**View the World Differently**

Day or night, the COTI reveals more than what is visible to the normal eye. The COTI adds a layer of thermal detection capabilities to identify heat sources - either present or residual - in any situation. COTI offers broader dimension imagery to users to assess any potential threats. While Night Vision Devices (NVDs) provide users with the ability to see in ambient or low-light environments, users get only a part of the available picture. The COTI exposes potential threats that may be hidden - i.e. in defilade, under clothing, or covered in a layer of dirt. It helps to identify and assess those situations to give users more awareness and information to make knowledgeable decisions on how to proceed with a mission.

**Interchangeability**

The COTI can be easily attached to an existing NVD, with the use of a mounting bracket, to add additional thermal capabilities to the I² system. It can also be used as a stand-alone handheld with the use of an eyepiece. Its low-power consumption, optimal sensor technology, and high-performance optics integrate seamlessly to provide state-of-the-art long-wave infrared technology.

To make detection easier, the COTI offers two heat detection modes (White Hot and Black Hot) and three viewing modes (Full Thermal, Patrol, and Outline) that users can choose from to better customize the device for the situation and mission.

**Small and Lightweight**

The small, compact, and lightweight COTI has low-power consumption that allows for extended use. COTI is waterproof to 10m and its rugged construction can withstand the harshest environments.

**Interchangeability**

- Projection optics allow complete interchangeability between host goggles
- Display injects image into the NVD or directly into user’s FOV

**Extended operating time**

- Single CR123 battery operation
- External power capable with optional battery pack kit

**Easy push-mode buttons**

- Simple button on each side to control Viewing Modes (Full Thermal, Patrol, and Outline) and Zoom settings.

**Rotary ON/OFF**

- Also controls Brightness, Polarity, and Calibration

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**Add thermal capability**

When added to a standard I² system, COTI enables the user to detect thermal sources and improve situational awareness. Even in pitch-black, no-light, adverse environmental conditions, recognition range extends dramatically. With COTI, the user is even able to see into darkened openings and detect residual heat - situational awareness at the highest level.

**Quick release**

- COTI can be easily be used alone by attaching an eyepiece or mounted to an existing NVD. Several mounts for different NVDs and Picatinny Rails available.

**Image & video capability**

- Ability to capture and store images
- Ability to inject video from external sources into NVDs
- Compass information displayed in the FOV in NVDs

**Extended operating time**

- Single CR123 battery operation
- External power capable with optional battery pack kit

**Small size and lightweight**

- Small and lightweight
- Fits into pocket

**Fixed focus objective**

- Minimal user interaction

**COTI Strengths:**

- Improve visibility in no-light/low-light situations including smoke and dust conditions
- Detect thermal sources
- See through basic camouflage
- See into dark openings such as windows and doorways
- Detect residual heat: see if people have been in a room or if a vehicle was used recently
- Find people in search-and-rescue situations

**Without Thermal**

- Thermal
- Full Thermal mode
- Patrol mode
- Outline mode

**COTI-LR**

The COTI Long Range (COTI-LR) is a modified version of the standard COTI, developed for use with a standard Vectronix MOSKITO handheld device. The new longer 10° projection head of the COTI-LR and the new 10° objective lens (which keeps a 1X magnification) easily interfaces to the MOSKITO with the use of a specially-modified mounting bracket. This allows the user to add thermal capabilities to the MOSKITO’s day and night vision — further increasing the user’s situational awareness.
### TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Optics</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>1x (optical unity)</td>
<td>1x (optical unit)</td>
</tr>
<tr>
<td>Field of view</td>
<td>20° circular, centered</td>
<td>10° circular, centered</td>
</tr>
<tr>
<td>Objective</td>
<td>Fixed Focus</td>
<td>Fixed Focus f/1.2</td>
</tr>
<tr>
<td>Aperture</td>
<td>f / 1.15</td>
<td>f / 1.15</td>
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</table>

