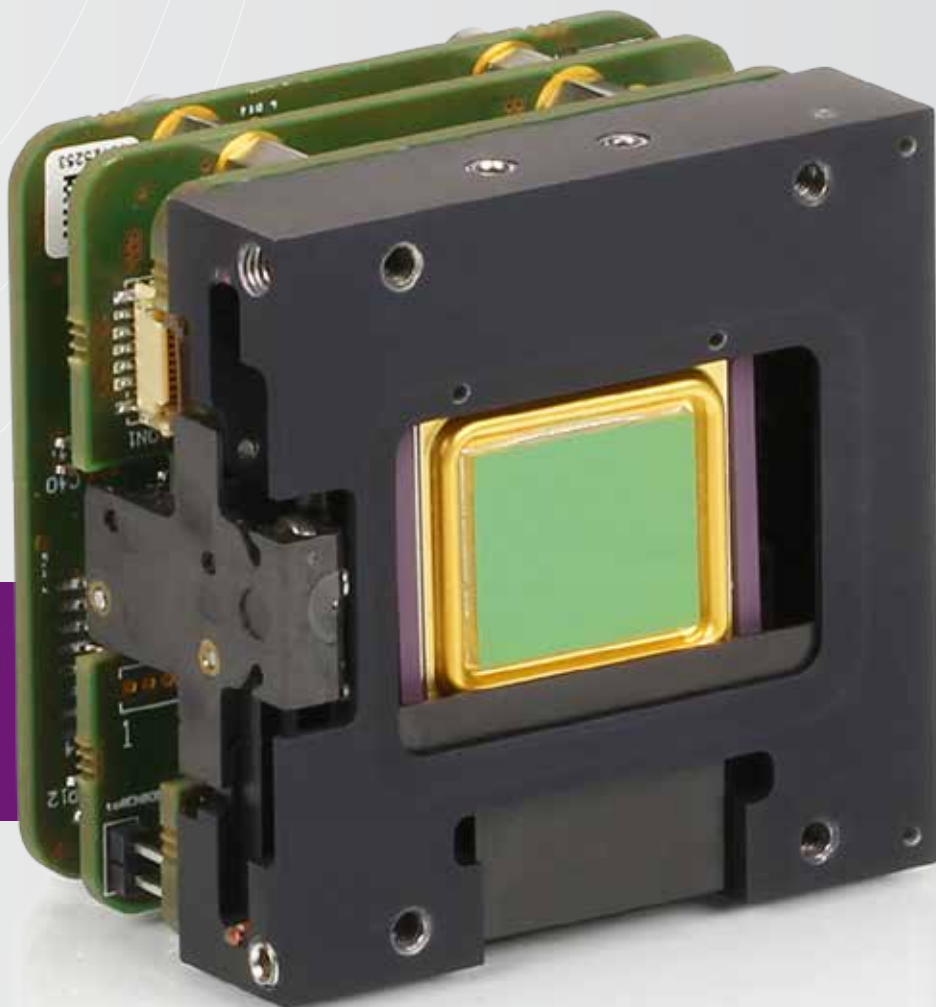
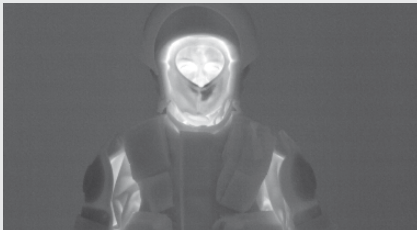


XTM 640 series



XTM 640 series

High resolution uncooled thermal OEM module



Thermal security



Vision enhancement



Police surveillance



Border security

The XTM 640 is presented as a compact and versatile thermal camera module. Built to easily integrate into other systems, the XTM 640 is suited for an extensive range of OEM applications.

Ready-to-integrate

The XTM 640 series are compact uncooled OEM modules, ready to be integrated in the customer's application with unique image quality and stability. High operating temperature range and unparalleled uniform and crisp thermal images are guaranteed thanks to on-board image processing and full shutter control.

The multitude of imaging interfaces options ensures you find one that suits your requirements. Integration and use of these infrared modules are also easy - little or no operator training is required. The small pixel pitch of 17 μm allows for longer Detection, Recognition and Identification (DRI) values in critical security applications.

