



# OE14-408/408E

## UNDERWATER DIGITAL STILLS CAMERA

10 MP Resolution

5:1 Optical Zoom

Achromatic Doublet Lens

Tri-state, RS232, RS485, Ethernet Control

The OE14-408/E digital stills camera has been designed primarily for use in subsea environments and is ideally suited to seabed survey, marine science and environmental monitoring applications.

The OE14-408/E digital stills camera has a custom engineered, water corrected optical arrangement which includes an achromatic doublet lens with a 5:1 optical zoom ratio, ensuring captured images are not affected by aberrations or distortions. The OE14-408/E is the perfect choice for high resolution stills imaging tasks.

Camera functions can be operated via a single wire (tri-state) voltage control system or by using Imenco's proprietary command protocol and GUI (Graphical User Interface) over an RS485 or RS232 serial link. Captured images can be uploaded once the camera is

retrieved to the surface via the USB 2 link or alternatively via an ad-hoc wireless network.

Alternatively, the OE14-408E (Ethernet configuration) allows for control of camera functions, image capture and image download via a single 10/100 Base-TX connection.

The OE14-408/E can be used in conjunction with the dedicated OE11-442 flashgun, which has a through lens flash metering feature for accurate exposure control.

Remote or sequential image trigger options are also available.

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

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## TECHNICAL SPECIFICATIONS

Performance		
Image Resolution	User selectable, from 10Mp (3648 x 2736) to VGA (640 x 480)	
Video Resolution	Framing video 360 TVL/PH	
Light Sensitivity	Manual or Automatic, ISO 80 to ISO 3200	
Minimum Scene Illumination	100mV video @ 510 x10 <sup>-3</sup> lux faceplate	
Signal to Noise Ratio	>45dB (weighted)	
Image Storage	16 GB internal memory, estimated storage capacities as follows: 3648 x 2736 – RAW resolution – 1100 images 3648 x 2736 – “L” Fine resolution – 6000 images 640 x 480 – “S” Normal resolution – 123,000 images	
Electrical		
Scan Standards	625 lines, 50 Hz PAL or 525 lines, 60 Hz NTSC	
Sensor Elements	1/1.7” High Density CCD Sensor, 10M Pixels	
Video Output	PAL or NTSC composite video	
Power Input	16 – 24 VDC, 450mA (max) without flashgun connected	
Control and Image Upload	OE14-408	OE14-408E
	Tri-state, RS232, RS485 USB 2 Wi-Fi	TCP/IP and DHCP compatible 10/100 Base-Tx Ethernet wiring IEEE 802.3 Compliant
Optical		
Lens	6.1 mm to 30.5mm, (35mm equivalent format to 28-140mm) F2.8 to F4.5 5:1 optical zoom	
AOV in water	Horizontal: 45° (Wide) Vertical: 35° (Wide) Diagonal: 55° (Wide)	
Iris Control	Automatic (manual control available through GUI)	
Focus Range	Automatic or manual (front port to infinity)	
Mechanical		
Dimensions	OE14-408	OE14-408E
	Diameter: 101mm Length: 239.1mm (excl. connector)	Diameter: 101mm Length: 345mm (excl. connector)
Weight	In air: 4.0 Kg, In water: 2.1Kg	In air: 5.0 Kg, In water: 2.2Kg
Housing Material	Titanium alloy 6AL/4V ASTM B3 48	
Connector	Camera: Burton 5506-1508 Flash: Burton 5506-1608 Image Upload: Burton 5507-0906	Camera: Subconn DBH13M Flash: Burton 5506-1608
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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