

# SURVEYOR-HD

## High Definition Colour Zoom Camera



underwater **vision** specialists

## Features

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- 10:1 Optical Zoom
- High Resolution 800 TVL
- 1080i/720p HD
- Component, HD-SDI or HD-SDI Over Fibre
- 45° Diagonal Angle of View
- 4,000 or 6,000 Metre Rated Titanium Housing



## Description

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The Bowtech Products SURVEYOR-HD high definition underwater colour zoom camera, utilises Sony's latest block camera incorporating 1/3 inch HD CMOS CCD giving exceptional picture quality, 10:1 optical zoom lens, as well as horizontal resolution of 800+ TV lines. Standard video output is component; however HD-SDI and fibre output are also available.

A unique feature of this camera, apart for the exceptional picture quality, is its size. The camera has a titanium 6,000 metre rated housing, with optically clear sapphire window. The camera is smaller than the standard underwater colour zoom camera and therefore ideal for mounting on all ROVs.



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Last updated 30<sup>th</sup> April 2013  
Revision: 0

# Specification - SURVEYOR-HD

## ELECTRICAL

Resolution, Horizontal:	800 TV Lines
Pixels:	1920 H x 1080 V
Sensor Type:	1/3" HD CMOS
Sensitivity (limiting):	0.1 Lux (faceplate)
Sensitivity:	11 Lux Typical @ f1.8, 50 IRE
Limiting Scene Illumination:	1.5 Lux with 100% Reflection
Signal to Noise Ratio:	>50dB
Voltage:	11-30Vdc
Current:	400mA Typical
HD Video Output:	Component Y/Pb/Pr, HD-SDI or HD-SDI Over Fibre Out
HD Format:	1080i 50 or 60 fps, 720p 50 or 60 fps (user selectable)
SD Video Output:	PAL & NTSC Composite
Video Aspect Ratio:	16:9 or 4:3 (user selectable)
Electro-magnetic Compatibility:	EN50081-1 Emission/EN50082-1 Immunity
Control Options:	Single Wire Tristate, Two Wire Bipolar, RS-232 Input

## ENVIRONMENTAL

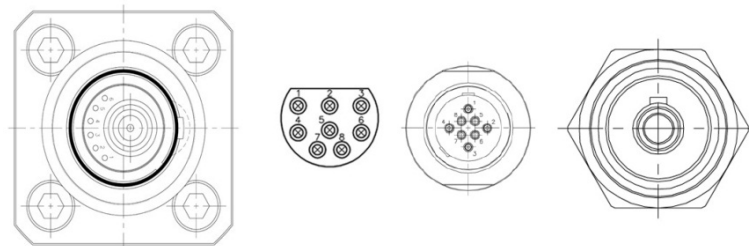
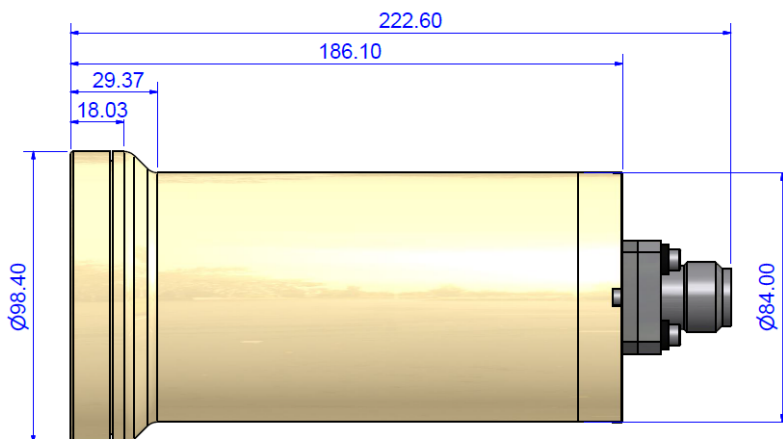
Water Depth:	4,000 or 6,000m (20,000 ft)
Storage Temperature:	-40 to +85°C
Operating Temperature:	-5 to +50°C
Shock 3 Axis: (operating)	30g Peak, 6ms Half-sine Pulse
Vibration 3 Axis: (operating)	10g, 20-150Hz

## OPTICAL

Optical Zoom:	10:1 5.1mm to 51.0mm Focal Length
Digital Zoom:	4x (40x with optical zoom) Deactivated as Standard
Iris:	Automatic, f1.6 to Close
Focus Control:	Front Window to Infinity (wide), 1500mm to Infinity (zoom)
Angle of View:	61° Diagonal in Air, 45° Diagonal in Water
Window:	Sapphire Glass

## MECHANICAL

Housing Diameter:	98.4mm (3.87") Front Retainer
Length:	172mm (6.77") Excluding Connector
Weight in Air:	2.7kg (5lbs)
Weight in Water:	1.4kg (3.08lbs)
Standard Housing:	Titanium Alloy Grade 5 6AL-4V ASTM B3 48
Standard Connector:	Large Selection of Connectors Available



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

connector face patterns not to scale)



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