



# Selex ES

A Finmeccanica Company



## FALCO EVO UAV SYSTEM

**The Falco EVO is a persistent surveillance Unmanned Aerial System, designed and manufactured by Selex ES to supply Command and Control net-centres with real-time tactical data and multi-spectral images/streaming of the operational scenario and target cueing. The Falco EVO delivers enhanced endurance and increased payload to expand the spectrum of unmanned tactical missions.**

Typical system configuration includes a Ground Control Station (GCS), Ground Data Terminal (GDT), Ground Support Equipment (GSE) and three Falco EVO air vehicles carrying payload suites tailored to the customer's needs.

The Falco EVO's specific characteristics of deployability, payload flexibility, mission endurance and reduced logistic footprint represent a true and effective system solution, providing valuable stand-off targets detection, tracking and identification in ground, littoral and maritime environments.

### GENERAL DESCRIPTION

Alongside the operationally proven Falco, the Falco EVO UAV System is aimed at dual-use requirements providing 24/7, all-weather, persistent surveillance capabilities, covering a wide range of missions and complementing typical military roles with government/commercial missions such as border patrol,

coastal watch, immigration prevention, law enforcement, power and pipelines surveillance, illegal fishery prevention and environmental monitoring.

The air vehicle is able to carry a wide selection of mission payloads including Electro-Optical (EO)/Infra-red (IR), Synthetic Aperture Radar (SAR), passive and active Electronic Warfare (EW) and Comms Relay/COMINT, with the ability to carry a combined payload suites function of the mission task.

### FALCO EVO FEATURES

Whilst presenting significant performance enhancements, the Falco EVO guarantees the same system reliability reliance by adopting the same established fault tolerant architecture, designed to meet EASA Airworthiness guidelines for both civil and military oriented products. Conventional take-off and landing are performed in automatic mode.

### KEY CAPABILITIES

- Multi-mission capability with combined payload suites
- Combined stand-off target detection, tracking and identification
- Reduced operator's workload and footprint
- System mobility and deployability
- Higher-tier performances at lower LCC.

**TECHNICAL SPECIFICATIONS**

**Physical**

Air vehicle length	6.2 m
Wing span	12.5 m
Height	2.5 m
MTOW	650 Kg

**Performance (ISA conditions)**

Endurance	in excess of 18 hours
Max payload weight	100Kg
Ceiling	6000 m
Link range	200 Km

(extendable with relay capability or GCS handover function)

**Payload**

EO/IR turrets, Laser Range Finder, Laser Target Marker, SAR/GMTI, Maritime surveillance Radar, ESM, NBC sensors, Hyperspectral sensor, Comms Intel and Relay.



Falco on the flight line

**GROUND CONTROL STATION**

The Falco EVO Ground Control Station enables mission planning and rehearsal, pre-flight system check, mission management, flight plan re-tasking, mission play back and mission simulation for operators training.

The surveillance flight plan is typically flown automatically along the pre-programmed route including the take-off and landing phases, with the possibility to perform manual override any time during the flight.

The Ground Control Station is capable of off-line target data evaluation and processing, for further data diffusion through the C4I net in STANAG 4609 format. Real Time data can also be received by small front line units via Remote Video Terminals (RVT).



Falco Ground Control Station

The Ground Data Terminal provides a real-time data link range in excess of 200 Km between the Ground Control Station and the in-flight Falco EVO air vehicle, via a redundant and jam-resistant (option) link system.