Imagine the invisible

**XTM-640-GigE**

High resolution uncooled thermal OEM module

**Ready-to-integrate thermal OEM module consuming ultra-low-power**

Xenics’ XTM-640-GigE is an extremely compact and versatile thermal camera module with unique image quality and stability for a broad range of OEM applications. These applications include security, night vision, firefighting, airborne and land-based reconnaissance and surveillance.

We guarantee you a high operating temperature range and unparalleled uniform and crisp thermal images thanks to on-board image processing and full shutter control.

The advantages of a high quality infrared module are now combined with the power of a GigE interface and Power over Ethernet (PoE).

The 640 x 480 image resolution with small pixel pitch of 17 µm allows for longer Detection, Recognition and Identification (DRI) values in critical security applications.

**Designed for use in**

- Thermal security
- Vision enhancement
- Police surveillance
- Border security

**Key features**

- Low power
- High resolution
- Easy connectivity
- Small size, 17 µm pixel pitch
- 50 Hz frame rate worldwide

**OEM applications**

- UAV / UGV
- Gimbal
- Night vision
- Thermal sights
- Border security
- Fire fighting
- Driver assistance
- Police surveillance
- Search & Rescue (SAR)
- Electro optical payloads
## Specifications

### Module specifications | XTM-640-GigE
---|---
**Lens**
Optical interface: Fixation holes for multiple lens mount

**Imaging performance**
Frame rate (full frame): 50 Hz
Window of Interest: Minimum size 160 x 120
Integration time: 1 μs - 80 μs
Shutter: Full control by GigE Vision
Temperature stabilization: No ThermoElectric Cooling required (TEC-less)
Integration type: Rolling shutter
On-board image processing: NUC (Non-Uniformity Correction), Auto-offset & Auto-gain
A to D conversion resolution: 16 bit

**Interfaces**
Digital output: GigE Vision
Analog output: -
Module control: GigE Vision: GigE standard
Trigger: In or out (via SMA)

**Power requirements**
Power consumption: < 4.5 W
Power supply: 12 V or Power over Ethernet (PoE)

**Physical characteristics**
Shock: 40 g, 11 ms according to MIL-STD810G
Vibration: 5 g (20 Hz to 2000 Hz) according to MIL-STD883J
Ambient operating temperature: -40 °C to 60 °C
Storage temperature: -45 °C to 85 °C
Dimensions (W x H x L mm³): 45 x 45 x 62.2
Weight module: 125 g

### Array specifications | XTM-640-GigE
---|---
Array type: Uncooled microbolometer (a-Si)
Spectral band: 8 to 14 µm
# pixels: 640 x 480
Pixel pitch: 17 µm
NETD: 50 mK @ 30°C with F/1 lens
Array cooling: Uncooled
Pixel operability: > 99 %

### Product selector guide

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**Discover our Lens Selector Guide**
www.xenics.com/LSG

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ISO 9001:2008 certified