

OE14-522

High Definition Pan & Tilt, Zoom Camera



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.

Performance

Horizontal resolution	800 TVL/PH
Light sensitivity	100mV video at 15×10^{-3} lux faceplate, 350mV video at 1.1 lux faceplate
Minimum scene illumination	2 lux
Signal to noise ration	>54dB (weighted)
Dimensions	400 x 220 x 220 mm

Electrical

Scan standards	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), HD Component (Y, Pb, Pr), PAL and NTSC composite video
Power input	16 – 24 VDC, 1A (max)
Control	Single wire (tri-state), RS232, RS485

Optical

Lens	5.1mm to 51 mm, 10:1 optical zoom, F1.8 to F2.1
AOV in water	Horizontal: 40.5° (Wide) Vertical: 23.9° (Wide) Diagonal: 45.1° (Wide)
Iris control	Automatic (manual control available through GUI)
Focus range	10 mm to infinity (at wide angle)
Control	Single wire (tri-state), RS232, RS485

Angular coverage

Pan & tilt	Pan: $\pm 115^\circ$, Tilt: $\pm 112^\circ$ (with lens at wide angle setting)
Pan & Tilt, Zoom and 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	Pan: $\pm 115^\circ$, Tilt: $\pm 112^\circ$ (with lens at wide angle setting)
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 peak acceleration, 25ms half sine during, on all three axes
Electromagnetic compatibility	BS EN 61000-6-3: 2007 Emission and BS EN 61000-6-1: 2007 Immunity