

CATS | COMMON APERTURE TARGETING SYSTEM

ELECTRO-OPTICAL RECONNAISSANCE,
SURVEILLANCE AND TARGETING SYSTEM

COMMON APERTURE WITH PRIMARY MIRROR OF DIAMETER 220 MM

COMPACT AND LIGHT-WEIGHT SYSTEM

SINGLE-LRU SYSTEM

SUPERIOR RANGE PERFORMANCE

HIGH PERFORMANCE IR CAMERA

TRUE FULL HIGH DEFINITION (1920X1080) HDTV CAMERA

LOW LIGHT NIR CAMERA

LASER TARGET DESIGNATION

OPERATION IN VERY LOW TEMPERATURES IN HIGH ALTITUDES





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Electro-Optical Reconnaissance, Surveillance and Targeting System

Applications

- Targeting
- Reconnaissance and Surveillance

Main Features

- Common Aperture with Diameter of 220 mm
 - Very Large Aperture for Narrow FOVs and Very Narrow FOVs of IR, HDTV and LL-NIR Cameras
 - Larger Aperture Means More Light and Therefore Better Image Quality and Better Range
- Compact and Light-Weight System
- Single-LRU System
- Superior Range Performance
- High Performance IR Camera
- True Full High Definition (1920x1080) HDTV Camera
- Low Light Near Infrared (LL-NIR) Camera
- Common FOVs for IR, HDTV and LL-NIR Cameras
- Laser Range Finder and Target Designator
- Laser Pointer and Illuminator
- Internal Boresight Unit
- All-Digital Video Pipeline
- Advanced Image Processing
- Multi Target Tracking
- Simultaneous Target Tracking on IR, HDTV and LL-NIR Videos
- Accurate Target Geo-Location
- Determination of Coarse and Speed of Moving Target
- Inertial Measurement Unit (IMU)
- Accurate Stabilization
- Automatic Alignment with Platform
- Operation in Very Low Temperatures in High Altitudes

Technical Specifications

Primary Mirror Diameter	220 mm
IR Camera	Sensor Resolution: 640x512
	Fields of View (FOVs) (Horizontal): 0.5°-0.9°-3.2°-30°
	Wavelength: MWIR
HDTV Camera	Sensor Resolution: 1920x1080
	Fields of View (FOVs) (Horizontal): 0.5°-0.9°-3.2°-30°
LL-NIR Camera	Sensor Resolution: 640x480
	Fields of View (FOVs) (Horizontal): 0.5°-0.9°-3.2°-30°
Field of Regard (FOR)	Azimuth : 360° continuous Elevation: +20° to -120°
Laser Range Finder and Target Designator	Laser type: Diode pumped ND:YAG Wavelength: 1064 nm Range: up to 30 km Repetition Range: up to 20 Hz Coding : STANAG 3733 Band I & II
Laser Pointer and Illuminator	Laser Pointer: Wavelength: NIR (Compatible with NVGs)
	Laser Illuminator: Wavelength: NIR (Compatible with LL-NIR Camera)
Communication Interface	RS-422, MIL-STD-1553B
Video Interface	4x SMPTE-292M HD-SDI (1920x1080p)
	2x PAL
Power Interface	28 VDC
Size	Width: 437 mm
	Height: 519.5 mm (Forward position)
Weight	≤ 59 kg
Temperature	Operating : -54°C to +50°C
	Storage : -55°C to +70°C