



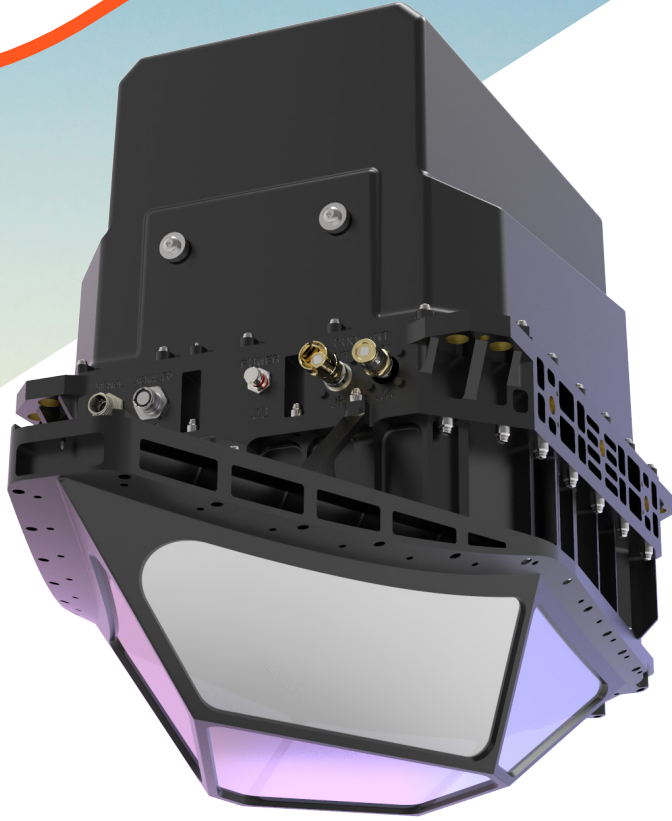
TOYGUN

aselsan

100, 200

ELECTRO-OPTICAL SENSOR SYSTEM

#ElectroOptics



HIGH DEFINITION (1280x1024) HD THERMAL CAMERA

LASER RANGE FINDER AND TARGET DESIGNATOR

LASER SPOT TRACKER

INTERNAL BORESIGHT SYSTEM (IBS)

HIGH PRECISION 2 AXIS MECHANICAL + 2 AXIS OPTICAL STABILIZATION

SINGLE/MULTI TARGET TRACKING

AUTOMATIC TARGET RECOGNITION (ATR)

OPERATION IN VERY LOW TEMPERATURES & HIGH ALTITUDES



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100, 200 ELECTRO-OPTICAL SENSOR SYSTEM

TOYGUN is an Electro-Optical Imaging and Targeting solution for the aircrafts where Radar Cross Section (RCS) and Aerodynamic Drag Coefficient are critical. The system can offer targeting solutions for both Air to Air and Air to Ground Missions. Integrated to aircraft fuselage, the system is protected from external influences by the faceted optical window specifically designed for the platform. The system provides various functions together with high performance for different platforms under the most challenging conditions.

Applications

- Targeting
- Reconnaissance and Surveillance
- Single and Multi-Target Tracking
- Automatic Target Tracking
- Search & Wide Area Scan
- Infrared Search and Track (IRST)

Main Features

- Common Aperture Technology for "Thermal (MWIR) Imaging" and "Laser Designation and Range Finder" Channels
- Platform-Embedded Electro-Optical Structure
- Faceted Design for Low Radar Cross Section (RCS)
- Single/Multi Target Tracking
- Laser Spot Tracker
- Internal Boresight Capability
- Image Processing with Artificial Intelligence Algorithms
- Infrared Search and Track (IRST) Mission
- High Definition HD IR Camera (MWIR)
- Laser Range Finder and Designator (LRFD)
- 2 Axis Mechanical + 2 Axis Optical Stabilization
- Automatic Target Recognition (ATR)
- Inertial Measurement Unit (IMU)
- Line of Sight Control
- Navigation and Target Estimation
- Liquid Cooling

Technical Specifications

HD IR Camera

- Sensor Resolution : 1280x1024, 15 μ m
- Wavelength : MWIR

Field of Regard (FOR)

- Azimuth : 360° continuous
- Elevation : -90° to +10°*
(*Depends on the A/C Integration)

Laser Range Finder and Target Designator

- Wavelength : 1570 nm (Training) & 1064 nm (Combat)
- Range : Up to 35 km
- Coding : NATO STANAG 3733

Communication Interface : RS-422, MIL-STD-1553B

Power Interface

- MIL-STD-704F Compatible
- Sensor Suit : 270 VDC
- Optional Electronic Unit : 28 VDC

Power Consumption : <1000 Watt (Maximum Average Power Consumption)

Size (w/o Faceted Window)

- Width : $\leq$ 510mm
- Height : $\leq$ 700 mm
- Depth : $\leq$ 660 mm

Weight

- TOYGUN Sensor Suit : $\leq$ 118 kg
- Optional Electronic Unit : $\leq$ 25 kg
(The weight of the faceted window will depend on the final design.)

Temperature

- Operation : -40°C to +70°C
- Storage : -55°C to +70°C

