SELEX Galileo is a leading supplier of stabilised airborne Electro-Optical (EO) sensor systems and has delivered turrets for fixed wing, rotary wing and unmanned aircraft platforms.

EOST-46 is the latest multi-sensor turret system designed for the demanding airborne environment. It combines high performance sensors with a high performance platform to meet the operational needs of today's airborne observation, surveillance and reconnaissance needs.

EOST-46 is based on a modular payload, containing up to four EO sensors. It uses, both during night and day, the proprietary Erica SLX thermal imager, operating in the medium wavelength spectrum (3÷5µ or 8÷12µ), based on the SELEX Galileo range of Focal Plane Array (FPA) detectors.

For day operations, including low light conditions, EOST-46 utilises a 26x zoom TV colour and B/W camera for target search. A colour and B/W high magnification, long range TV camera spotter is available for target identification at long distance. As an alternative, a Laser Range Finder can be installed.

An NVG compatible laser illuminator is also available: in cooperation with TVCC or TV spotter, it provides low light search capability enhancement.

**TYPICAL MISSIONS**

**Maritime Patrol**
All -weather surveillance, day/night long stand-off range detection, identification and tracking of naval targets.

**Search And Rescue**
All-weather, day/night detection of naval units in distress and/or men at sea.

**Coast Guard/Police Operations**
All-weather, day/night detection and identification of illegal activities (immigration, smuggling, poaching, etc).

**Land Operations**
All-weather, day/night support to the operation of multirole armed helicopters employed for patrol, escort or protection of ground troops.
**TECHNICAL CHARACTERISTICS**

**PLATFORM TURRET**
- Line of Sight Stabilisation: < 20 µrad, 4 axis gyrostabilised
- Azimuth Steering Range: 360° continuous
- Elevation Steering Range: > +20° to < -120° in operational mode
- Interface: Serial link RS422
- Video Output: 1154712-3

**INFRARED (IR) CAMERA**
- Nominal IR Spectral Band: 3 ÷ 5µ (or 8÷12µ)
- Array Format: 640 x 512
- Cooling: Stirling micro cooler
- Field Of View (FOV): 1.2° x 0.9° - 4° x 3° - 24° x 18°
- Polarity: White hot / black hot
- Processing: AGC with dynamic compression
  - Autofocusing
  - Digital zoom

**DAYLIGHT CAMERA**
- Detector: Colour CCD 1/3" size
- FOV: 42°x32° to 1.6°x1.2°
- Optical Zoom: 26x Continuous
- Digital Zoom: 12x
- Minimum Illumination: 0.7 lux 1/50sec (with IR-Cut filter disengaged)
- Colour / Black & White: Yes, switchable
- White Balance Modes: Auto, ATW, one push AWB
- Focusing: Auto, manual, one push focus
- Iris: Auto / manual
- Gain: Auto / manual
- IR Cut Filter: Automatic depending on light condition to increase sensitivity
- Colour / B&W Image: Yes

**SPOTTER COLOUR CAMERA**
- Imaging Device: Interline transfer CCD
- Pixels: 752 H x 582 V
- FOV: 0.44° x 0.33°
- Horizontal Resolution: 450 TVL
- Operative Minimum Illumination: 50 lux (Full filter selected)
- Nominal Wavelength Range: 450 ÷ 1000 nm
- Colour / Black & White: Yes, switchable
- White balance modes: Auto, AWB selectable
- Sensitivity: Auto control integrating shutter, gain, exposure correction, gamma
- Selectable Wavelength Filters: Full pass (400 ÷ 1000 nm)
  - Visible (460 ÷ 680 nm)
  - Near IR (680 ÷ 900 nm)
  - IR (830 ÷ 1000 nm)
- Direct Sunlight Exposure Protection: Automatic

**EYE SAFE LASER RANGE FINDER** (optional alternative to the spotter)
- Laser Type: 1.54 µm, Erbium-Glass
- Safety Classification: Class 1M eye-safe
- Multiple Targets: First and last

**LASER ILLUMINATOR (OPTIONAL)**
- Emitting Wavelength: 808 nm (NVG compatible)
- Output Power: 1 Watt CW (Class IV)
- Beam Divergence: < 10 mRad

**VIDEO TRACKER**
- Tracking Modes:
  - Centroid single target
  - Centroid multi target (up to 5)
  - Correlation single target
  - Correlation multi target (up to 5)
  - Correlation area
- Target Polarity: White or black
- Symbology: Mission and tactical symbology
- Video Image Processing:
  - Independent tracking function and display presentation
  - Freeze
  - Auto focussing
  - Continuous digital zoom
  - Picture in picture
- On Screen Display (OSD): Yes

**PLATFORM CONTROL UNIT (PCU)**
The Platform Control Unit is used to provide the platform and sensors with power supply and controls.

**INSTALLATION DATA**
- Dimensions:
  - Turret: 350mm Ø (14’’)
  - Height: 540 mm for helicopters
  - Height: 500 mm for fixed wing
  - PCU: 129 × 233 × 231mm
- Weight:
  - Turret: 29 Kg including helicopter mechanical interface
  - PCU: 5.2 Kg
- Power consumption:
  - 150 W (Typical); 400 W (max) at 28 VDC