

# Digital Helicopter Operations Surveillance System (DHOSS) – Dual Sensor Naval PTZ Camera



## DHOSS – DUAL SENSOR NAVAL PTZ CAMERA STATION 0550-6002

- 36x Zoom HD Visible Sensor
- Ultra Low Light Mono Mode (0.00008 lux)
- Uncooled LWIR Thermal Sensor
- Quick Connect Mechanism for fast Camera LRU swap
- ONVIF Compliant / Fibre Options
- Highly Ruggedised for Extreme Maritime Environments
- Agile BLDC Integrated Servo Drives
- Cyber Approved / NDAA Compliant
- Qualified to US Navy MIL SPEC

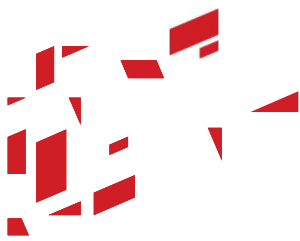
Introducing the Imenco 0550-6002 DHOSS Dual Sensor Naval PTZ Camera, a robust surveillance solution tailored for naval maritime & flight deck operations. This advanced camera station features a High-Definition visible sensor with 36x optical zoom, ensuring precise visual reconnaissance. In challenging low-light conditions, the colour camera seamlessly switches to an ultra-low light monochrome mode with exceptional sensitivity, capturing clear imagery even in near total darkness. Additionally, the integrated 640 x 480 uncooled LWIR thermal sensor enhances situational awareness day and night by detecting heat signatures.

Qualified to meet arduous US MIL-SPECS, the DHOSS camera station is built to withstand the most demanding naval environments. The advanced Pan & Tilt unit includes integrated BLDC Servo Drives to deliver ultra smooth, agile and silent positional accuracy. The system further incorporates an innovative quick connect mechanism for easy camera LRU repairs / upgrades, minimizing downtime.

The DHOSS camera station is ONVIF compliant, allowing seamless integration with third-party Video Management Software. For naval surface ship platforms, the DHOSS dual sensor camera is typically installed above decks overlooking the heli-deck or flight deck, with the MIL-STD-1399 qualified junction box located below decks.

DHOSS is also available as a complete system, Imenco part 0550-6000, with advanced MIL-SPEC Recording, Display & Control options, featuring low latency VMS to enable real-time monitoring.

For further information, email  
[systems.uk@imenco.com](mailto:systems.uk@imenco.com)



## Applications

- Flight Deck Surveillance
- Helicopter Operations
- Naval Surface Ships
- Waterline Security

## DHOSS Dual Sensor Naval PTZ Camera

### Technical Specifications

Performance	Visible Sensor	Thermal Sensor
Sensor Type	1/2.0" progressive scan CMOS	LWIR Uncooled ASi Microbolometer
Resolution	1920x1080 @ 60fps max	640x480 @ 30fps max / 17um pixel pitch
Sensitivity	Colour: 0.005 Lux / Mono: 0.00008 Lux (1/30sec 30IRE)	<40mK / Spectral Response 8-14um
Zoom	Optical 36x / Digital 8x	Digital 8x
Focal Length / Aperture	f = 6 to 216mm F1.5 to F4.8	f = 14.2mm ** F1.2
Focus	Auto / Manual	Fixed
FOV in air	Horizontal: 58.2° (wide) to 1.6° (tele) Vertical: 33.9° (wide) to 0.94° (tele)	Horizontal: 42.5° ** Vertical: 32.5°
DRI	-	Detect small boat @1.26km with 14.2mm lens (**Detect small boat up to 6.76km with alternate lens)
Video Compression	H.265, H.264, MJPEG	H.264, MJPEG
Video Streaming	Up to 4 simultaneous streams	Up to 3 simultaneous streams
AI & Video Analytics	Object detection, object tracking, motion detection	-
<b>Pan &amp; Tilt Unit</b>		
Pan Range / Speed	360° continuous rotation, speed: 0.2°/second to 100°/second	
Tilt Range / Speed	-90° down to +60° up (limited in software – continuous option), speed: 0.2°/second to 70°/second	
Preset Positions/Tours	200 presets visible camera / 20 presets thermal camera / repeatable accuracy better than 0.2° / 8 tours	
<b>Electrical &amp; Network</b>		
Connectivity	ONVIF Profile S and T / 100/1000BASE-T and 100/1000BASE-LX / Milestone XProtect® compatible	
Protocols	IPv4, UDP, TCP, HTTP, HTTPS, RTP, RTCP	
Power	115Vac, max 300W, Type 1 power i.a.w. MIL-STD-1399 for Junction Box	
<b>Mechanical</b>		
Dimensions	PTZ Camera, pan motion clearance Ø610mm max, tilt motion max height 438mm, pan base Ø302mm, Cable 45.72m (150') length, Junction Box 444.5mm h x 378.7mm w x 160mm d	
Materials & Finish	PTZ Camera: Aluminium Alloy 6082-T6 anodised & painted to FED-STD-595, color no. 26270 / 316 Stainless Steel quick connect & shafts, Junction Box: Sheet Steel powder coated to Gray ANSI61	
Weight	Pan & Tilt: 31Kg, Visible Camera: 3.5Kg, Thermal Camera: 3.3Kg, Cable: 6Kg, Junction Box: 15Kg	
Installation Info	EMI conduit, conduit adaptors, connector adaptors, deck penetrators and stuffing tubes for Junction Box to be supplied by Installing Activity	
Connector	Pan & Tilt Unit: ST/ST D38999 Cameras: D38999 Junction Box: Stuffing Tubes	
Window Material	Visible Camera: Borofloat glass/ITO coating, Thermal Camera: Germanium c/w DLC/conductive coating	
<b>Environmental &amp; EMI</b>		
Housing	IP66	
Temperature	Operating: -25°C to +65°C (Above Deck PTZ Camera) / 0°C to +50°C (Below Deck Junction Box) Storage: -40°C to +70°C, MIL-STD-810G Methods 501.5 & 502.5	
Humidity	RH 100% for PTZ Camera / RH 95% for Junction Box, MIL-STD-810G Method 507.6 Aggravated	
Rain	Operate when subject to 10cm/hr rain / 50 knots of wind, MIL-STD-810G Method 506.5	
Salt Fog	MIL-STD-810G Method 509.5	
Wind	Operate: in 95 kph, gusts of 140 kph / Survive without damage: in 185 kph, gusts of 325 kph	
Shock	MIL-DTL-901E, Grade B, Class I, Type A	
Vibration	MIL-STD-167-1, Type 1, Shipboard	
EMI	MIL-STD-461G, Above Decks Surface Ships Limits	

\*\* Various other fixed athermal lens options available – please contact us

Specification subject to change without any further notice

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