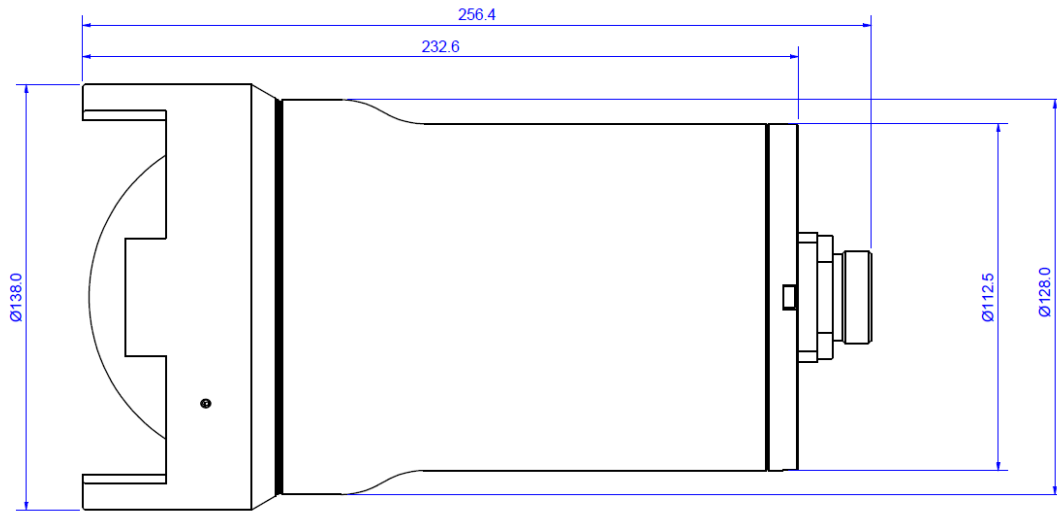
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## Ultra-wide Angle Colour Zoom Camera

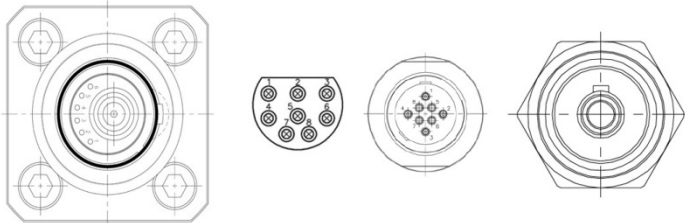


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## Specification



## Connector Options



MINL-551506-75OHM6#20-FCR    5506-1508    OPT-8-FCR    OPT-1-FCR

(connector face patterns not to scale)



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