

ENHANCED CLIP-ON THERMAL IMAGER

Small Size and Lightweight

- + Small and lightweight
- + Fits into pocket
- + Minimal additional mass on helmet



Single Battery Operation or Battery Pack

- + Long operational life on single CR123A battery (>3.5 hrs)
- + Longer battery life with O1 Smart Power Pack



Heads Up Display (HUD)

- + Import/Display RS-170 video
- + Export RS-170 video
- + 7-PIN connector
- + Connect to PC/Droid™ for picture download and Nav File upload
- + Connect to Situational Awareness Apps (SA-Apps)
- + Connect to external accessories: GPS, Smart Power Pack, etc.

Easy Push-Mode Buttons

- + Simple buttons allow user to modify Polarity settings
- + Optimized thermal mode, brightness, capture still pics

ENHANCED CLIP-ON THERMAL IMAGER

Clip and Go

The E-COTI easily attaches to existing Night Vision Devices (NVDs) to increase threat detection and situational awareness. Low-power consumption, thermal sensor technology, and high-performance optics integrate seamlessly to provide state-of-the-art long-wave infrared capability. With the ability to mount on NVDs with a bracket, the need to refit helmets with special equipment is eliminated. Along with being able to withstand the harshest environments, the E-COTI's rugged construction is waterproof to 66 ft.

Works with Legacy and Recently Fielded NVDs

The E-COTI enhances the functionality of NVDs by adding a thermal image overlay to the image intensified (I2) scene without modification of existing hardware. Used in extreme low-light, no-light, or foliated conditions where I2 devices are limited, E-COTI improves situational awareness and increases threat detection capabilities. The E-COTI system allows for custom configuration to meet individual user needs.

Ease of Use

The compact and lightweight E-COTI attaches to NVDs in mere seconds without tools using a simple bracket.

Augmented Reality

E-COTI's Augmented Reality capability provides a Heads-Up Display (HUD) with navigation and route execution as well as real-time, geo-referenced, XML-based augmented reality. When used with Android devices, the NVD becomes a remote HUD display for identifying teammates, targets, and route points. The E-COTI allows the ability to keep eyes on the mission while the HUD eliminates the need to stop and look down at a screen. The navigation capability utilizes KML and GPX formats from Google Earth® and similar programs for simple route planning. Along with route execution, the built-in 16GB SD card provides on-board storage for image capture (>10,000 .TIF images), navigation tracks, and marking capability. AIR-based routes provide real-time altitude and glide ratio 3D Landing Point information for navigation under canopy.

TECHNICAL SPECIFICATIONS

Optics

Magnification	1x (optical unity)
Field of view	30° circular, centered
Objective	Fixed Focus

Image sensor

Sensor Type	Uncooled LWIR Microbolometer
Image Sensor	640 x 480 17 µm pixel
Wavelength	8 - 12 µm

Range performance

Thermal Range	Clear	Obscured
Detection (2.3m NATO)	> 1400 m	> 750 m
Detection (0.75m man)	> 450 m	> 350 m

Display

Display	High contrast Micro display (field changeable)
Polarity view mode	White Hot or Black Hot
Brightness	Adjustable

Power Supply

Battery	Internal: Type CR123A External: Battery Pack - 3xAA or 6xAA
Operating time (one Internal battery)	> 3.5h @ 23°C
Operating time (auxiliary battery pack)	> 8.0h @ 23°C or >16 hrs (6xAA Battery Pack)
Combined operating time (w/o change of batteries)	> 11.0h @ 23°C or >19 hrs (6xAA Battery Pack)

Physical

Dimensions (l x w x h)	50 x 43 x 60 mm (ext. battery) 90 x 43 x 60 mm (int. battery)
Weight	
E-COTI with internal battery	125 g. (w/ battery and mounting bracket) 110 g. (w/ battery only)
E-COTI with external battery	95 g. (w/ mounting bracket) 80 g. (system only)
Tested	MIL-STD-810



E-COTI image
with augmented reality