<table>
<thead>
<tr>
<th>Image sensor</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
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<tbody>
<tr>
<td>Sensor Type</td>
<td>uncooled LWIR</td>
<td>uncooled LWIR</td>
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<tr>
<td>Microbolometer</td>
<td>Microbolometer</td>
<td></td>
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<tr>
<td>Image Sensor</td>
<td>320 x 240 pixel</td>
<td>320 x 240 pixels</td>
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<tr>
<td>Wavelength</td>
<td>8-12 µm</td>
<td>8-12 µm</td>
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<table>
<thead>
<tr>
<th>Range performance</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
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<tbody>
<tr>
<td>Thermal Range</td>
<td>Clear</td>
<td>Obscured</td>
</tr>
<tr>
<td>Detection</td>
<td>&gt; 500 m</td>
<td>&gt; 500 m</td>
</tr>
<tr>
<td>Recognition</td>
<td>&gt; 300 m</td>
<td>&gt; 300 m</td>
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</table>

<table>
<thead>
<tr>
<th>Display</th>
<th>Standard COTI</th>
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<tbody>
<tr>
<td>Display</td>
<td>Micro Display</td>
<td>Micro Display</td>
</tr>
<tr>
<td>Polarity</td>
<td>white hot or black hot</td>
<td>white hot or black hot</td>
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<tr>
<td>Brightness</td>
<td>adjustable</td>
<td>adjustable</td>
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<table>
<thead>
<tr>
<th>Power supply</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
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<tbody>
<tr>
<td>Battery</td>
<td>1x 3VDC Lithium, type CR 123A</td>
<td>1x 3VDC Lithium, type CR 123A</td>
</tr>
<tr>
<td>Operating time (one battery)</td>
<td>&gt; 3.0 h @ 23°C</td>
<td>3.0 h @ 23°C</td>
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<tr>
<td>Operating time (auxiliary battery pack)</td>
<td>&gt; 8.0 h @ 23°C</td>
<td>&gt; 8.0 h @ 23°C</td>
</tr>
<tr>
<td>Combined operating time (without change of batteries)</td>
<td>&gt; 11.0 h @ 23°C</td>
<td>&gt; 11.5 h @ 23°C</td>
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<table>
<thead>
<tr>
<th>Physical</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
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<tbody>
<tr>
<td>Dimensions (l x w x h)</td>
<td>140 mm x 38 mm x 76 mm</td>
<td>144 mm x 38 mm x 93 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>150 g (5.8 oz), incl. battery</td>
<td>180 g (6.3 oz), incl. battery</td>
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<table>
<thead>
<tr>
<th>Identification</th>
<th>Standard COTI</th>
<th>COTI-LR</th>
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<tr>
<td>NOM</td>
<td>COTI Sovas Imager</td>
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<tr>
<td>NSN</td>
<td>5855-01-582-3974</td>
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<tr>
<td>NIIN</td>
<td>015823974</td>
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<tr>
<td>LIN</td>
<td>FA 5509</td>
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</tbody>
</table>

1) Verified and tested independently

### ACCESSORIES

#### Included with COTI
- Mounting Bracket (PVS-7, -14, -23 or -15, -18)
- Batteries
- Lens Cleaner
- Storage Pouch (Berry Compliant available)
- Operator’s Manual
- Quick Reference Guide

#### Optional Accessories for COTI
- Mounting Bracket (PVS-7, -14, -15, -18, -23)
- Picatinny Mounting Bracket (PVS-22, 24, 26, UNS-SR, LR)
- Eyepiece Adaptor for COTI conversion to handheld imager
- Auxiliary Battery Pack
- Battery Pack Helmet Adaptor
- Custom Menu Configuration

#### Included with COTI-LR
- COTI-LR Mounting Bracket and Insert for MOSKITO
- Batteries
- Lens Cleaner
- Storage Pouch
- Operator’s Manual
- Quick Reference Guide

#### Optional Accessories for COTI-LR
- Eyepiece Adaptor for COTI conversion to handheld imager
- Auxiliary Battery Pack
- Battery Pack Helmet Adaptor
- Custom Menu Configuration

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**Authorized Distributor:**
- [PRG Defense](https://www.PRGUSA.net)
- [SAFRAN Optics 1](https://www.safaranoptics1.com)
- GSA # GS-07F-5489R

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**Included with COTI-LR**
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