

# 3D-HD

## High Definition Stereoscopic Camera

## Features

- 3D (stereoscopic) Imaging
- High Definition
- 1080i/720p HD
- Dual HD-SDI or HD-SDI over Fibre
- 60° Diagonal Angle of View
- 4,000 or 6,000 Metre Rated Titanium Housing



## Description

The Bowtech Products 3D-HD high definition stereoscopic underwater camera incorporates two high definition cameras into one housing. The camera transmits either dual HD-SDI or HD-SDI over fibre to the surface, where the data is converted back into two HD-SDI signals.

On the surface, these signals are simply fed into 3D monitor with integral sync, or processed via our 3DHD-ADC-UDC-SYNC 19" rack, to deliver synchronised images suitable for recording. With the use of polarised 3D glasses, the observer can see a perception of depth from the images displayed.

The core technology builds on our highly acclaimed Surveyor HD camera, providing dual 800+ TV lines resolution images, at either 1080p in 25 or 60 Hz output, or 720p, in 50 or 60 Hz output.

The twin cameras incorporate 1/2.8 inch HD CMOS CCD, giving exceptional picture quality and horizontal resolution of 800+ TV lines. Standard video output is HD-SDI with fibre option.



# Specification – 3D-HD

## ELECTRICAL

Resolution, Horizontal:	800 TV Lines
Pixels:	3.27 Mega Pixels
Sensor Type:	2x 1/2.8" HD CMOS CCD
Sensitivity: (limiting)	0.1 Lux (faceplate)
Sensitivity:	11 Lux Typical @ f1.2, 50 IRE
Limiting Scene Illumination:	1.0 Lux with 100% Reflection @ f1.2
Signal to Noise Ratio:	>50dB
Voltage:	11-30Vdc
Current:	800mA Maximum
HD Video Output:	Dual HD-SDI or HD-SDI Over Fibre (option)
HD Format:	1080p 25/30, 720p 50 or 60 fps
Video Aspect Ratio:	16:9
Electro-magnetic Compatibility:	EN50081-1 Emission/EN50082-1 Immunity
Control Options:	RS-232 Input (enable video format, gain, shutter, white back light comp., balance and visual effects settings) Character Generator Focus.

## ENVIRONMENTAL

Water Depth:	4,000 or 6,000m Option
Storage Temperature:	-20 to +60°C
Operating Temperature:	-5 to +50°C
Shock 3 Axis: (operating)	30g Peak, 6ms Half-sine Pulse
Vibration 3 Axis: (operating)	10g, 20-150Hz

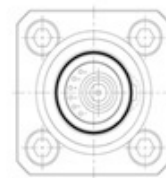
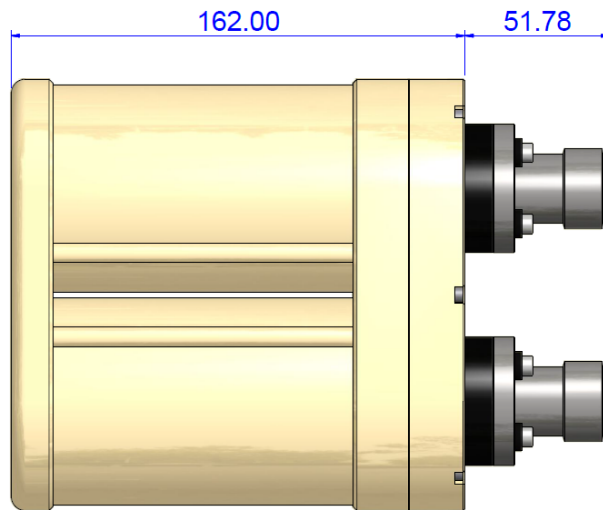
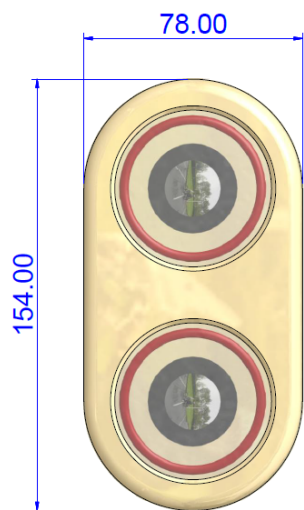
## OPTICAL

Iris:	3mm Auto
Focus Control:	f1.2 to Close
Convergence:	From 2m
Angle of View:	67° Horizontal (1080p) in Water, 45° Horizontal (720p) in Water

## MECHANICAL

Housing Width, Height & Length:	154mm Front Retainer (titanium)
Length:	162mm Excluding Connector (titanium)
Standard Housing:	Titanium
Standard Connectors:	2x MINL-551506-750HM6#20-FC
Window:	Sapphire Glass

\*Convergence Distance to be Factory Set



MINL-551506-750HM#20-FCR  
(connector face pattern is not to scale)



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T +44 1224 772345  
F +44 1224 772900

sales@bowtech.co.uk  
[www.bowtech.co.uk](http://www.bowtech.co.uk)

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