



April 2015

HOSS LOW LIGHT MONOCHROME PTZ CAMERA STATION, MIL QUALIFIED

- **Unique Low Light PTZ Camera**
- **Proven in Navy Helicopter Applications**
- **Radar Cross Section Reduced (RCSR)**
- **H.264 IP option**
- **Fully qualified to US Mil Spec**

The 096-0100-01 Low Light Monochrome Camera, and 0418-6005 Pan & Tilt Unit, make up the core of the Kongsberg Maritime Helicopter Operations Surveillance System (HOSS) which has built an excellent reputation for reliable performance in providing the bridge with real-time CCTV display even in very low light conditions.

The camera comprises a high sensitivity monochrome CCD video camera coupled to a 10:1 zoom lens, protected by a sealed, nitrogen purged aluminium housing. A thermostatically controlled heated window helps to disperse external condensation. A Radar Cross Section Reduced (RCSR) shroud is also fitted around the camera as part of the assembly.

As well as the standard analogue interface an advanced IP option is also available. The integrated IP option can deliver two simultaneous video streams, one in H.264 and another in Motion JPEG, at full frame rate in all resolutions up to D1 (720x480 in NTSC, 720x576 in PAL). The H.264 video compression format drastically reduces bandwidth and storage requirements without compromising image quality. The integrated IP option is fully compatible with Video Management Software (VMS), including Milestone XProtect®.

The 316 stainless steel pan & tilt unit provides continuous rotate and a $\pm 70^\circ$ tilt range. It also features fully enclosed cable routing to reduce overall footprint and improve safety and reliability. Cable entry can be from the side or fully concealed underneath.

For surface ship applications the HOSS PTZ camera is typically installed overlooking the heli-deck, or flight deck. A standard Junction Box for termination of ships cables is also available.

The camera and pan & tilt unit have been fully qualified to meet the stringent US Navy requirements of MIL-STD-901D 'Hammer' shock test as well as MIL-STD-461F EMI for surface ships (Above Decks limits).

Applications

- **Heli-Deck Monitoring & Safety**
- **Flight Deck Surveillance**
- **Waterline Security**
- **Topside Observation**

TECHNICAL SPECIFICATIONS

Electrical

Horizontal Resolution	570 TV Lines/ph
Picture Elements Video	768 (H) x 494 (V) NTSC
Sensitivity, typical	0.0003 Lux (at sensor, useable picture, full frame rate (30fps))
Scene Illumination (limiting)	0.0024 Lux with F1.2 lens (scene)
Sensor Type	1/2" IL CCD sensor
Power Input	115V ac, 26 VA normal, 74 VA peak
Video Output	1V p-p (nominal) composite video
Standard Video Formats	525 lines 60Hz (RS-170 Mono) (CCIR and IP options also available)
Electro-Magnetic Compatibility	MIL-STD-461F Emissions (Above Decks Surface Ships) MIL-STD-461F Susceptibility (Above Decks Surface Ships)

Environmental

Housing	IP67
Temperature	MIL-STD-810F Operating: -20°C to +50°C / 95% RH Storage: -30°C to +70°C
Vibration	MIL-STD-167-1A Shipboard, 4 to 25Hz
Shock	MIL-STD-901D, Grade B, Class II

Optical

Standard Lens	8 to 80mm, F1.2, 10:1 zoom lens
Iris Control	Automatic
Focus	1.2m to infinity
Angle of View in Air	4.6° to 43.6° Horizontal

Mechanical

Dimensions	480mm (H) x 522mm (W) x 486mm (D)
Weight	38.0Kg in Air
Standard Housing	Camera – 6061-T6 Aluminium Pan & Tilt - Stainless Steel 316 Both painted 1 coat epoxy primer, 2 coats high solids polyurethane semi-gloss grey to federal standard 595 colour no. 26270
Window Material	Optically polished Borosilicate
Connector, Camera	MS3102R22-14P (Aluminium)
Connector, P&T	MS3452LS24-28P (Stainless Steel)

Pan and Tilt Coverage

Tilt	±70° from horizontal
Pan	360° continuous unlimited
Pan and Tilt Control	RS485 or analogue

Specifications subject to change without any further notice.

HOSS_Datasheet_A4 / Rev. A

