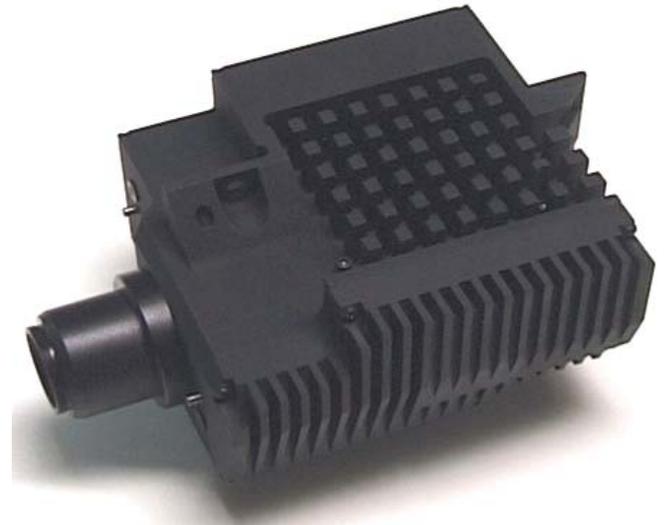


Short Wave Infrared Sensor System

Date Revised: 30 JAN 04

VENDOR DESCRIPTION

The Lockheed Martin Short Wave Infrared (SWIR) Sensor uses ruggedly packaged off-the-shelf technology to give the warfighter the ability to see farther than his weapons will fly. The SWIR sensor gets this long range ISR capability from the marriage of a high sensitivity InGaAs focal plane array and low-noise/adaptive video control circuitry to automatically optimize video signal-to-noise. Video has been recorded showing buildings more than 50 kilometers away using this unique device in its passive mode – on a day when optical visibility was less than 13 km! Since the Short Wave IR band is so close to the visible spectrum, this sensitivity and haze penetration comes with the added ability to read normal markings on signs and vehicles. The LM SWIR Sensor is designed to operate at frame rates from 60 frames/sec down to single frame and can be synchronized with an eye-safe illuminator for night operation.



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Business Category: Large Business

EOIR

Hardware	
RF Frequency: NA	Operating Temp.: -40°C to 70°C
Power: 13 watts	Storage Temp.: -55°C to 85°C
Weight: 2.5 lbs	Interface: Video: Hotlink/RS170, Control: RS232
Dimensions: 117mm x 119mm x 70mm	Bandwidth Required: 400 MHz
Internal Volume: 3.4x10 ⁻⁴ m ³ or 0.013 ft ³	TCDL Compatibility: Yes
Cooling: Ambient air	MTBF: > 7000 hrs
LOS Stabilization: NA	MTTR: 1 hr
Auto Video Tracker: NA	Maintainability: 2-level BIT to LRM level
Operating Altitude: GL to 55 Kft AGL	Pd: 95%
Operating Speed: NA	

Infrared (IR)	
Type: InGaAs Focal Plane / Staring Array	Modes of Operation: Passive & Active
Resolution: 640 x 512	Target Size: APC
Range: 54 km Passive	WFOV: User-definable
Angular Coverage: User-definable	MFOV: User-definable
Cooling Method: TE cooler to stabilize FPA	NFOV: User-definable