

Applications

- Marine Science
- Vessel Hull Mount
- Manned Submersibles
- HD Inspection and Survey
- Pipeline & Jacket Inspection



High Definition Wide Angle Colour Zoom Camera

- 10:1 Zoom Lens
- 83° Optical Viewing
- 1080p / 720p / NTSC / PAL

The OE14-504 high definition colour zoom camera has been designed primarily for use in subsea environments and is ideally suited to HD inspection & survey tasks, marine science and (HOV) manned submersible deployment and vessel hull mount (research vessel & mega yacht) applications.

The OE14-504 high definition, colour zoom camera has a custom engineered and water corrected optical arrangement, with a 10:1 optical zoom lens, the video image remains in focus 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 OE14-504 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 OE14-504 can also be customized with a variety of external connectors. Camera functions can be operated via a single wire (tristate) voltage control system or by using Imenco's proprietary command protocol and GUI (Graphical User Interface) over an RS485 or RS232 serial link.

The OE14-504 is supplied with a hand held infra-red remote control and GUI 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 yachts hulls



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OE14-504

Technical Specifications

Performance	
Horizontal Resolution	800 TVL/PH
Light Sensitivity	100mV video at 0.02 lux faceplate, 350mV video at 0.15 lux faceplate
Minimum Scene Illumination	0.05 lux
Signal to Noise Ratio	>70dB (weighted)
Electrical	
Scan Standards	1080p / 1080i / 720p, 50 fps 1080p / 1080i / 720p, 59.94 fps 1080p / 720p, 29.97 fps 1080p / 720p, 25 fps PAL / NTSC composite video
Sensor Elements	1920 (H) x 1080 (V)
Video Output	HD-SDI over Coax, HD-SDI over fibre (SM, MM, CWDM) HD Component (Y, Pb, Pr) PAL and NTSC composite video
Power Input	16 - 24 VDC, 700mA (max)
Control	Single wire (tri-state), RS232, RS485 (user selectable via IR remote)
Optical	
Lens	3.8mm to 38mm, F1.8 to F3.4 10:1 optical zoom
AOV in water	Horizontal: 75.2° (Wide) Vertical: 44.5° (Wide) Diagonal: 83.3° (Wide)
Iris Control	Automatic (manual control available through GUI)
Focus Range	Front port to infinity (at wide angle) 600mm to infinity (at tele angle)
Mechanical	
Dimensions	Diameter: 95mm (excl. main body) Length: 245.5mm (excl. connector and bump guard)
Weight	In air: 3.7 Kg, In water: 1.86 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

