

## 3D high definition stereoscopic colour camera

oe14-530



- Real-time 3D viewing facilitates manipulator operation
- Wide field of view provides optimum coverage
- Multi-standard HD / SD video capability

The Kongsberg Maritime OE14-530 Underwater 3D HDTV Color Camera provides real time stereoscopic images of the subsea workspace in high definition.

With its wide field of view and factory-set optical alignment, the camera design has been optimised primarily for use in subsea tele-robotic applications, providing the ROV operator with a comfortable and natural 3D view of manipulator operations. The enhanced depth perception enables more accurate positioning, faster performance of tasks, and reduces the risk of damage. The OE14-530 is a multi-standard camera with the ability to select video formats. HD video output is available as dual HD-SDI digital data streams on coax or fibre connectors. CWDM wavelengths are also available. It is also possible to switch to high resolution analogue composite video output if HD is not required for certain tasks, or for use on ROV's that are not yet equipped for HD signals.

The camera is compatible with a wide range of stereoscopic display and processing equipment, offering a choice of active, passive, or the latest glasses-free 3D display technology.

The Kongsberg Maritime hand-held IR remote control allows initial selection of single wire (tri-state), RS485 or RS232. It can also be used to pre-set the video format, white balance setting, and backlight compensation. In serial control modes, the Kongsberg Maritime Graphical User Interface (GUI) provides full control of all camera functionality via the serial link.

Kongsberg Maritime reserves the right to amend specifications without notice.

### Standard Features

#### Electrical

Horizontal Resolution	800 TV Lines per picture height
Picture Elements Video	Dual sensors 1920 (H) x 1080 (V)
Light Sensitivity (limiting)	0.1 Lux (faceplate)
Scene Illumination (limiting)	1.0 Lux assuming 100% scene reflectance
Signal to Noise Ratio	>54dB weighted
Power Input	Constant Voltage 12V-30Vdc @15W max.
Video Output	HD-SDI – twin high-integrity coax or fibre optic

#### Optical Output Options

Optical Output Options	Composite Video – twin coax
	CWDM (Coarse Wave Division Multiplex) Wavelength options
	Single fibre WDM
Standard Video Formats (selected by IR or GUI)	1080i 50Hz or 60Hz - dual HD-SDI
	720p 50Hz or 60Hz - dual HD-SDI
	PAL or NTSC (squeeze or crop) - dual analogue composite
White Balance	Selectable 3,200K, 5,600K, Auto
Back Light Compensation	Selectable on / off
Control Interface	Selectable KML Tri-state, RS485, RS232 or Pelco-D

#### Electro-Magnetic Compatibility

Electro-Magnetic Compatibility	Ethernet (option)
	BS EN61000-6-3 2007 Emission
	BS EN61000-6-1 2007 Immunity

#### Environmental

Water Depth	3,000 metres (other options available)
Temperature	Operating -5°C to +40°C in Water
	Storage -20°C to +60°C
Vibration	10g, 20-150Hz, 3-axes (non-operating)
Shock	30g peak, 25mS half-sine pulse

#### Optical

Angle of View in Water	74° Diagonal
	67° Horizontal (56° in PAL/NTSC crop mode only)
	41° Vertical
Iris Control	Automatic
Focus Control	200mm to infinity

#### Mechanical

Diameter	146 mm (main body)
Length	267 mm (excl. connectors)
Weight	8.5 Kg in Air, 4.1 Kg in Water
Standard Housing	Titanium Alloy 6AL/4V ASTM B348
Connector	Burton 5506-1508 (power/control/composite video)
HD-SDI Outputs	Seacon Opticon Fibre
	DG O'Brien Coax
	Other connectors are available, including fibre or coax hybrid



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