

OE14-502



KONGSBERG



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HIGH DEFINITION COLOR ZOOM CAMERA

- **High definition color inspection camera**
- **Multi-standard video capability**
- **10:1 optical zoom lens**

The Kongsberg Maritime OE14-502 Underwater HD Camera is designed and priced to be used for all general purpose ROV inspection tasks. Video output is available as Component (Y, Pb, Pr) and HD-SDI on coax or fibre connectors (Single or Multi-mode). CWDM alternative wavelengths are also available. It is possible to easily switch to high resolution composite video output if HD is not required for certain tasks.

The OE14-502 is a multi-standard camera with the ability to change video formats by IR remote control (RC) or by GUI.

Long line drive can be set by RC or GUI and allows the component signal to drive three matched coax cables with no degradation over three hundred metres. In addition to full control of the camera using the GUI, white balance can be set to 3,200K, 5,800K or to auto tracking and back light compensation can be switched on or off using the remote control.

A domed water compensated port and optical zoom provide a close-up inspection capability combined with the flexibility of a 10x magnification for powerful stand off inspections.

The unique Kongsberg Maritime IR remote control also allows camera control set-up. Camera control can be single wire (tri-state), RS485 and RS232.

The inclusive Kongsberg Maritime Graphical User Interface (GUI) provides control functionality via the serial link.

Applications

- **Marine Science**
- **Manned Submersible**
- **HD and SD High End Inspection**

TECHNICAL SPECIFICATIONS

Performance

Horizontal Resolution	800 TVL/PH
Light Sensitivity	100 mV video at 140 x 10 ⁻³ lux faceplate 350 mV video at 1 lux faceplate
Minimum Scene Illumination	2 lux
Signal to Noise Ratio	>54 dB (weighted)

Electrical

Scan Standard	1080i / 720p, 50 fps 1080i / 720p, 59.94 fps PAL / NTSC VBS Composite Video
Sensor Elements	1920(H) x 1080 (V)
Video Output	HD-SDI over coax, HD-SDI over fibre (SM,MM, CWDM), Component (Y,Pb,Pr), PAL and NTSC composite video
Power Input	16 to 24 V dc, 700mA (max)
Control	Single wire (tri-state), RS232, RS485 (user selectable via IR remote)

Optical

Lens	5.1mm to 51mm, F1.8 10x Optical Zoom
AOV in water	Horizontal: 45° Vertical: 29° Diagonal: 50°
Iris Control	Automatic (Manual using the GUI)
Focus Range	Front port to infinity (at wide angle) 800mm to Infinity (at narrow angle)

Mechanical

Dimensions	Diameter: 95mm (excl. bump guard) Length: 222.5mm (excl. connector and bump guard)
Weight	In air 3.2Kg, in water 1.6Kg
Housing Material	Titanium Alloy, 6AL/4V ASTM B3 48
Connector	Configuration dependent

Environmental

Operating Depth	4,500 msw (other depth rated housing options are available)
Temperature	Operating: -5 to 40°C, Storage: -20 to 60°C
Shock	30G peak acceleration, 25ms half sine duration, on all three axes
Vibration	10G, from 20 to 150Hz on all three axes
Electromagnetic Compatibility	BS EN 61000-6-3: 2001 Emission and BS EN 61000-6-1: 2001 Immunity

Features

White Balance	Auto, 3,200K, 5,800K selectable through GUI or IR remote
Back Light Compensation	Switch on and off using the GUI or IR remote
	Over voltage and reverse polarity protection

Specifications subject to change without any further notice

oe14502_Datasheet_US / Rev.B

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