

aselsan

Thermal Sighting Systems



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Missile Launcher Thermal Sight

SAGER is a complete system solution that equips the anti armour / anti tank missile launchers with a compact, low weight and cost effective thermal imaging sight.

SAGER has a state of art high performance thermal imaging camera designed for detection, recognition and identification of threats at long ranges during day-night and adverse weather conditions.

SAGER has been successfully used with Kornet-E anti Tank Guided Missile System. SAGER thermal view observed within the same sight channel of direct view optics of Kornet-E via the Optical Collimator supplied within SAGER.

SAGER

General Specifications

- Operation Mode Selection (Direct View or Thermal)
- Anti-blooming Feature (not effected from missile)
- Image Enhacement Algorithm
- Power On/Standby/Off modes
- Image Freeze
- Easy to use mechanical mounting interface
- Easy boresighting thermal view
- Ergonomic Design
- Polarity Change



Technical Specifications

- Weight : < 7 kg (with internal battery)
- Video Output: CCIR
- Detector
640 X 512 pixel (3-5 μ m MWIR)
- Field of View: from 2° to 25° Continuous Zoom
3 preset field of view
- Polarity Change: Hot Black / Hot White
- Cooling Time: < 7 mins.
- Electronic Zoom : X2

Accessories

- Internal Litium-Ion Battery (> 5 hours)
- Optional External Litium-Ion Battery (> 12 hours)
- Battery Charger (AC and DC input)
- Solar Charger (optional)
- 220 V AC-DC Adaptor (optional)

Fire Control Unit Thermal Sight

FCU-TS integrated electro-optical system uses the advanced technologies and offers different sensors into one compact and ergonomic design. It comprises a high resolution thermal imaging sensor, color day camera, eye-safe laser range finder, GPS receiver and digital magnetic compass. FCU-TS integrated to launchers provides fire calculation information to Fire Control Unit. It is a state of art product fulfilling the requirements for target acquisition (detection, recognition and identification) in extensive ranges.

User has the advantage of using a high performance thermal imaging sensor for day and night observation and target positioning capability. FCU-TS performs all calculations by its embedded software without user intervention. All functions are operated through the user-friendly menus and controls.

FCU-TS

FCU-TS is an integrated electro-optical system which incorporates;

- Thermal Imaging Sensor
- Laser Range Finder
- Color Day Camera
- Digital Magnetic Compass
- GPS
- IR Laser Pointer



General Specifications

- Custom Design Reticle
- Ergonomic Design
- "Standby" mode of operation in thermal imaging
- Meets military environmental requirements per MIL-STD-810
- Automatic image optimization and image enhancements
- Image freezing of thermal imager
- Polarity change in thermal imaging
- (Hot White / Hot Black)
- Reticle brightness adjustment
- Gain and level adjustment
- Reticle adjustment
- High resolution OLED Display for improved day observation along with night observation
- Binocular eyepiece Battery level indicator

Technical Specifications

• Thermal Imaging

- Preset Field of Views
 - WFOV: 25° X 20°
 - MFOV : 6° X 5°
 - NFOV : 2° X 1,6°
- Continuous Zoom From WFOV to NFOV
- Electronic Zoom : X2
- Detector : 640X512 (3-5 μm uncooled,)

• Laser Range Finder

Type : Class-1, eye-safe
 Wavelength: 1,55 ±2 μm
 Range : 100 m – 20.000 m

• Digital Magnetic Compass

• Color Day Camera

- Field of Views
 - WFOV: 25° X 18,5°
 - MFOV : 6° X 4,5°
 - NFOV: 2° X 1,5°
- Continuous Zoom : From 2° to 40°