Benefits & Features

Made for easy integration

Compact, low weight and power consumption to overcome constraints in integration

High resolution

640 x 480 pixel resolution

Flexible interface options

A variety of interfaces are available to suit your needs

Windowing mode

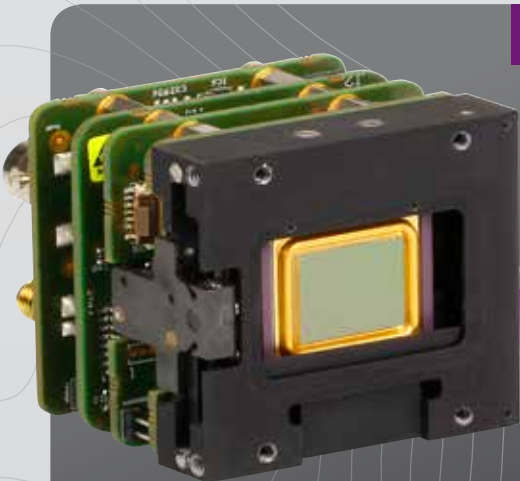
Imaging in a reduced window of interest for increased frame rates

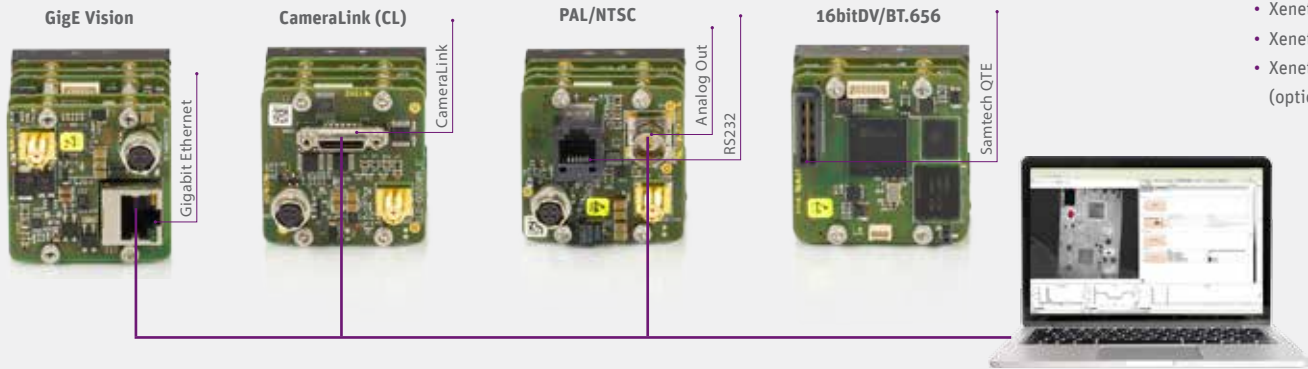
Advantages

- Low power consumption
- High resolution
- Easy connectivity
- Small size, light-weight

Designed for use in

- UAV / UGV
- Gimbals / Electro optical payloads
- Search & Rescue (SAR)
- Situational awareness





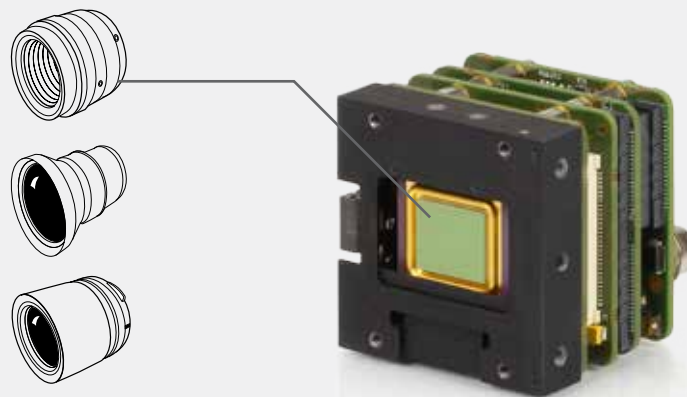
- Software**
- Xeneth
 - Xeneth SDK (optional)
 - Xeneth LabVIEW SDK (optional)

