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
TECHNICAL DATA

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
Slew 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
Minimum Range (m): 20,000
Maximum 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 1m² 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

WEIGHTS

Director head: 75 Kg
Control unit: 22 Kg
Keyboard: 1.9 Kg
Display: 12 Kg

This brochure should not be considered a contractual offer to sell. The specifications given herein may be changed by the manufacturer, GEM elettronica S.r.l., without notice.