

Thermal Imaging Module - TIM1500

Description

Designed for remote weapon stations and weapon targeting systems, the TIM1500 is an advanced, uncooled thermal imager for today's targeting and situational awareness needs.

Enabling the user to see deep into the battlefield, the TIM1500 increases surveillance and target acquisition range. It gives the war fighter the ability to overmatch the enemy in battlefield conditions and obscuration, both day and night.

Operational advantage

The TIM1500 is designed around a highly modular and common MicroIR[®] sensor architecture that provides high sensitivity in a small, lightweight package. MicroIR[®] does not require cryocoolers or optical scanners, thus reducing size, power, and weight. With more than 10,000 hours mean time between failures, the user benefits from increased reliability in a rugged and cost-effective solution for today's war fighter.

Features

- High performance in small, qualified package
- Silent image in less than 30 seconds
- Dual optical field of view
- 2x, 3x, and 4x electronic zoom
- User-specific adjustable reticules and alpha numerics to simplify platform and weapon-specific integration



Photo Courtesy of U.S. Army

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BAE Systems has qualified and is producing the world's most advanced family of uncooled thermal sighting systems for the war fighter. Our innovative design and superior performance are backed up by a world-class vanadium oxide microbolometer foundry and production facility. Our high-volume and low-cost production facility leverages commercial markets and COTS module product lines to bring the best product to the market in the shortest time and within budget.

TECHNICAL SPECIFICATIONS

Spectral band	7.5 - 14 μm
Focal plane array	
Detector type	Vanadium oxide microbolometer
Format	640 x 480 28 μm pitch
Optics	Athermalized motorized zoom
Field of view (horizontal)	Wide 10.1° Narrow 3.3°
Aspect ratio	4:3
Electronic zoom	2x, 3x, 4x
Effective focal length	WFOV-102 mm NFOV-307 mm
Boresight retention	<0.25 mrad stability
Physical characteristics	
Length	(276 mm) 10.9 in.
Width	(178 mm) 7 in.
Height	(178 mm) 7 in.
Weight	5.7 kg (12.5 lbs)
Operational	
MTBF	>10,000 hrs.
Operating - ambient	-46°C to +52°C
Storage	-51°C to +71°C
Moisture resistance	Qualified to MIL 810 E
Shock	Qualified to MIL 810 E
Vibration	Qualified to MIL 810 E
Time to operation	<30 seconds
Image polarity	Black hot/White hot
Level/gain	Automatic and manual (selectable)
Scene dynamic range	>140°C
Interfaces	
Power	<12 W steady-state
Mounting	3 point mount
Features	
Frame rate (FPA scan/readout)	30 Hz, progressively scanned
Output video	Analog (RS-170); Digital (8 or 16 bit)
Communication interface	RS-422 serial interface
External power	18 - 32 VDC, 28 V nominal
Standard equipment	Lens cover

FOR MORE INFORMATION, CONTACT:

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