

SURVEYOR-HD

High definition colour zoom camera



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 HDSDI 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.

Specifications

Product	SURVEYOR-HD
Country of origin	USA
Manufacturer	Teledyne Marine

Features

- 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

Electrical specifications

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

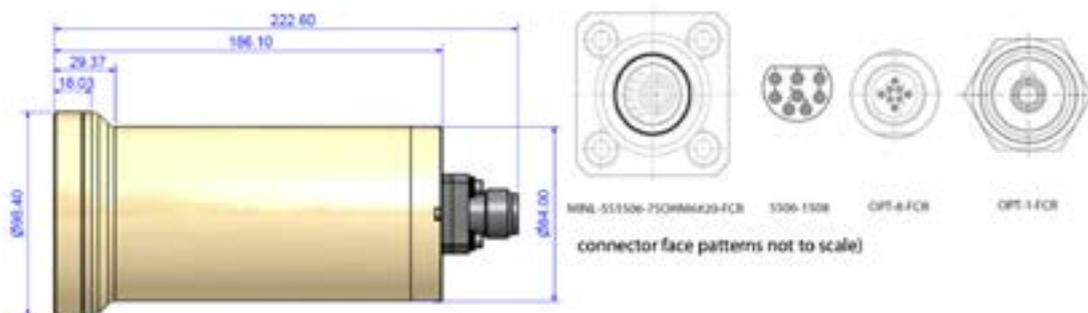
Water depth	4,000 or 6,000m (20,000 ft)
Storage temperature	-40 to +85°C
Operating temperature	-5 to +50°C
Shock 3 Axis: (operating)	30g Peak, 6ms Half-sine Pulse
Vibration 3 Axis: (operating)	10g, 20-150Hz

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



BV5000

3D Mechanical Scanning Sonar



BlueView's BV5000-1350 and BV5000-2250 3D mechanical scanning sonar create highresolution imagery of underwater areas, structures, and objects. With the touch of a button, these new 3D mechanical scanning sonar create 3D point clouds of an underwater scene with minimal training required. The compact, lightweight units are easily deployed on a tripod or an ROV. The scanning sonar head and integrated mechanical pan and tilt mechanism generate both sector scans and spherical scan data. For the first time, get 3D laser-like scanning capabilities underwater, even in low and zero visibility conditions and seamless integration with traditional laser scan imagery.

Specifications

Product	BV5000
Country of origin	USA
Manufacturer	Teledyne Marine