

Imagine the invisible

Modules & components



XCO-640

Long range MWIR surveillance demonstrator

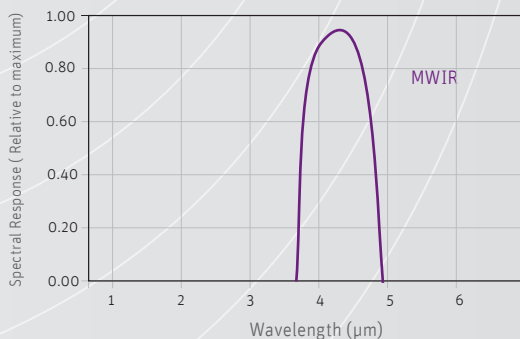
Highly stabilized and superior optical performance for long range monitoring

For stable medium to long range imaging, Xenics demonstrates the active and stirling cooled XCO-640: an infrared camera configuration with zoom range going from 15 mm to even 1000 mm.

The built-in zoom control over RS232/RS422 together with on-board image processing for increased contrast performance, make the XCO-640 demonstrator the perfect fit for a flexible and mobile observation platform for law enforcement, homeland security and perimeter surveillance.

Full flexibility is offered with a multiple interface functionality such as GigE Vision, CameraLink and Analog out simultaneously. The fast trigger in/out allows for easy synchronisation with other control systems. The exposure time range is fully adjustable. Furthermore the 100 Hz high speed frame rate can be further increased in windowing mode

This technology demonstrator will meet the professional security market looking for specialty and customizable features.



Designed for use in



Long range surveillance



Harbour protection



Airplane tracking



Perimeter protection

Applications

- Night vision
- Border control
- Airplane tracking
- Harbour protection
- Perimeter protection
- Long range surveillance

Benefits & Features

- Made in Europe
- Easy multiple connectivity
- On-board image processing
- High resolution and high speed monitoring
- Custom optical alignment for 15-330mm, 30-660mm or 40-1000mm zoom

Powerful and customizable surveillance system

Wide range of

Field of View (FoV)

Large selection of lenses, including motorized zoom going from 15 mm up to 1000 mm



High quality images at high speed

High resolution of 640 x 512 pixels with full frame rates up to 100 Hz. The frame rate can even be further increased in windowing mode

Multiple connectivity

Flexible with several analog and digital video formats. This allows the trigger input or output with external sources



Ruggedized design

The lens assembly integration is perfectly aligned with the camera body and detector.

Specifications

Camera specifications	XCO-640
Lens (to be specified)	
Focal length, f#	Standard 15-330 mm f/4, Optional: 30-660 mm f/4 or 40-1000 mm f/5.5
Zoom control	Built-in control over RS232/RS422
Imaging performance	
Frame rate: Video rate	30 Hz
High speed	100 Hz
Automatic Gain Control (AGC)	Yes
Exposure time range	> 1 us adjustable to full range
Interfaces	
Video output	NTSC or PAL
Digital Control	GigE (GigE Vision or Xeneth API) Serial channel CameraLink (XSP)
Trigger	Trigger in and out; LVCMOS; pre and post trigger
Power	
Power consumption	< 40 Watt at room temperature
Power supply	24 V
Environmental Specifications	
Operating temperature range	0°C to +50°C
Physical Characteristics	
System weight	5 kg (lens not included)
External dimensions	170 W x 190 H x 250 L mm (lens not included)

Array specifications	MWIR
Array Type	InSb
Spectral band	3.6 μm to 4.9 μm
# Pixels	640 x 512
Pixel Pitch	15 μm
Array Cooling	Stirling cooled
Sensitivity (NETD)	< 20 mK
Pixel operability	> 99 %

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