

THERMAL IMAGING MODULE – TIM 1500®

Designed for remote weapon stations and weapon targeting systems, the TIM 1500® is the advanced uncooled thermal imager for today's targeting and situational awareness requirements.

The battle-proven TIM 1500 enables the user to see deep into the battlefield with increased surveillance and target acquisition range. The TIM 1500 provides the ability to overmatch the enemy in battlefield conditions and obscurants, both day and night.

The TIM 1500 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 over 10,000 hours mean time between failures and over 15,000 units fielded and in service today, the user benefits from a battle proven, reliable, and cost-effective solution.



Key features

High performance in a small, qualified package

Silent image in less than 30 seconds

Dual optical field of view

2x, 3x, and 4x electronic zoom

User-specific adjustable reticles and alpha numerics to simplify platform and weapon specific integration



TIM 1500 Technical specifications

Spectral band	7.5 – 14 μm
Focal plane array	
Detector type	Vanadium oxide microbolometer
Format	640 x 480 28 mm pitch (standard), other format and pitch options available
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-STD-810E
Shock	Qualified to MIL-STD-810E
Vibration	Qualified to MIL-STD-810E
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

BAE SYSTEMS HAS QUALIFIED AND IS PRODUCING THE WORLD'S MOST ADVANCED FAMILY OF UNCOOLED THERMAL SIGHTING SYSTEMS.

Our innovative design and superior performance is backed up by a world-class vanadium oxide foundry. Our high-volume and low-cost production facility leverages commercial markets and military off-the-shelf (MOTS) module product lines to bring the best product to the market in the shortest time and within budget.



Photo courtesy of Kongsberg Defence System

For more information

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