

EOFCS-115A

ELECTRO-OPTICAL FIRE CONTROL SYSTEM (EOFCS)

The EOFCS is a compact, lightweight electro-optical tracking system (EOTS) designed for precision target tracking within the naval environment. The system provides training, elevation and range data to a fire control or command system for target indication and weapon control purposes, and can be used as a remote observation and tracking sensor for navigation and surveillance purposes.



System key features:

- Weapon system management for fire control
- Most advanced optronic subsystem determining the precise aiming parameters for the weapon system by optically tracking targets
- Rugged multifunctional compact console exploiting LCD technology with powerful software for ballistic calculations for several types of weapon systems (guns, missiles, etc.)
- High performance processing techniques including multilevel threat discrimination
- Built In Test Equipment (BITE) on the control console, capable to detect a fault to the LRU level
- Electronic alignment of sensors
- Fully automatic search, detection and acquisition reducing operator workload
- Target video tracking with information about target distance, bearing, speed, course, CPA etc., capable to handle external tracking requests

Equipment specifically designed for ease of installation and maintenance which, together with high reliability, keep through-life costs to a minimum

CONFIGURATION OPTRONIC TURRET

2 axes stabilized system, including servomotor, angular sensor	
Azimuth group, including servomotor, angular sensor and slip-ring for continuous Nx360° operation.	
Payload, consisting of IR and TV cameras, ELRF, Laser Point (option)	
2 FOG Gyroscopes.	
Elevation:	no limitation (dual slip ring)
Position accuracy:	better than 20 arcsec
Slewing rate:	> 100°/sec
Stabilization accuracy:	0.05 mRad (1 sigma)
Pedestal base (option)	

CONTROL UNIT

Rugged chassis	
Driver for servomotors	
Stabilizing software with drift compensation	
Power supply management unit	
Remote panel interface	

EYE SAFE LASER RANGE FINDER (ELRF)

Laser type	Erbium Glass
Wavelength	1.57 µm
Beam Divergence (mrad)	1
Maximum Range (m)	20,000
Minimum Range (m)	100
Range accuracy (m)	± 5
Multiple target resolution (m)	5
Multiple target indication	5
Repetition Rate	1-3 pps

LASER POINTER (option)

Class:	III B
Wavelength:	0.8 µm
Power:	135 m W

IR CAMERA

Spectral waveband	3-5 µm
Detector type	Cooled InSb
Resolution	640x512 pixel
Lens type	Dual view angle
Wide Field of View	27° x 21.75°
Narrow FoV	1.7° x 1.4°
NETD (sensitivity)	< 20 mK
Video output	PAL
STANAG 4347 DETECTION	2.3x2.3m target > 14 km human 1m ² target > 7.5 km

TV COLOR CAMERA

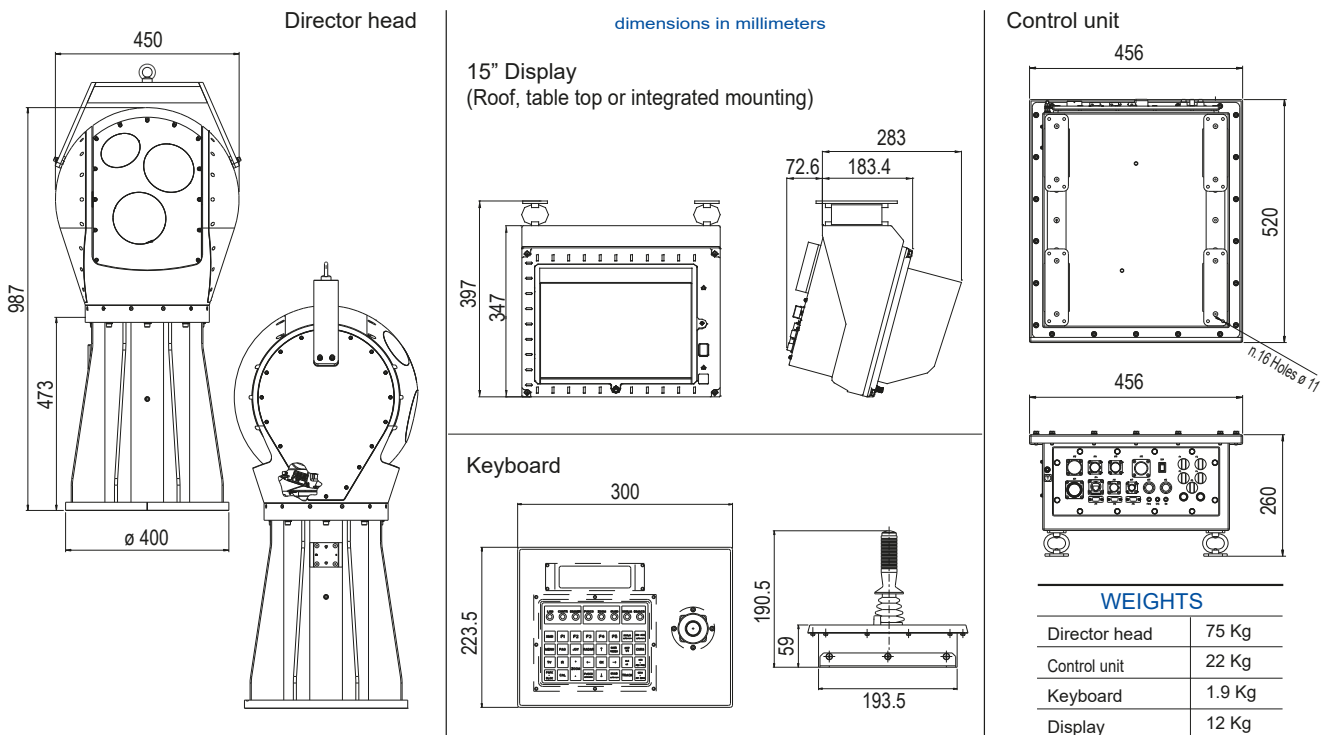
Type of detector	1/3" ExView HAD CCD
Lens type	Continuous zoom
Resolution	Full PAL or NTSC
Signal-to-Noise ratio	> 50 dB
Wide Field of View	46.6° horizontal
Narrow FoV	1.55°
Zoom ratio	34:1 optical
Sensor gain	Automatic / Manual
Video output	PAL
Sensitivity	0.09 LUX

ENVIRONMENTAL AND ELECTRICAL FEATURES

Operative temperature range:	-25° + +55°C (external unit)
Relative humidity:	up to 95%
EMI / vibrations:	IEC-945
Power absorption (peak):	220 Vac or 24 Vdc 1 KW peak

OPTIONS

Automatic Video Tracker VTU-130
Video Recording System
15" display console
Keyboard with joystick



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