

PIRI PANORAMIC INFRARED IMAGING INFRARED SEARCH AND TRACK SYSTEM (IRST)

PASSIVE SEARCH AND TRACK

DETECTION AND TRACKING OF AIR/SURFACE VEHICLES AND MISSILES

STARING SENSORS

SIMULTANEOUS DUAL-BAND IR IMAGING (MWIR AND LWIR)

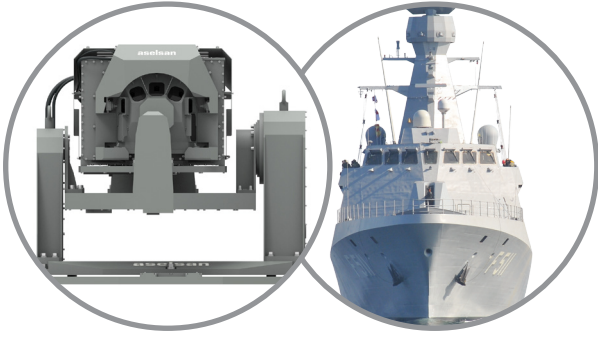
LARGE ELEVATION FIELD OF VIEW

DISPLAY OF MWIR AND LWIR FULL AZIMUTH PANORAMIC IMAGES

DISTRIBUTED SENSOR ARCHITECTURE

MOVEMENT IN ELEVATION





PIRI

INFRARED SEARCH AND TRACK SYSTEM (IRST)

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
- Movement In Elevation
 - Ability of Detecting and Tracking of Higher-Altitude Threats
- Accurate Stabilization
- 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)
Movement in Elevation	-10° to +45°
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

