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.

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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.