

3D-SD

High Resolution Stereoscopic Camera

Features

- 3D (stereoscopic) Imaging
- High Resolution
- 650 TVL Colour
- 700 TVL Monochrome
- 4,000 or 6,000 Metre Rated Titanium Housing
- Compact (109x102x49mm)



Description

The Bowtech Products 3D-SD high resolution stereoscopic underwater camera incorporates two CCD sensors, configured within a single compact underwater housing, for standard definition stereoscopic imaging. The 3D-SD transmits left and right standard composite analogue video signals (PAL/NTSC), on a single connector, allowing straight forward connection to the majority of ROV and underwater imaging systems.

On the surface, the left and right composite video signals are input to the Bowtech Products 3D-SD surface control unit, which is contained within a 19" rack enclosure. The 3D-SD control unit can be configured to allow connection to a variety of professional and consumer 3D display types.

The Bowtech Products 3D-SD utilises the proven core imaging technologies, found within our highly acclaimed professional tooling cameras, providing 650 TVL (colour), or 700 TVL (mono) of image resolution per eye. The 3D-SD is housed in grade 5 titanium housing, with sapphire glass windows, which is already proven in the field in terms of high quality and ruggedness.

The 3D-SD can be fitted with a wide array of underwater connectors, to allow easy integration to any PAL/NTSC composite video system.



Specification – 3D-SD

ELECTRICAL

Resolution, Horizontal:
Limiting Light Sensitivity:
Sensor Type:

Sensor Elements:
Signal to Noise Ratio:
Scanning:
Voltage:
Current:
Composite Video Output:
Electro-magnetic Compatibility:
MTBF:

Colour

650 TV Lines
0.1 Lux @ f2.0
1/3" (Sony) EX-View HAD CCD
10 Bit Digital Processing
752 (H) x 582 (V) PAL, 768 (H) x 494 (V) NTSC
>52dB
625 Line 50Hz PAL, 525 Line 60Hz NTSC
12 to 24Vdc
260mA Maximum
1.0V pk-pk
EN50081-1 Emission/EN500852-1 Immunity
80,000 hrs

Monochrome

700 TV Lines
0.01 Lux @ f2.0
1/3" (Sony) EX-View HAD CCD
10 Bit Digital Processing
752 (H) x 582 (V)
>50dB (AGC off)
625Line 50Hz CCIR, 525 Line 60Hz EIA
12 to 24Vdc
200mA Maximum
1.0V pk-pk
EN50081-1 Emission/EN500852-1Immunity
80,000 hrs

OPTICAL

Lens:
Iris:
Focus:
Convergence:
Angle of View:
Window:

f1.4, 2.9mm or 3.6mm, 4.3, 6, 8, 12, 16
Electronic Shutter 1/50th to 100,000th .sec
Fixed 100mm to Infinity
From 2m
92° Diag in Air, 65° in Water (2.9mm lens)
Sapphire Glass

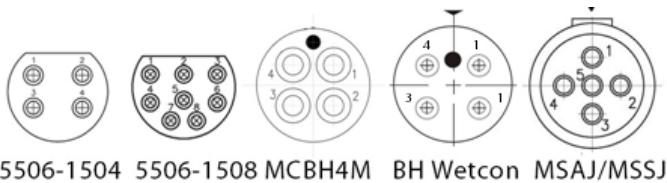
ENVIRONMENTAL

Water Depth: 4,000 or 6,000m Option
Storage Temperature: -20 to +60°C
Operating Temperature: -10 to +50°C
Shock 3 Axis (operating): 30g Peak, 6ms Half-sine Pulse

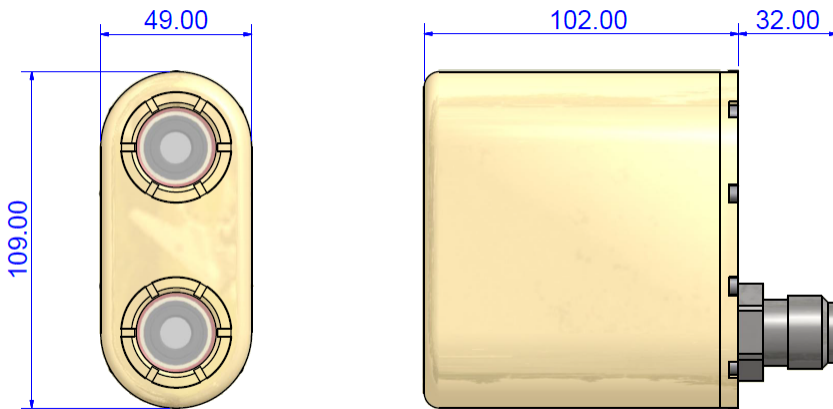
MECHANICAL

Dimensions: 109 x 102 x 49mm
Weight in Air: 1650g
Weight in Water: 1150g
Standard Housing: Titanium Grade 5
Standard Connectors: 5507-1508 or MCBH4M
Optional Connectors: Large Selection of Connectors Available

*Convergence Distance to be Factory Set



(connector face patterns not to scale)



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