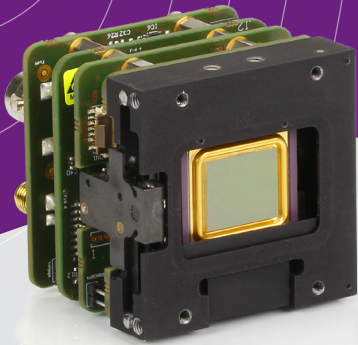


Imagine the invisible

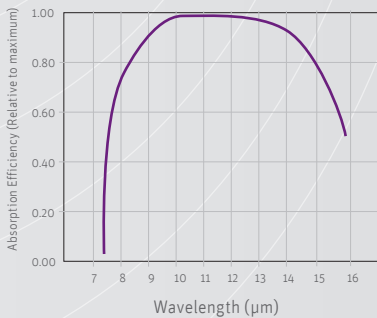
Modules & Components

XTM-640-Analog 17 μ m

High resolution uncooled thermal OEM module



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



Xenics' XTM-640-Analog is an extremely compact and versatile thermal imaging 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.

The module interface can be PAL/NTSC video for a regular CCTV security network. The module is controlled by RS232. The integration and use of these infrared modules are so easy, that no operator training is required.

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

The small pixel pitch of 17 μ m 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

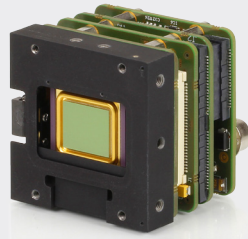
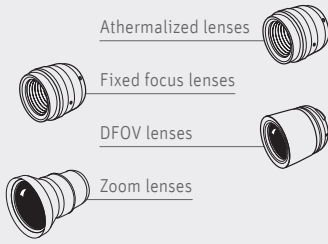
- Low power
- High resolution
- Easy connectivity
- Small size, 17 μ m pixel pitch
- 25 or 30 Hz frame rate worldwide

OEM applications

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

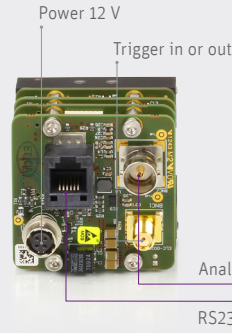
Ready-to-integrate

▶ Lens & filter options



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

▶ Inputs



▶ Software



• Xeneth Basic

▶ Outputs

Specifications

Module specifications	XTM-640-Analog 17 µm
Lens	
Optical interface	Fixation holes for multiple lens mount
Imaging performance	
Frame rate (full frame)	25 Hz (PAL) 30 Hz (NTSC)
Window of Interest	Minimum size 160 x 120
Integration time	1 µs - 80 µs
Shutter	Full control by serial command
Temperature stabilization	No ThermoElectric Cooling required (TEC-less)
Integration type	Rolling shutter
On-board image processing	NUC (Non-Uniformity Correction) Auto-offset & Auto-gain (selectable region of interest) XIE (Xenics Image Enhancement) Histogram equalization Digital zoom
A to D conversion resolution	16 bit
Interfaces	
Digital output	-
Analog output	PAL or NTSC
Module control	XSP protocol (RS-232)
Trigger	In or out (via SMA)
Power requirements	
Power consumption	< 2 W
Power supply	12 V
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 mm ³)	45 x 45 x 44.6
Weight module	99 g

Array specifications	XTM-640-Analog 17 µm
Array type	Uncooled microbolometer (a-Si)
Spectral band	8 to 14 µm
# pixels	640 x 480
Pixel pitch	17 µm
NETD	55 mK @ 30°C with F/1 lens
Array cooling	Uncooled
Pixel operability	> 99 %

Product selector guide

Part number	NETD (mK)	Frame rate (Hz)	Interface
XEN-000302	55	25	PAL
XEN-000450		9	
XEN-000303		30	NTSC
XEN-000451	9		