STAR SAFIRE® 380-HD

Single LRU HD EO/IR Imaging System

APPLICATIONS

ISR

SAR

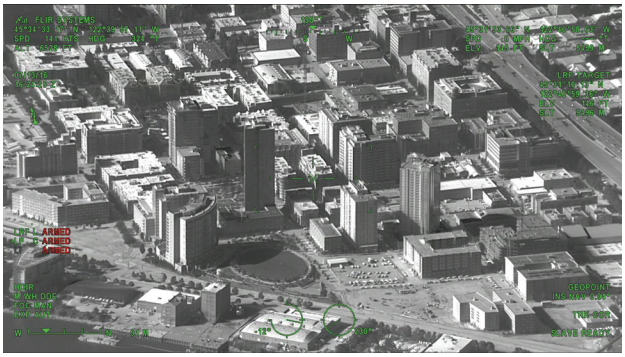
MARITIME PATROL

BORDER PATROL

UAS/RPA

FORCE PROTECTION





The Star SAFIRE 380-HD provides superior image stabilization, ultra-long range imaging performance, and true metadata embedded in the digital video. Featuring internal navigation for precise targeting, a MWIR thermal imager, optional HD color and low-light cameras, and multiple laser payload options, the system is fully hardened for military fixed-wing and helicopter operations. It can operate continuously in all conditions –even while sitting on the tarmac with no airflow.

HD sensors allow Star SAFIRE 380-HD to detect, recognize, and positively identify targets with pinpoint precision at extreme ranges – capabilities beyond what's possible with non-HD systems. 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 and a record of proven performance, Star SAFIRE 380-HD is optimal for airborne intelligence, surveillance, reconnaissance, patrol, and search and rescue missions.

FEATURES

Superior Range and Imaging

120x-magnification extends detection range. Laser payloads covertly illuminate and point out targets and determine distance and location.

Single LRU Full-HD Multi-sensor Imaging

The only all-digital, full HD system in a single LRU, it's easy to install and integrate – no junction boxes required.

Full Digital Image Blending

The system combines HD IR, color, and SWIR spectral information for enhanced results – essential in single video channel downlinks.

Precision Targeting

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

Less Operator Effort Required

Intelligent, automated operation optimizes tracking and continuously indicates target size, location, speed, and distance.

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SPECIFICATIONS

THERMAL IMAGER	
Sensor type	1280 x 720 InSb MWIR FPA
Resolution	720p/1080p HD and NTSC/PAL
Wavelength	3-5 µm response
FOVs	40° to 0.35°
Zoom ratio	120x
COLOR HIGH DEFINITION CAMERA (OPTIONAL)	
Sensor type	(CMOS) Global Shutter
Resolution	720p/1080p HD and NTSC/PAL
FOVs	30° to 0.25°
Zoom ratio	120x
COLOR LOW LIGHT HIGH DEFINITION CAMERA (OPTIONAL)	
Sensor type	(CMOS) Global Shutter
Resolution	720p/1080p HD and NTSC/PAL
FOVs	50° to 2.3°
SWIR SHORT WAVE IR CAMERA (OPTIONAL)	
Sensor type	InGaAs
Resolution	720p/1080p HD and NTSC/PAL
FOVs	30° to 0.25°
LASER PAYLOADS (OPTIONAL)	
Rangefinder	Up to 30 km, Class 1 (eyesafe), Class 1M over 2Hz
Illuminator	1 W or 2 W, Class 4
Pointer	150 mW (Class 3b) or 650 mW (Class 4)
DIGITAL IMU/GPS	
Type	Tightly-coupled, fully-integrated, IMU and GPS for geo-pointing and target geo-location capability
SYSTEM PERFORMANCE	
System type	4-axis stabilization
Az. coverage	360° continuous
El. coverage	+30° to -120°
Envelope	405 KIAS, 0-50,000 ft
SYSTEM INTERFACES	
Digital video	SMPTE 292M; MISB 2016.1; STANAG 4609
Analog video	NTSC/PAL
Data and control	RS-422, ARINC 429, MIL-STD-1553B, Ethernet
Metadata	MISP ST0601, 0902, 9716; STANAG 4609; SMPTE 291M / RP214

ENVIRONMENTAL	
Standards	MIL-STD-810G and MIL-STD-461F
Operating temperature	-40°C to 55°C
POWER REQUIREMENTS	
Voltage	22-29 VDC (per MIL-STD-704F)
Consumption (Steady State)	280 W typ., 336W max
DIMENSIONS, WEIGHT & MOUNTING	
Single LRU	15.0" x 18.7" (380 mm x 475 mm)
TFU Weight	<100 lbs (45.4 Kg)
Mounting	Compatible with existing SAFIRE installations

OTHER OPTIONS & ACCESSORIES

Navigation/Radar Interfaces, Quick-Disconnect Mounts, High Resolution Displays and Recorders, Moving Map Systems, High-Definition Downlinks, Reg. US Patent 7,474,451 and 7,264,220, other patents pending





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