

KM MARINE PTZ CAMERA STATION



KONGSBERG



April 2015

ABOVE DECK PAN/TILT/ZOOM CAMERA WITH IR AND HD OPTIONS

- **Harsh Environment Marine Camera Stations**
- **IP67 rated**
- **H.264 IP/Analogue options**
- **Standard/High Definition options**
- **Qualified to US Mil Spec**
- **3rd party Video Management Software (VMS) compatible**

The Kongsberg Maritime “KM” range of cameras offer an ultra rugged, Pan, Tilt & Zoom camera solution for use in the harshest of marine environments and come with a comprehensive variety of options to suit each application.

The KM range has been developed to offer suitable products for applications which require a more durable option ideal for shipboard CCTV and offshore renewable installations.

Each unit is constructed of powder coated aluminium which is coated in a marine grade anti corrosion paint that not only prevents corrosion from the elements but also damage from chemical, oxidation or solvent attacks. Furthermore each station is provided with a galvanic isolation kit to combat corrosion caused by electrolysis.

The camera has been fully qualified to meet the stringent US navy requirements of MIL-STD-167 vibration criteria & MIL-STD-810F environmental criteria for surface ships.

The camera head comes in white as standard (other colour options available on request), with a wiper facility (wash facility optional) and is supplied complete with a 316L stainless steel mounting bracket, 316L stainless steel junction box for terminating ships cables and a 3m cable tails for interface between the junction box & camera (cable tail options available on request).

Applications

- **Commercial Vessels**
- **Naval Surface Ships**
- **Port & Harbour Security**
- **Offshore Installations**

Kongsberg Maritime cameras always utilise the latest in optical technology and come with list of module options to choose from that ensure that the requirements of the operators can be met whenever possible. Options available include Standard Definition, Low light, Full 1080p High Definition (HD) and varying zoom ranges from x10 to x36 (optical). See specifications table for full options & module details.

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®.

In addition, the camera unit can also be offered with a wash system or with high performance LEDs for infra-red illumination of targets.

KM Marine PTZ Camera Stations. Shown here inverted with wiper as standard and with IR option (far right).

AVAILABLE OPTIONS

- Wash System
- LED Illumination
- Thermal Imaging
- NTSC
- Additional Interface Cable Tail Length
- High Definition (HD) & Internet Protocol (IP)



PRODUCT ORDER OPTIONS

Marine PTZ Camera Station	
Product Code	Description
KM-P-10LLAN	Low Light, Analogue, 10:1
KM-P-10LLIP	Low Light, IP, 10:1
KM-P-18LLAN	Low Light, Analogue, 18:1
KM-P-18LLIP	Low Light, IP, 18:1
KM-P-18SDAN	Standard Definition, Analogue, 18:1
KM-P-18SDIP	Standard Definition, IP, 18:1
KM-P-28SDAN	Standard Definition, Analogue, 28:1
KM-P-28SDIP	Standard Definition, IP, 28:1
KM-P-36SDAN	Standard Definition, Analogue, 36:1
KM-P-36SDIP	Standard Definition, IP, 36:1
KM-P-20HDIP	High Definition, IP, 20:1

Marine PTZ Camera Station c/w IR LED Lamp	
Product Code	Description
KM-P-IR-10LLAN	Low Light, Analogue, 10:1
KM-P-IR-10LLIP	Low Light, IP, 10:1
KM-P-IR-18LLAN	Low Light, Analogue, 18:1
KM-P-IR-18LLIP	Low Light, IP, 18:1
KM-P-IR-18SDAN	Standard Definition, Analogue, 18:1
KM-P-IR-18SDIP	Standard Definition, IP, 18:1
KM-P-IR-28SDAN	Standard Definition, Analogue, 28:1
KM-P-IR-28SDIP	Standard Definition, IP, 28:1
KM-P-IR-36SDAN	Standard Definition, Analogue, 36:1
KM-P-IR-36SDIP	Standard Definition, IP, 36:1
KM-P-IR-20HDIP	High Definition, IP, 20:1

TECHNICAL SPECIFICATIONS

Class	SD, Low Light	SD, Low Light	SD	SD	SD	HD
Optical Zoom	10x	18x	18x	28x	36x	20x
Digital Zoom	12x	12x	12x	12x	12x	
Resolution	530TVL	530TVL	530TVL	530TVL	530TVL	2.3MP
Image Format	PAL	PAL	PAL	PAL	PAL	HD 1080P
Image Sensor	1/3 Super HAD CCD II	1/3 Exview CCD	1/4 Exview CCD	1/4 Exview CCD	1/4 Exview CCD	1/2.8 Type (1/3) CMOS
Lens	F = 5.1mm to 51mm F1.8 to F2.1	F = 4.7mm to 84mm F1.6	F = 4.1mm to 73.8mm F1.4 to F3.0	F = 3.5mm to 98mm F1.35 to F3.7	F = 3.4mm to 122.4mm F1.6 to F4.5	F = 4.7mm to 94mm F1.6
Angle of View	50° (W) to 5.4° (T)	54.4° (W) to 3.1° (T)	48° (W) to 2.8° (T)	55.8° (W) to 2.1° (T)	58° (W) to 1.7° (T)	55.2° (W) to -2.9° (T)
Minimum Illumination	Day mode (colour): 0.25 lux typical Night mode (mono): 0.0004 lux typical	Day mode (colour): 0.25 lux typical Night mode (mono): 0.0025 lux typical	Day mode (colour): 0.7 lux typical Night mode (mono): 0.01 lux typical	Day mode (colour): 0.65 lux typical Night mode (mono): 0.005 lux typical	Day mode (colour): 1.4 lux typical Night mode (mono): 0.01 lux typical	1.6lux, 0.04 lux in High Sens Mode
Video Output	Composite	Composite	Composite	Composite	Composite	Digital/IP

Electrical

Tilt	290° Overall
Pan	360° Continuous Unlimited
Presets	127
Tours	16 Preset Tours
Protocols	Pelco P, Pelco D
Power Requirements	24V ac/dc 30w max.
Rotational Contacts	Heavy Duty Slip Rings
Configuration	Via On-screen Menu
Electro-Magnetic Compatibility	CE Marking, BSEN 55022 as part of EN 61000-6-3 2001 Emission and EN 61000-6-1 2001 Immunity

IR Illumination (Option)

Range (subject to camera Lux sensitivity)	80-120 metres
Angle	30°

Environmental

Housing	IP67
Temperature	MIL-STD-810F Operating: -20°C to +55°C Storage: -30°C to +70°C
Vibration	MIL-STD-167-1A, Type 1, Shipboard
Shock	NES 1004, 30g Peak, 18mS

Mechanical

Mount Orientation	Upright, Inclined and Inverted
Dimensions	220mm (W) x 368mm (H)
Weight	7Kg
Standard Housing	Powder Coated Aluminium with Marine Grade Anti-Corrosion Coating
Window Material	Optically Flat Glass
Connector	Amphenol Neptune IP67
Junction Box	316 Stainless Steel
Cable Tail	LSZH Composite CCTV Cable

Specifications subject to change without any further notice.

