STAR SAFIRE® 380X-HD

Advanced Imaging Single LRU EO/IR System

APPLICATIONS

ISR

SAR

BORDER PATROL

MARITIME PATROL

FORCE PROTECTION

FORWARD OBSERVATION



The Star SAFIRE® 380X-HD provides enhanced features in a single LRU for defense, airborne law enforcement, SAR units, and airborne firefighting applications. Advanced image aiding features reduce operator workload for faster, smarter decision support and features customizable configurations and icon-based graphics, multi-tile video management and external video input from another system.

The system also features an integrated moving target indicator (MTI), improved auto tracker, and de-scintillation filter which removes atmospheric effects to reveal clearer, sharper detail from greater distances. Being able to see more and act fast are essential to airborne missions, and with AR mapping overlays, operators can also have improved situational awareness in the live environment. With these advanced imaging capabilities, operators can detect and identify threats sooner and take action more definitively. SAFIRE 380X is also available as an upgrade to any existing SAFIRE 380 system.

FEATURES

MULTI-TILE, ALL PAYLOADS

View all payloads at once, including external video input from another system in the air or on the ground with multi-tile management options.

LESS CLUTTER, MORE ACTION

The new user interface contains customizable, icon-based graphics (GUI), to expedite inputs when needed during the mission. Saved profiles and a decluttered active screen immediately reduce operator workload.

IMPROVED TARGETING WITH MTI

Identify threats earlier with Moving Target Indicator (MTI), now fully embedded in the system. Operators have increased situational awareness without a separate LRU.

SUPERIOR CLARITY AND DETECTION

Operators can see more details with de-scintillation filter, designed to remove atmosphere effects and obscurants that would otherwise reduce detection ability.

AR MAPPING OVERLAYS

Augmented reality mapping overlays help improve situational awareness for the operator by showing customized importable graphics and locations on the live video with the ability to slew to cue to them.

SPECIFICATIONS

THERMAL IMAGER	
Sensor type	1280 x 720 InSb MWIR FPA
Resolution	720p/1080p HD
Wavelength	3-5 µm response
FOVs	40° to 0.35°
Zoom ratio	120x
COLOR HIGH DEFINITION CAMERA (OPTIONAL)	
Sensor type	Color CCD, Progressive Scan
Resolution	720p/1080p HD
FOVs	29° to 0.25°
Zoom ratio	120x
COLOR LOW LIGHT HIGH DEFINITION CAMERA (OPTIONAL)	
Sensor type	Color NIR CCD, Progressive Scan
Resolution	720p/1080p HD
FOVs	50° to 2.2°
SWIR SHORT WAVE IR CAMERA (OPTIONAL)	
Sensor type	InGaAs
Resolution	720p/1080p HD
FOVs	33° to 0.28°
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
Data and control	RS-422, Ethernet (Serial Type A Protocol), MIL-STD-1553B. Customized interfacing available upon request
Metadata	MISP ST0601, 0902, 9716; STANAG 4609; SMPTE 291M / RP214

ENVIRONMENTAL	
Standards	MIL-STD-810H and MIL-STD-461G
Operating temperature	-40°C to 55°C
POWER REQUIREMENTS	
Voltage	22-29 VDC (per MIL-STD-704F)
Consumption (Steady State)	330 W typ., 420W max @ 28V VDC
DIMENSIONS, WEIGHT & MOUNTING	
Single LRU	15.0" x 18.7" (380 mm x 475 mm)
TFU Weight	103 lbs (46.8 Kg) Max
Mounting	Fully compatible with existing Star SAFIRE 380 installations. Interface kit available for all other existing SAFIRE installations.

OTHER OPTIONS & ACCESSORIES

Quick-Disconnect Mounts, High Resolution Displays and Recorders, ARINC 429, digital to analog converters available upon request
Moving Map Systems, High-Definition Downlinks, Reg. US Patent 7,474,451 and 7,264,220, other patents pending



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