• GPS

• IR Laser Pointer

- Wavelength : 830 nm

• Video Output : CCIR

• Remote Control : RS-232

Anti Aircraft Missile Launcher Thermal Sight

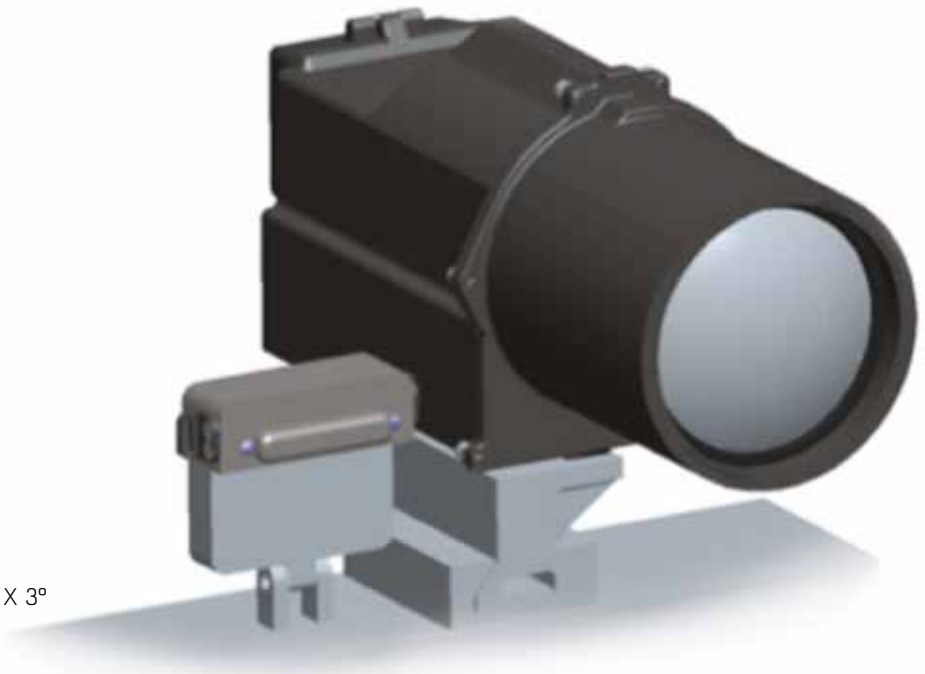
AATN is a complete system solution that equips the anti aircraft missile launchers with a compact, low weight and cost effective thermal imaging sight.

AATN has a state of art high performance uncooled thermal imaging camera designed for detection, recognition and identification of threats at long ranges during day-night and adverse weather conditions.

AATN has been successfully used with IGLA IR Guided Missile System. AATN, instead of mechanical sight, provides more sensitive strike of targets. Thermal image is viewed via PIRATE External Display Unit

AATN

- Uncooled LWIR Thermal Camera
- Detector : 640 X 480
- Field of View : Narrow Field of View 4° X 3°
-Wide Field of View 12° X 9°
- Lithium-Ion Battery (>4 hours)
- Battery Charger
-220 V
-Solar Charger (optional)
- Display Unit : PIRATE External Display Unit
- User Interface : 3-button menu
- Weight : ~ 1,5 kg.



ATS-10 & ATS-20 Armoured Vehicle Sighting System

ASELSAN ATS-10 Armored Vehicle Thermal Sighting System is designed in order to enhance the operational capabilities of armored vehicles. With its compact and versatile structure ATS-10 can be integrated on any type of armored vehicle. ATS-10 offers one-button control and easy to understand menu structure which makes it to be a user friendly device with simple operating principles.

State of the art ASELSAN ATS-20 Armored Vehicle Thermal Sighting System has been designed in accordance with the operational needs of Armored Personnel Carrier (APC) or Armored Combat Vehicle (ACV). ASELSAN ATS-20 Armored Vehicle Thermal Sighting System enhances the operational capabilities for;

- Reconnaissance and surveillance,
 - Fire support,
 - Patrol missions,
- in all weather and battlefield conditions. With its compact and versatile structure ASELSAN ATS-20 Armored Vehicle Thermal Sighting System can be integrated on any type of armored vehicle.

Utilizing uncooled microbolometer technology, ASELSAN ATS-20 Armored Vehicle Thermal Sighting System is a completely passive infrared sighting system with no required external illumination, minimizing the chance of detection by an enemy and allowing its user to identify the heat signatures of individuals or objects at day/night and even in dust, haze, rain, fog, smoke and other battlefield obscurants.

Main Features

- User Friendly Interface
- Automatic Image Processing Algorithms
- Polarity Change
- Automatic Contrast and Brightness Adjustment
- Stadiametric Reticle
- Reticle Adjustment
- Reticle On/Off
- High Resolution LCD Monitor
- Compliant with Military Standards

Technical Specifications

Thermal Camera	ATS10	ATS20
• Operating Band	: 8-12 μm	8-12 μm
• Detector	: 384x288 Focal Plane Array	384x288 Focal Plane Array
• FOV (HxV):		
• Narrow	: $3^\circ \times 2.25^\circ \pm 10\%$	$4^\circ \times 3^\circ \pm 10\%$
• Wide	: $9^\circ \times 6.75^\circ \pm 10\%$	$12^\circ \times 9^\circ \pm 10\%$
• Video Output	: CCIR	CCIR
• Focal Length	: 20m - ∞	10m - ∞
• Electronic Zoom	: X2	X2

Environmental Conditions

- Operating Temperature : -30°C to +50°C arası
- Storage Temperature : -40°C to +60°C arası

Standard Accessories

- Operator Control Unit
- LCD Monitor
- Integration Kit
- Cable Kit
- Power Regulator Unit
- Ballistic Armor
- Video Receiver and Transmitter Units



ASELSAN A.Ş. is a Turkish Armed Forces Foundation company.

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