Camera Specifications	XTM 640 GigE	XTM 640 CL	XTM 640 PAL/NTSC	XTM 640 16bit DV	XTM 640 BT.656
Mechanical specifications					
Dimensions - excluding lens (width x height x length) [mm]	45 x 45 x 63	45 x 45 x 45	45 x 45 x 47	45 x 45 x 36	45 x 45 x 36
Weight - excluding lens [gr]	125	84	99	72	72
Optical interface (optional)	M42 or M34 x 0.75				
Connector GigE	RJ-45	NA	NA	NA	
Connector CameraLink	NA	Standard SDR	NA	NA	
Connector power	Hirose HR10-7R-SA(73)				NA
Connector trigger	SMA				NA
Connector analog	NA	NA	BNC	NA	
Connector RS232	NA	NA	RJ-12	NA	
Connector general I/O	NA	NA	NA	QTE-020-02-L-D-A Samtec	
Environmental & power specifications					
Ambient operating temperature range [°C]	From -40 to +60				
Storage temperature [°C]	From -45 to +85				
Power consumption [W]	4.5	2	2	1.65	
Power supply voltage	DC 12 V			DC 3.3 V	
Electro-optical specifications					
Image format [pixels]	640x480				
Pixel pitch [µm]	17				
Detector type	a-Si microbolometer				
Integration type	Rolling shutter				
Active area and diagonal [mm]	10.88 x 8.16 (13.6 diagonal)				
Detector NETD (Noise Equivalent Temperature Difference) [mK]	<55 (at 30Hz, 300K, F/1)				
Spectral range [µm]	8 - 14				
Pixel operability	>99% (excluding 3 peripheral lines and columns)				
Max frame rate (full frame) [Hz]	50 (or 9)	50 (or 9)	PAL: 25 (or 9) NTSC: 30 (or 9)	50 (or 9)	50 (or 9)
Integration time range [µs]	1-80				
Region of interest	Yes				
Min region size [pixels]	160x120				
Analog-to-Digital (ADC) [bits]	16				
Command and control	GigE Vision	CameraLink	RS232	QTE Samtec (Serial LVCMOS)	
Digital output format	16 bit GigE Vision	16 bit base CameraLink	NA	16 bit Digital Video	BT.656
Trigger	in or out via SMA (configurable, not for 9 Hz)	in or out via SMA or CL-CC1 (configurable, not for 9 Hz)	in or out via SMA (configurable, not for 9 Hz)	in or out via QTE Samtec (configurable, not for 9 Hz)	

Broad selection of lenses available

We offer various long-wave infrared lenses that are compatible with the XTM 640 series. Optical interfaces are optional.

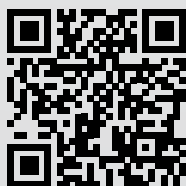
Contact us or visit the product page for more info.



Product selector guide

Product	Part number	Detector NETD (mK)	Max frame rate (full frame)	Interface
XTM 640 GigE	XEN-000300	< 55 (at 30Hz, 300K, F/1)	50 Hz	GigE Vision
XTM 640 GigE 9Hz	XEN-000447		9 Hz	
XTM 640 CL	XEN-000301		50 Hz	CameraLink
XTM 640 CL 9Hz	XEN-000448		9 Hz	
XTM 640 PAL	XEN-000302		25 Hz	PAL
XTM 640 PAL 9Hz	XEN-000450		9 Hz	
XTM 640 NTSC	XEN-000303		30 Hz	NTSC
XTM 640 NTSC 9Hz	XEN-000451		9 Hz	
XTM 640 16bit DV	XEN-000064		50 Hz	16bitDV (QTE)
XTM 640 16bit DV 9Hz	XEN-000445		9 Hz	
XTM 640 BT.656	XEN-000299		50 Hz	BT.656 (QTE)
XTM 640 BT.656 9Hz	XEN-000446		9 Hz	

More information



Further information available at our product page:

- Access to technical documents, white papers;
- Information on lens compatibility;
- Contact form for pricing and general inquiries