



MEDUSA MK4/L ELECTRO-OPTICAL SURVEILLANCE SYSTEM

MEDUSA MK4/L is a light and easy-to-use Electro-Optical (EO) surveillance system. It is designed for maritime patrol and in general for sea control and Homeland Protection operations.

It belongs to the last generation of the light EO Surveillance Systems developed by SELEX Sistemi Integrati and it is based upon state-of-the-art processing unit and latest generation EO sensors.

MEDUSA MK4/L is designed to minimize space and weight requirements and for ease of operation.

The director is controlled from a Control Desk provided with monitor, keyboard and joystick. The monitor displays the TV/IR image and presents the target data (bearing, elevation, range) in addition to other indications (Lat, Long, Time).

The system can be connected to the Search or Navigation radar in order to receive target designation.

It is also able to provide target indication towards external systems.

The high reliability of the system allows to obtain a low cycle cost for its maintenance.

ARCHITECTURE

The system is composed of the following units:

- An unmanned self-stabilized pedestal mounting the optronic sensor suite (TV, IR sensors) for target automatic tracking
- A Servo and Computer Unit including a state-of-the-art Tracking computer.
- A Control Desk provided with monitor, keyboard and joystick.

MAIN OPERATIONAL FUNCTIONS

MEDUSA MK4/L performs the main following tasks:

- EO surveillance and search
- Target detection, recognition and identification
- Target tracking by means of the Automatic Video Tracker
- Video recording/play-back

STATUS

The MEDUSA MK4/L System is a fully developed item. It belongs to the MEDUSA EO System family, that is



operational on board of Italian Customs Fast Patrol Boats (70 Systems).

It is designed following international regulations and using COTS components. The system can be installed on board small fast boats (both patrol and attack ones).

TECHNICAL CHARACTERISTICS

Sensor Head

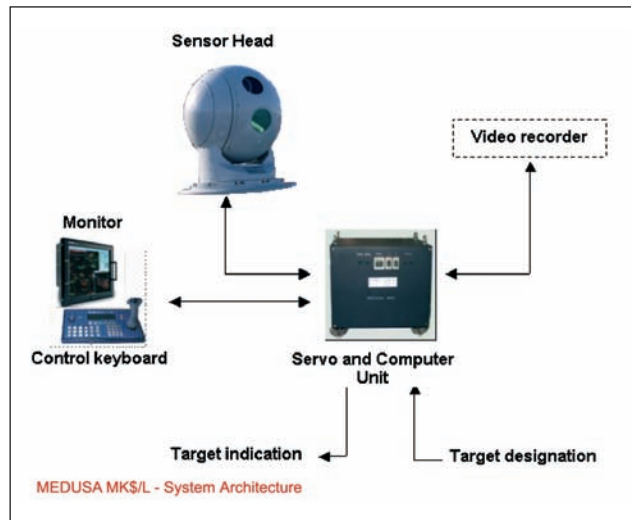
Self-stabilized	
Training limit:	unlimited (slip ring)
Training max speed:	2 rad/s
Acceleration:	6 rad/sec ²
Elevation limits:	unlimited (slip ring)
Elevation max speed:	2 rad/s
Acceleration:	6 rad/sec ²
Elevation useful arc:	- 30° to + 210°

TV Camera

Target:	CCD
Sensitivity:	10 to 200,000 lux
Lens:	Continuous zoom

IR Camera

Detector:	FPA
Spectral band:	3÷5 µm
Two optical FoVs:	Wide
	Narrow
Cooling system:	Closed cycle



INSTALLATION DATA

Director (Sensors included)

- Dimension (h):	mm 516 (above deck)
	mm 300 (below deck)
- Diameter:	mm 425
- Weight:	kg 48

Control keyboard

- Dimension (h w d):	mm (117x460x264)
- Weight:	kg 6,5

Monitor

- Dimension (h w d):	mm (520x380x180)
- Weight:	kg 15

Servo and Computer Unit

- Dimension (h w d):	mm (575x473x600)
- Weight:	kg 40

