

## 0E14-222/223

## COLOUR PAN \& TILT, ZOOM CAMERA (PATZ)

The OE14-222 (PAL) and OE14-223 (NTSC) pan \& tilt, zoom colour camera has been designed primarily for use in subsea environments and is ideally suited to inspection \& survey tasks, general observation \& situational awareness tasks, (HOV) manned submersible deployment and vessel hull mount (research vessel and mega yacht) applications.

The OE14-222/3 (PATZ) pan \& tilt, colour zoom camera has a unique gimbal head design, providing $176^{\circ}$ angular coverage on the pan axis and $205^{\circ}$ angular coverage on the tilt axis. With a 10:1 optical zoom lens the OE14-222/3 will focus from as close as 10 mm from the front port to infinity, making it the perfect choice for both close up and stand-off inspections.

Packaged within a robust 4500 msw depth rated marine grade titanium alloy housing, the OE14-222/3 (PATZ) camera has been fully qualified to withstand extremes of temperature, shock, vibration and stringent EMC standards, making it suitable for use in the most extreme of marine environments.

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 OE14-22/3 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.

Contact us for additional information or to get a quotation. Send an e-mail to camera.sales.uk@imenco.com or find personal contact info on our website.

| Performance |  |
| :---: | :---: |
| Horizontal Resolution | 460 TVL/PH (OE14-222) <br> 470 TVL/PH (OE14-223) |
| Light Sensitivity | 100 mV video at $40 \times 10^{-3}$ lux faceplate 350 mV video at 0.3 lux faceplate |
| Minimum Scene Illumination | 0.7 lux (nominal) |
| Signal to Noise Ratio | $>50 \mathrm{~dB}$ (weighted) |
| Electrical |  |
| Scan Standards | 625 lines 50Hz PAL (OE14-222) <br> 525 lines 60Hz NTSC (OE14-223) |
| Sensor Elements | $\begin{aligned} & 752(\mathrm{H}) \times 582(\mathrm{~V}) \text { (OE14-222) } \\ & 768(\mathrm{H}) \times 494(\mathrm{~V})(\mathrm{OE} 14-223) \end{aligned}$ |
| Video Output | 1 V pk - pk composite video into $75 \Omega$ |
| Power Input | 16 - 30 VDC, 650mA (max) |
| Inrush Current | 1.2A at 16 VDC |
| Control | Single wire (tri-state), RS232, RS485 |
| Lighting | 10 gimbal mounted LEDs, illumination at 1m-130 Lux |
| Optical |  |
| Lens | 4.2 mm to $42 \mathrm{~mm}, 10: 1$ optical zoom, F1.8 to F2.9 |
| AOV in water | Horizontal: $36^{\circ}$ (Wide) <br> Vertical: $26^{\circ}$ (Wide) <br> Diagonal: $41.5^{\circ}$ (Wide) |
| Iris Control | Automatic (manual control available through GUI) |
| Focus Range | 10 mm to infinity (at wide angle), 1000 mm to infinity (at tele angle) |
| Angular Coverage |  |
| Pan \& Tilt | Pan: $176^{\circ}\left( \pm 88^{\circ}\right)$, <br> Tilt: $205^{\circ}\left( \pm 102.5^{\circ}\right)$ Both figures include AOV at zoom wide position |
| Pan \& Tilt, Zoom and Focus Control | GUI or optional joystick terminal |
| Mechanical |  |
| Dimensions | Diameter: 148 mm (At widest point), Length: 178mm (excl. connector) |
| Weight | In air: 5.5 Kg , In water: 3.2 Kg |
| Housing Material | Titanium alloy 6AL/4V ASTM B3 48 |
| Connector | 8 Pin Burton 5506-1508, side or rear entry (other connector options available) |
| Environmental |  |
| Operating Depth | 4500 msw (other depth rated housing options are available) |
| Temperature | Operating: -5 to $40^{\circ} \mathrm{C}$, Storage: -20 to $60^{\circ} \mathrm{C}$ |
| Shock | 30G peak acceleration, 25 ms 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 |

