



# SAAB



## **ELECTRONIC SURVEILLANCE PAYLOAD** FOR UAV APPLICATIONS

The ESP is an ESM payload developed for UAV applications. The primary purpose of ESP is to provide the enemy Electronic Order of Battle (EOB) through emitter identification and location.

The ESP is designed to operate as a stand-alone ESM system integrated with UAV systems and is based on the Saab Emitter Location System (ELS) with an improved Probability of Intercept (POI) for search radars.

The airborne portion of the ESP acquires and analyses radar emissions. Emitter data is transferred via the UAV data link to the ground-based Remote Terminal (RET) for the display and control of the system.

The ESP consists of an acquisition and analysis receiver, as well as a controller integrated into a single unit with a nose-mounted interferometric antenna array.

### FEATURES

- Low mass and volume.
- Intra-pulse channel switching for a single pulse Direction Finding (DF) capability.
- High DF accuracy using a combination of phase and amplitude comparison techniques.
- Pulse Doppler Radar handling capability.
- High sensitivity.

### ESP PROVIDES THE FOLLOWING FUNCTIONS

- Acquisition, analysis and precision DF of emissions from search, tracking and fire control radars.
- Accurate bearings and signal parameter measurement of emitters.
- Gathering and recording of detailed emitter data for ESM/ELINT analysis.
- High POI for search radars using a wide open acquisition receiver.
- Onboard mini flash data recorder.



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Antenna Array with low band (0.5-6 GHz) and high band (6-18 GHz) antennas.



ESP Controller.



ESP on Seeker II.

## TECHNICAL SPECIFICATIONS

Frequency Coverage	0.5-18 GHz
Frequency measurement resolution	1 MHz
Instantaneous Bandwidth	1 GHz or 100 MHz
	Narrow Band
Direction Finding	1° RMS Class above 2 GHz, 3.5° RMS @ 700 MHz
Field of View (fully calibrated)	AZ. 210° (in 3 sectors) EL. 70°
Antennas	Phase amplitude matched

## PHYSICAL CHARACTERISTICS

Dimensions	
ESP Controller	343 x 127 x 193 mm
Mass	
ESP Controller	10 kg
Antenna Array	6 kg

Specifications subject to change without notice

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