

Search System and Optical Communication

PSAR-100



PSAR-100 is a system that performs surveillance, optical communication and long distance lighting functions.

Sensors:

UV Light used for Search & Rescue and Oil Spill operations; The UV light has a range up to 1000mt;

White Light used for long distance research and lighting; it has a maximum range up to 3500mt;

LED Light for optical communications made with the Morse code; guarantees excellent visibility both at night and day. The unit has 4 colors: White, Red, Blue and Green. Its maximum range is 6000mt;

Color daylight surveillance **Camera**; it is a camera capable of providing full HD video.

Summary APPLICATIONS:

- Search & Rescue
- Docking
- Off-shore Oil Industry
- Oil Spill Detection
- Vessel Communication





PSAR-100 is composed of a projectors system made with 2 turrets stabilized on 2 axes and remotely controllable.

Search and Rescue and Oil Spill Detector



This activity is supported by a long distance lighting system and availability of HD video camera.

Off-Shore Oil Industry



Vessel Communication



The system automatically encodes and decodes the optical communications of the Morse alphabet exchanged with other naval units.



Optional Software Presentation



Technical documentation

SEARCH LIGHT BODY

Housing Dimension	1116 x 685 x 880 mm (WxDxH)
Clearance	Horizontal Ø 1270 mm, vertical Ø 783 mm
Weight searchlight turret	90 kg
Housing material LED-modules	Seawater resistant aluminium
Housing material searchlight body	Acid proof stainless steel 1.4401 in critical structural parts.
Coating	Powder coat grey
Rubber dampers	4 pcs, 32 x 33 mm, for vibrations and shock
Electrical motors	2 for movements, 5000 hours
Horizontal rotation	Unlimited movement
Vertical movement	Unlimited movement
Protection class	IP66
Speed both axis	Stepless, max 20°/s
Operation temperature	-25°C to +55°C
Relative humidity	100 %
Enclosure protection grade	IP66

LIGHT PAYLOADS

LED	UV	WHITE	
Signalling light technology			LED
Average life			50 000 h
Power			50 W each color
UV light technology			HMI Metal halide lamp, single-ended
Power			400W
Average life			1000h
Range			1000m
Light beam angle			Fixed spot beam 4 degrees
White light technology			HMI Metal halide lamp, single-ended
Average life			1000 h
Power			575 W
Range			1 Lux at 3500 m
Light beam angle			Fixed spot beam 3 degrees

CAMERA PAYLOAD

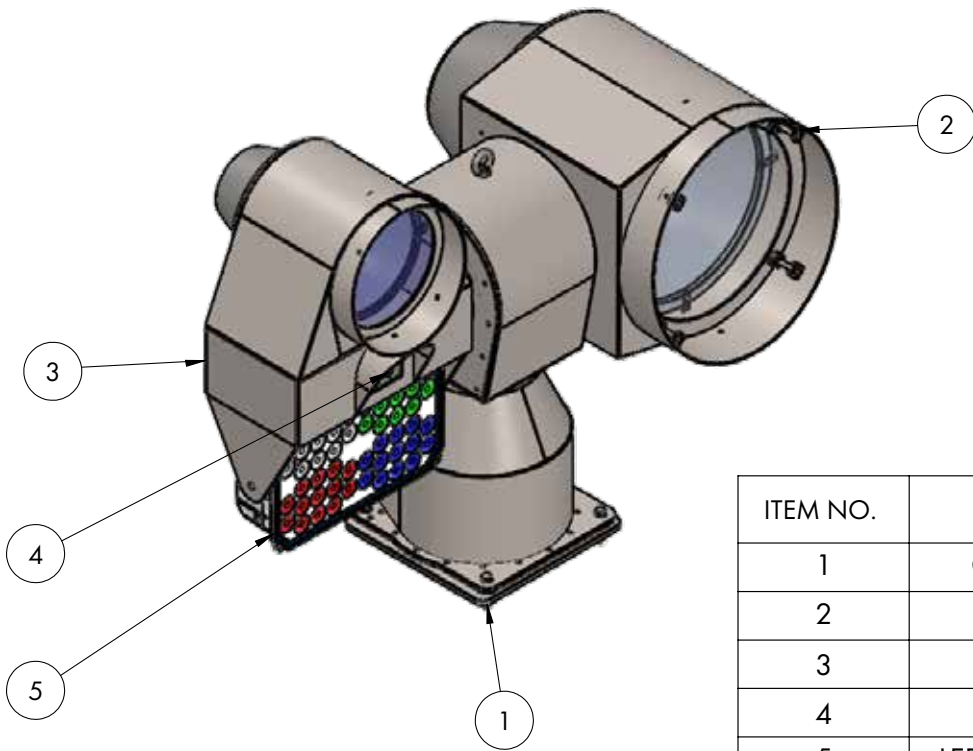
Type	Sony FCB-EV7500
Image sensor	1/2.8 type Exmor CMOS
Picture quality	Full HD 1080p (1920x1080)
Zoom	30x opt., 12x digital (360x with optical zoom)
Lens value	30x opt. zoom; f=4.3mm (wide) to 129.0mm (tele); F1.6 to F4.7
Digital video output	HD-SDI 292M

ELECTRONIC BOX

Measurements	600 x 210 x 625 mm (WxDxH)
Weight	28 kg
Material	Acid proof stainless steel 1.4401
Coating	FED-STD 595 n° 26307
Protection class	IP44
Supply voltage	115VAC 60Hz
Power consumption	2000W (max load)
Operating temperature	-15°C to +55°C

SAFETY SWITCH

Dimensions	240 x 150 x 180 mm (WxDxH) Wallmount excluded
Housing material	Acid proof stainless steel 1.4401
Weight	4,5 kg
Protection class	IP66
Operating Temperature	-25°C to +55°C



ITEM NO.	DESCRIPTION
1	Complete SAR turret
2	White light head
3	UV head
4	Camera
5	LED light communication unit

Optronic sensor

Weight: 90 Kg.

Safety Switch

Weight: 4.5 Kg.

Motion Control Unit

Weight: 37 Kg.

