



## GENERAL DESCRIPTION

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The Trittech OceanSpy underwater video camera incorporates the very latest in colour CCD technology. Built to survive in the harsh underwater inspection environment the OceanSpy has been designed to be as small as possible while at the same time provide a high quality colour picture. The OceanSpy incorporates an integral low voltage LED light array. This integral lighting provides a camera that is well suited for close proximity inspection work where little or no lighting is available. External control of the lighting allows the camera to be operated with or without the LEDs thus ensuring the operator can select the optimum operating configuration. The external focus adjustment capability of the OceanSpy allows adjustments to be made without opening the camera therefore allowing you to alter the focus while operating the camera at depth. The camera power supply board can accept 12-30VDC and provides excellent protection for the efficient operation of the camera module. Fitted with an integral video line driver the OceanSpy compensates attenuation of the video signal when used over various umbilical lengths. As with all of the Trittech cameras the OceanSpy is fitted with a high quality water corrected viewport to optimise the picture quality. This water corrected viewport results in a camera that provides a crisp picture during close proximity viewing in murky water.

### Features

- High resolution colour CCD module
- Very compact unit – only 10 cm in length, diameter 3.4 cm
- Low power consumption
- Unique external focus adjustment and LED on/off switch
- A water corrected port is fitted to optimise the picture quality.
- Standard depth rating of 3000m
- Extremely robust - will survive in the harshest environment

### Applications

- Subsea inspection
- Tooling
- Diver hand-held
- General purpose
- Down hole
- Internal pipe inspection
- AUV video suites



# TRITECH OCEANSPY CAMERA

## SPECIFICATIONS

### Mechanical

Diameter	34mm
Length excluding connector	100mm
Pressure housing	Stainless steel (Aluminium optional)
Connector	Subcon MCBH3M
Weight in Air	0.5kg
Weight in Water	0.4kg

### Video

Pick up element	1/4 inch Interline
Transfer	CCD Image Sensor
Number of pixels	537 H x 597 V
Number of sensing pixels	500 H x 582 V
Horizontal resolution lines	More than 320 TV
Sync system	Internal
Scanning	2:1 interlace
Video output	PAL 1 Vpp 75 Ohms (unbalanced)
Video Line Drive Capability	1000m with good quality coax
Camera Control	LED control via External Adjustment
Zoom	N.A.
Focus	Externally Adjustable

### Environmental

Operating temperature	-10 0 C to +40 0 C
Storage temperature	-30 0 C to +70 0 C
Operating depth	3000m standard (optional depths available)

### Electrical

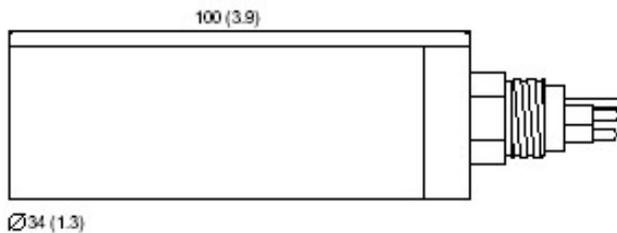
Power supply	12V minimum - 30V 120mA Nominal
Solid state light	Ring of 6 LED (5.6 candela)

### Optical

Lens (water corrected)	3.8 mm F2
Angular view in air	51° V x 40° H
Internal Adjustable Focus	2cm to infinity

### Sensitivity

Minimum illumination	5 Lux (F2.0)
S/N ratio	More than 45db (AGC Off)
Automatic Gain Control (AGC)	More than 18 db



All measurements in mm (inches)



OceanSpy's external focus adjustment