### aselsan

# PIRI-ES PANORAMIC INFRARED IMAGING

## INFRARED SEARCH AND TRACK SYSTEM

PASSIVE SEARCH AND TRACK

DETECTION AND TRACKING OF AIR/SURFACE VEHICLES AND MISSILES

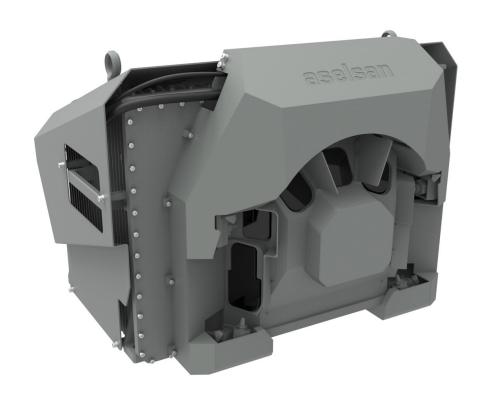
**ELECTRONIC STABILIZATION** 

SIMULTANEOUS DUAL-BAND IR IMAGING (MWIR AND LWIR)

LARGE ELEVATION FIELD OF VIEW

DISPLAY OF MWIR AND LWIR FULL AZIMUTH PANORAMIC IMAGES

DISTRIBUTED SENSOR ARCHITECTURE





### **PIRI-ES**

### INFRARED SEARCH AND TRACK SYSTEM

#### **Applications**

- Search and Track
- Surveillance

#### **Main Features**

- Passive Search and Track
- Detection and Tracking of Air/Surface Vehicles and Missiles
- Simultaneous Detection and Tracking of Multiple Targets
- Staring Sensors
  - High Image Update Rate Compared to Rotating Systems
  - Shorter Time for Track Declaration
  - Longer Track Declaration Range
  - Longer Available Time for Counter Measures
- Simultaneous Dual-Band IR Imaging (MWIR and LWIR)
  - Low False Alarm Rate
- Large Elevation Field of View
  - · Simultaneous Detection of Sea-Skimming
  - Missiles and Other Airborne Targets
- Display of MWIR and LWIR Full Azimuth Panoramic Images
  - Simultaneous Display of 6 Pieces of Compressed Panoramic Videos (213x1536) and 5 Pieces of Original Resolution (640x512) Sector Videos
- Distributed Sensor Architecture
  - Full Azimuth Coverage by Placing Sensor Units Around Ship Mast
  - No Blocked View, in Contrast to Rotating Systems
- Situational Awareness
- · Definable Masking Zone
- · Video Recording Capability

#### **Technical Specifications**

Sensor Resolutions	MWIR: 640x512
	LWIR: 640x512
Field of View (FOV)	Azimuth: 360° (3x120°) Elevation: 17 ° (Sea state level=0)
Image Update Rate	5 Hz
Multi Target Track	50 Targets Per Sensor Head, Totally Up To 150 Targets
False Alarm Rate	< 1 per hour
Communication Interface	Ethernet
Video Interface	Ethernet
Power Interface	STANAG 1008 Edition 9
Environmental Spec	MIL-STD-810G

