

OE14-522

Applications

- Marine Science
- Manned Submersibles
- HD Inspection and Survey
- Observation and Situational Awareness
- Vessel Hull Mount



High Definition Pan & Tilt, Zoom Camera

- 10:1 Zoom Lens
- 230° Optical Viewing
- 1080p / 720p / NTSC / PAL

The OE14-522 high definition, pan & tilt zoom camera has been designed primarily for use in subsea environments and is ideally suited to HD inspection & survey tasks, general observation & situational awareness tasks, marine science, (HOV) manned submersible deployment and vessel hull mount (research vessel and mega yacht) applications.

The OE14-522 high definition, pan & tilt zoom camera has a unique gimbal head design, providing 230° angular coverage on the pan axis and 224° angular coverage on the tilt axis. The custom engineered optical arrangement ensures the high definition video image remains in focus through the complete range of movement on both axes. With a 10:1 optical zoom lens the OE14-522 will focus from as close as 10mm from the front port to infinity, making it the perfect choice for both close up and stand-off inspections.

Packaged within a robust 4500msw depth rated titanium alloy housing the OE14-522 provides a high definition video output signal which is available in a range of customer specified transmission modes including HD component, HD-SDI over coax and HD-SDI over fibre. The OE14-522 can also be customized with a variety of external connectors.

Camera functions can be operated via a single wire (tri-state) voltage control system or by using Imenco's proprietary command protocol over an RS485 or RS232 serial link. Camera functions can also be operated using the Pelco-D protocol over an RS485 serial link.

The OE14-522 is supplied with a hand held infra-red remote control and GUI (Graphical User Interface) both are included free of charge and have been intuitively designed for ease of use. An optional flange mount housing assembly is also available for integration into research vessels and mega yacht hulls.

For further information, email
camera.sales.uk@imenco.com



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Technical Specifications

Performance	
Horizontal Resolution	800 TVL/PH
Light Sensitivity	100mV video at 15 x10 ⁻³ lux faceplate, 350mV video at 1.1 lux faceplate
Minimum Scene Illumination	2 lux
Signal to Noise Ratio	>54 dB (weighted)
Electrical	
Scan Standards	1080p / 720p, 50 fps 1080p / 720p, 59.94 fps 1080p, 29.97 fps 1080p / 720p, 25 fps PAL / NTSC composite video
Sensor Elements	1920 (H) x 1080 (V)
Video Output	SMPTE ST 292 HD-SDI over 75Ω Coax 1.5Gb/s, SMPTE ST 292 HD-SDI over fibre (SM, MM, CWDM) 1.5Gb/s, HD Component (Y, Pb, Pr), PAL and NTSC composite video
Power Input	16 – 24 VDC, 1A (max)
Control	Single wire (tri-state), RS232, RS485 (user selectable via IR remote)
Optical	
Lens	5.1mm to 51mm, 10:1 optical zoom, F1.8 to F2.1
AOV in water	Diagonal: 45.1° (Wide) Horizontal: 40.5° (Wide) Vertical: 23.9° (Wide)
Iris Control	Automatic (manual control available through GUI)
Focus Range	10mm to infinity (at wide angle) 1000mm to infinity (at tele angle)
Angular Coverage	
Pan & Tilt	Pan: ±115°, Tilt: ±112° (with lens at wide angle setting)
Pan & Tilt, Zoom & Focus Control	GUI or optional joystick terminal
Mechanical	
Dimensions	Diameter: 140mm (Main Body), 170mm (Dome), Length: 226.5mm (excl. connector)
Weight	In air: 6.4 Kg, In water: 4.4 Kg
Housing Material	Titanium alloy 6AL/4V ASTM B3 48
Connector	Configuration dependant.
Environmental	
Operating Depth	4500 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: 2007 Emission and BS EN 61000-6-1: 2007 Immunity

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