



## Super SeaSpy

### COLOUR CCD UNDERWATER CAMERA

#### Benefits

- Compact design
- Dynamic Light Control (DLC)
- Optimised illumination
- Water corrected optics

#### Features

- Robust 4,000m depth rated construction
- Dynamic or manual illumination control
- Evenly distributed beam from the LED white light engine
- Optimised optics: water corrected
- Amplified video for use with a long umbilical

#### Applications

- ROV inspection and ancillary camera
- ROV intervention tooling camera
- Visual inspection operations
- Restricted access area inspection
- Marine science research



*Super SeaSpy*

The Tritech Super SeaSpy underwater video camera is a compact, high resolution, full colour camera with integral low voltage lighting.

Built to survive the harsh underwater inspection environment, the Super SeaSpy has been designed to be compact and rugged whilst providing high quality colour video.

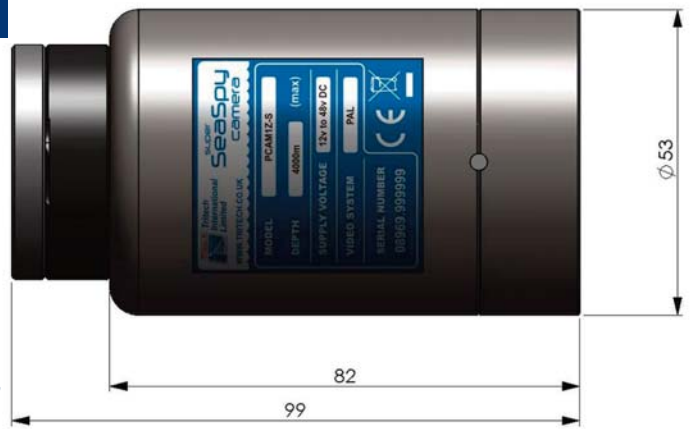
The Super SeaSpy incorporates a ring of white LEDs which provide uniform illumination over the field of view. The LED Engine utilises Dynamic Light Control (DLC) which automatically adjusts the lighting level to optimise video image quality, regardless of the reflectivity of work surface. This feature also helps enhance picture quality by reducing the amount of backscatter from suspended particles in the water column.

This integral lighting provides a camera that is well suited for close proximity inspection work where little or no lighting is available. The Super SeaSpy is also specified for ROV Intervention Tooling by several of the major developers in this field.

The Super SeaSpy is fitted with a water corrected lens system which optimises the picture quality by reducing radial distortion and reducing chromatic aberration.

Fitted with an integral Video Line Driver, the Super SeaSpy compensates for attenuation of the video signal when used through longer Umbilicals. The Line Driver Gain is selectable and the circuit is protected against overvoltage.

**SPECIFICATION**



All specifications are in mm

Minimum Illuminance Sensitivity	0.5 Lux. Min. (No illumination)
Illumination	10 Lux @ 1m & 110 Lux @ 0.3m
Illumination Control	Dynamic Light Control (DLC) On/ Off Manual override
CCD Module	1/ 3" Interline transfer CCD

	<b>PAL</b>	<b>NTSC</b>
Vertical resolution (Number of Horizontal Lines)	550 Lines	470 Lines
Scanning System	625 Lines @ 50Hz	525 Lines @ 60Hz
Viewing Angle	72° in water (diagonal)	
Focus Range	50mm to Infinity	
Primary Lens	Fixed, 4.3mm, F2.2	Water corrected optics
Iris Control	Auto Iris (AI)	
Video Output	1v Peak to Peak Composite, 75Ω unbalanced	
Signal to Noise Ratio	>48dB (AGC Off)	
Other features	Auto white balance, back light compensation, Gamma correction	

<b>ELECTRICAL</b>	
Voltage Range	12v to 48v DC
Power Consumption	4.8w @ 24v

<b>PHYSICAL</b>	
Depth Rating	4000m
Weight in Air	0.65Kg (with Tritech Connector)
Weight in Water	0.45Kg (with Tritech Connector)

	<b>STORAGE</b>	<b>OPERATING</b>
Temperature Range	-20°C to +50°C	-10°C to 40°C
Shock (DEF STAN 00-35 (Part 3)/3 Chapter 2-03)	30g for 6ms in each axis (operating)	
Vibration (DEF STAN 00-35 (Part3)/3 Chapter 2-01)	Sinusoidal sweep & dwell in each axis from 5 to 150Hz @ 10g (operating)	
Connector	Tritech 6w connector	

<b>MATERIALS</b>	
Pressure Housing	Stainless steel 316
Port	Water corrected optical acrylic

<b>CUSTOMER SPECIFIED OPTIONS</b>	
Other Connection Options	Burton/ Seacon 5506 series
Illumination Control Override	Bi-Polar Control (Default) - See Manual Tri-State Control - See Manual
Video Line Driver	Up to 500m with good quality RG59 Co-axial Cable (with selected variable gain) - See Manual

All specifications are subject to change in line with Tritech's policy of continual product development.

Ref: EDS-CAM-004.9