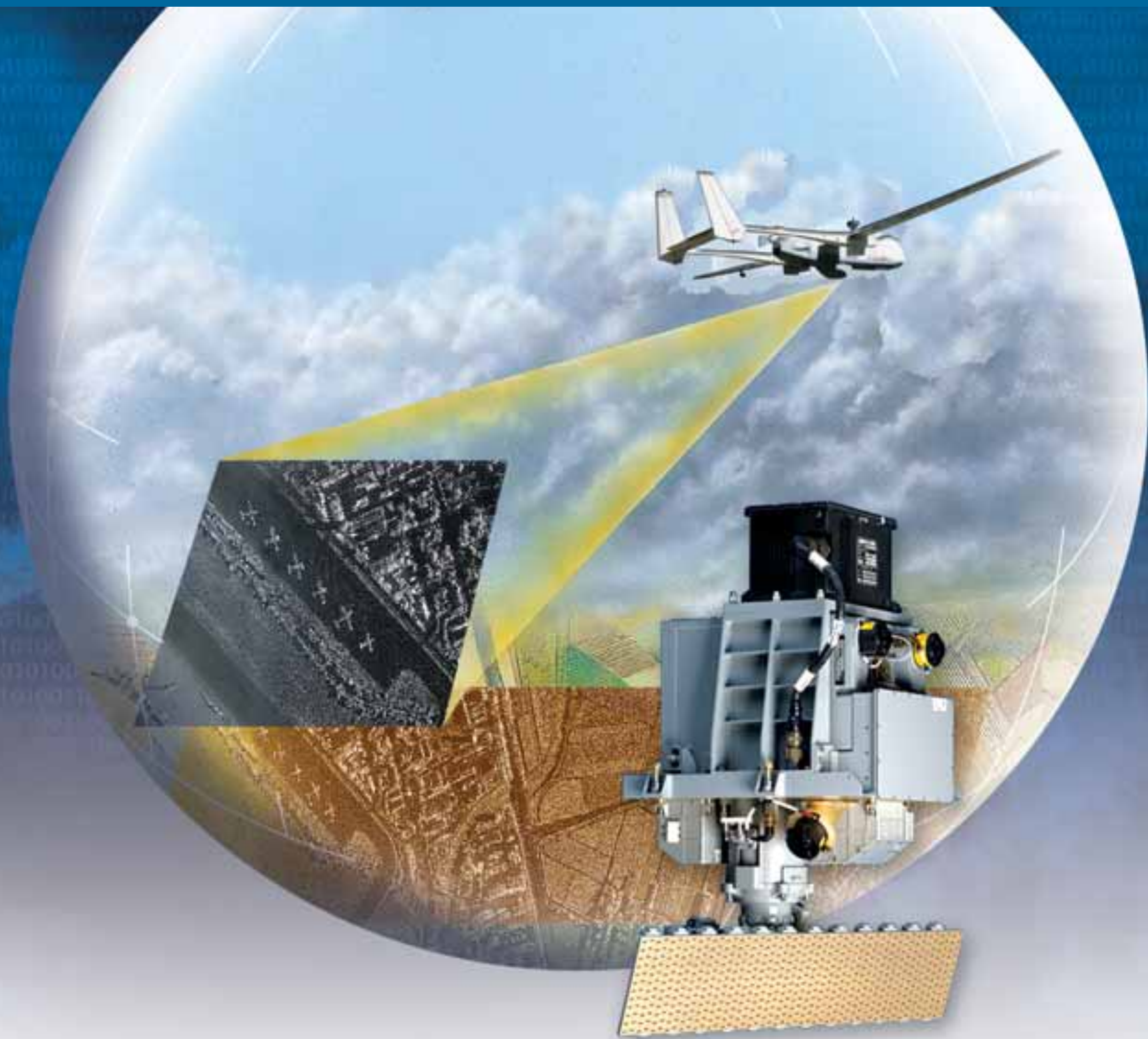


# SAR/GMTI Payload Systems ■ EL/M-2055



■ INTELLIGENCE, SURVEILLANCE, RECONNAISSANCE

## General

The new generation of ELTA's EL/M-2055 family of SAR/GMTI sensors provides a state-of-the-art solution for all-weather, air-to-surface ISTAR applications onboard manned and unmanned aircraft.

The EL/M-2055 reflects the maturity and proven capabilities of ELTA's SAR/GMTI payloads. It utilises the latest technologies to achieve lower weight, volume and power consumption, together with high performance.

The EL/M-2055 features modular, open architecture. It can be easily configured for a broad range of installations, spanning from small-tactical UAVs and light reconnaissance aircraft through high performance MALE UAVs and manned reconnaissance systems .

## Features

### Radar Sensor

Wide Area Search

- SAR Strip Modes: stationary target detection
- GMTI Mode: moving target detection

### Target Classification

- SAR Spot Modes: very high resolution

### State-Of-The-Art Technology

- On-board signal processing
- Standard IT interfaces & data formats

### Ground Exploitation Station (GES)

#### Advanced Exploitation Tools

- Automatic geo-referencing
- Computer aided target detection, track and classification
- Automatic Change Indication
- GMTI Track While Scan (TWS)
- Imagery data manipulations, annotations and mensuration
- Cross-cueing Radar data to/from EO/IR and other sensors
- Intelligence report preparation and forwarding

# SAR/GMTI Payload Systems ■ EL/M-2055



EL/M-2055D



EL/M-2055M



Ground Exploitation Station (GES)



EL/M-2055DX



SAR Strip Image



SAR Spot Image

## Typical performance of EL/M-2055 Payload Systems

Parameter	EL/M-2055D	EL/M-2055DX	EL/M-2055DL	EL/M-2055M
Range (maximum)	40 Km	60 Km	80 Km	≥100 Km
Wide Area Search (up to)	2,000 Km <sup>2</sup> /hr	2,000 Km <sup>2</sup> /hr	2,000 Km <sup>2</sup> /hr	10,000 Km <sup>2</sup> /hr
Weight	38 Kg	50 Kg	60 Kg	≥100 Kg
Power consumption	800 Watt	850 Watt	850 Watt	3,000 Watt

## Typical EL/M-2055 Radar Configurations

- EL/M-2055D** (Downsized)- A single Line Replaceable Assembly with a Medium Power Transmitter and Compact Antenna. Optimal configuration for Tactical UAVs carrying either single or dual-payloads. The Radar fits existing EO/IR sensor mountings (e.g. IAI/TAMAM -MOSP) for rapid UAV reconfiguration.
- EL/M-2055DX** Downsized-eXtended range – Similar LRA like the EL/M-2055D but with Mid-sized Antenna. Best configuration for tactical or MALE UAVs or Light Reconnaissance Aircraft.
- EL/M-2055DL** Downsized-Long range – Similar to the EL/M-2055DX, except its larger Antenna. Fits MALE UAVs or Reconnaissance Aircraft
- EL/M-2055M** - For high altitude MALE UAVs and long-range reconnaissance aircraft. The Radar contains three major LRUs: the Radar Processor; the High Power Transmitter and Large-aperture Antenna Assembly.

## Radar Sensor Modularity

EL/M-2055 SAR/GMTI Payload modularity is expressed in three major areas:

- Signal Processor - parallel processor modules; Amount of Processor modules selected per application.
- Transmitter alternatives: Low, Medium or High Power
- Antenna configurations: Compact, Mid-sized or Large Aperture

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