# Extended Repterment

# Star SAFIRE® 380-HD

SINGLE LRU EO/IR IMAGING SYSTEM
WORLD'S FIRST AND ONLY FULL HD SYSTEM
FULL SPECTRUM IMAGING
FLIR COMMON INTERFACE STANDARD
VIDEO METADATA



# **APPLICATIONS**

ISR

SAR

MARITIME PATROL

**BORDER PATROL** 

UAS/RPA

FORCE PROTECTION





# **FEATURES**

Single LRU full HD system

Full 1080P HD-SDI digital performance

Third generation full-HD

Embedded metadata

Advanced SWIR band sensor

High definition low light color

Full color digital image blending

120x zoom ratio

Optimized usability

Multiple laser payloads

Simplified common interface

Fully hardened for military fixedwing and helicopter operations

## **BENEFITS**

The only all-digital, Full HD system in a single LRU for ease of installation and integration; no junction boxes required

High bandwidth HD-SDI (aka SMPTE-292M) video channels with symbology overlays comply with all government HD standards, providing full 1080P, 720P and other formats

Full high definition mega-pixel resolution imagery from all sensors for superior range and imaging performance

Sensor and geospatial data is fully embedded within the digital video stream – no need for dedicated ports or external boxes

See more than others can see using the optional SWIR short wave infrared payload for expanded multi-spectral imaging

Extend full color imaging into the dark with full high definition clarity and superior area coverage

Combine important spectral information from IR & color or SWIR sensors for enhanced results; extremely valuable when limited to single video channel downlinks

High-magnification optics extend detection range to the horizon without sacrificing wide FOV situational awareness

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

Covertly illuminate wide areas, point out distant targets to other forces, and determine target distance and location

Provides standardized wiring for all HD turrets and to external systems in this familiy; completely interchangeable and interoperable

All-weather design is qualified to the most demanding requirements of MIL-STD-810 and 461  $\,$ 







# Star SAFIRE® 380-HD

# THERMAL IMAGER

Sensor type 640 x 512 InSb MWIR FPA (standard) 1280 x 720 InSb MWIR FPA (optional) Resolution 720p/1080p HD and NTSC/PAL

Wavelength 3-5 µm response

FOVs 30° to 0.25° (with standard FPA)

Zoom ratio 120x

## **COLOR HIGH DEFINITION CAMERA (OPTIONAL)**

Sensor type Color CCD, Progressive scan
Resolution 720p/1080p HD and NTSC/PAL

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 and NTSC/PAL FOVs 55° to 1.5°

## **SWIR SHORT WAVE IR CAMERA (OPTIONAL)**

Sensor type InGaAs

Resolution 720p/1080p HD and NTSC/PAL

FOVs 28° to 0.25°

# LASER PAYLOADS (OPTIONAL)

Rangefinder Up to 25 km, Class 1 (eyesafe)

Illuminator 1 W or 2 W, Class 4

Pointer 150 mW (Class 3b) or 650 mW (Class 4b)

# DIGITAL IMU/GPS+

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

# SYSTEM PERFORMANCE

System type 6 axis stabilization
Az. coverage 360° continuous
El. coverage +30° to -120°
Envelope 405 KIAS, 0-50,000 ft

# **SYSTEM INTERFACES**

Digital video SMPTE 292M/424M

Analog video NTSC/PAL

Data and Control RS-232, RS-422, ARINC 419/429, MIL-STD-1553B, Ethernet

Metadata MISP compliant STD0601, STD0902.1 & STD9716,

STANAG 4609, SMPTE 291M/RP214

# **ENVIRONMENTAL**

Mounting

DANGER

UMINATOR: 2 W AT 808 nm ASS IV LASER PRODUCT

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Operating temperature -40°C to 55°C

# POWER REQUIREMENTS

Voltage 22-29 VDC (per MIL-STD-704E) Consumption 280 W (350 W max)

isumption 200 vv (550 vv max

# **DIMENSIONS, WEIGHT & MOUNTING**

Single LRU 15.0" x 18.5" (380 mm x 475 mm)

TFU Weight <99 lbs (<45 kg)

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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