

# 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 (standard) 640 x 512 InSb MWIR FPA (optional)
Resolution	720p/1080p HD
Wavelength	3-5 $\mu$ m response
FOVs	40° to 0.35° (with standard FPA)
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
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**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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