

# STAR SAFIRE® III

Multi-Mission EO/IR Surveillance Sensor

## APPLICATIONS

**SEARCH & RESCUE**  
**RECONNAISSANCE**  
**BORDER AND  
COASTAL PATROL**

**TARGET  
IDENTIFICATION**  
**FORCE PROTECTION**  
**UAV PLATFORMS**



With thousands of systems fielded, the Star SAFIRE III provides extremely reliable high performance. Along with superior image stabilization and long-range imaging, Star SAFIRE III features internal navigation for precise targeting, a MWIR thermal imager, optional EO color and low-light cameras, and multiple laser payload options. The system is fully hardened for military fixed-wing and helicopter operations, and it operates continuously in all conditions – even while sitting on the tarmac with no airflow.

Multiple sensors allow the Star SAFIRE III to detect, recognize, and positively identify targets with pinpoint precision at long ranges – capabilities that have been proven time and again on the battlefield. Mission crews can remain undetected at safe standoff distances while viewing high-resolution imagery in narrow and wide fields-of-view. With flexible integration options on multiple platforms, the Star SAFIRE III is optimal for program-centric airborne intelligence, surveillance, reconnaissance, patrol, and search and rescue missions.

## FEATURES

### OPTIMIZED USABILITY

View and track ground locations using the fully-embedded IMU; follow moving targets with the multi-mode Autotracker.

### MULTI-MISSION CAPABLE

Can be used in applications as diverse as land force protection, shipboard open ocean and littoral patrol, and long-range airborne reconnaissance.

### IMAGE BLENDING

Combine critical spectral information from the IR imager with the Image Intensified Low-Light camera or long-range Spotter Scope.

### PRECISION TARGETING

Tightly coupled navigation delivers accurate, robust CAT 1 target coordinate-generation for faster, more confident targeting.

### RELIABLE 24/7 OPERATION

Mature product with high MTBF and proven combat survivability in demanding arctic and desert environments.

## SPECIFICATIONS

### THERMAL IMAGER

Sensor type	640 x 512 InSb focal plane array
Wavelength	3-5 $\mu$ m response
FOVs	25° to 0.35°
Zoom ratio	71x

### COLOR ZOOM CAMERA (OPTIONAL)

Sensor type	Color CCD-TV
Resolution	525 / 625 line (NTSC/PAL)
FOVs	28° to 2.7°
Zoom ratio	18x (+12x E-Zoom)

### SPOTTER SCOPE (OPTIONAL)

Sensor type	3-chip Color CCD
Resolution	800 line
FOVs	5.4° to 0.29° (Matched to IR FOVs)

### LOW-LIGHT CAMERA (OPTIONAL)

Sensor type	Image intensified
FOVs	5.4° to 0.7° (Matched to IR FOVs)

### LASER PAYLOADS (OPTIONAL)

Range finder	Max. range 25 km +/- 5 m Classification: Class 1 (eyesafe)
Illuminator	Power: 1 W or 2 W options Classification: Class 4
Pointer	Power: 100 mW Classification: Class 3b

### DIGITAL IMU/GPS+ (OPTIONAL)

Tightly-coupled, fully-integrated, IMU and GPS for geo-pointing and target geo-location

### SYSTEM PERFORMANCE

System type	5 axis stabilization
Az. coverage	360° continuous
El. coverage	+30° to -120°
Airspeed	405 KIAS

### SYSTEM INTERFACES

Analog video	NTSC/PAL
Control	RS-232, RS-422, Ergonomic Laptop or Handheld
Data	RS-232, RS-422, ARINC 419/429, MIL-STD-1553B

### ENVIRONMENTAL

Standards	MIL-STD-810E and MIL-STD-461F
Operating temperature	-40°C to 55°C

### POWER REQUIREMENTS

Voltage	22-29 VDC (per MIL-STD-704E)
Consumption	200 W (650 W max)

### DIMENSIONS, WEIGHT & MOUNTING

TFU Size	15.0" x 17.5" (380 mm x 450 mm)
TFU Weight	<98 lbs (<44 kg)
CEU Size	10.0" x 7.5" x 12.5" (254 mm x 191 mm x 318 mm)
CEU Weight	23.0 lbs (10.4 kg)
Mounting	Compatible with Star SAFIRE family

### Other Options & Accessories

Automatic Target Tracker, Navigation/Radar Interfaces, Quick-Disconnect Mounts, Displays and Recorders, Moving Map Systems, Video Downlinks



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