

Imagine the invisible

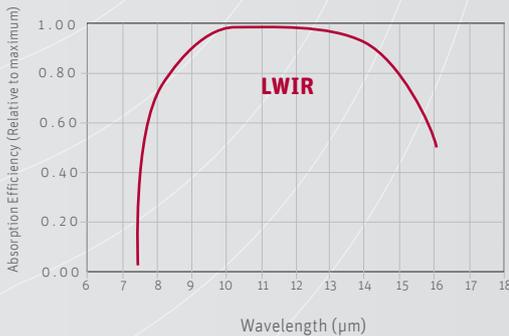
Industrial



Gobi-640-CL

High resolution uncooled thermal CameraLink camera

Smallest thermal CameraLink camera and easy-to-integrate



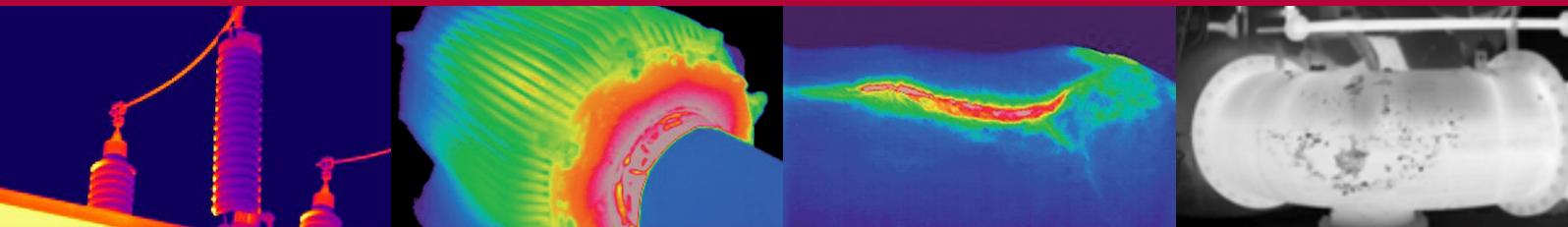
The Gobi-640-CL guarantees to be the most versatile industrial camera on the market with excellent image quality, high thermal resolution (0.05°C) and accurate thermal analysis capabilities. The advantages of a high quality infrared camera are now combined with the power of a CameraLink interface.

an industry-standard CameraLink interface for data transfer at full frame rate. In windowing mode the frame rate can even be further increased.

This combination makes it ideal for instant, accurate and cost-effective evaluation of your thermal imaging. Using the Gobi-640-CL will bring your measurements to the next level of accuracy!

The Gobi-640-CL is perfectly suited for high speed imaging at full 640x480 resolution with high frame rates of 50 Hz. The camera comes with

Designed for use in



⌘ Maintenance

⌘ Monitoring of critical installations

⌘ Waste combustion

⌘ Pipeline monitoring

Applications

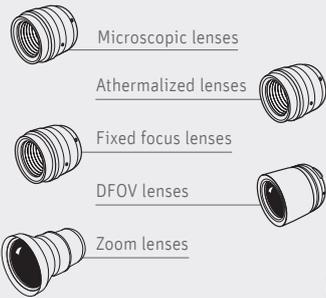
- Semiconductor inspection
- NDT: Lock-in thermography
- Accurate temperature measurement
- Quality control and quality assurance
- Real-time process control and monitoring

Benefits & Features

- High sensitivity
- High image resolution
- Multiple lenses available
- Smallest complete LWIR CameraLink camera
- Compliant with all CameraLink framegrabbers
- Easy to export with frame rates of 50 Hz in full resolution

Broad range of accessories available to simplify your system

▶ Lens & filter options



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

▶ Inputs



▶ Software



- Xeneth
- Xeneth SDK (optional)
- Xeneth LabVIEW SDK (optional)

▶ Outputs

Specifications

Camera specifications	Gobi-640-CL
Lens	
Focal length	Various lenses available
Optical interface	Lens mount supporting multiple lenses
Imaging performance	
Frame rate (full frame)	50 Hz
Window of interest	Minimum size 160 x 120 (shuttered)
Integration time	1 - 80 μ s
Temperature stabilization	No ThermoElectric Cooling required (TEC-less)
Integration type	Rolling shutter
On-board image processing	NUC (Non-Uniformity Correction) Auto-offset and auto-gain with selectable region of interest XIE (Xenics Image Enhancement) Histogram equalization
On-board functionality	Self-starting, trigger possibilities, BIST (Build-In Self-Test), lifetime and power-on counter, test-pattern
A to D conversion resolution	16 bit
Interfaces	
Camera control	CameraLink: XSP (Xenics Serial Protocol)
Image acquisition	CameraLink
Trigger	In or out (configurable)
Power requirements	
Power consumption	< 2 W
Power supply	12 V DC
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 (industrial components)
Storage temperature	- 45 °C to 85 °C (industrial components)
Dimensions	49 W x 49 H x 61.35 L mm ³ (lens not included)
Weight camera head	208 g (lens not included)

Array specifications	Gobi-640-CL
Array type	Uncooled microbolometer (a-Si)
Spectral band	8 μ m to 14 μ m
# pixels	640 x 480
Pixel pitch	17 μ m
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-000066	55	50	CameraLink

Thermography calibrations*

Part number	Temperature range
ASY-001301	-20 °C to 120 °C
ASY-001302	50 °C to 400 °C
ASY-001333	300 °C to 1200 °C
ASY-001334	1000 °C to 2000 °C

*Thermography accuracy +/- 2 °C or +/- 2 % (whichever is the highest)
 $T_{detector}$ of 25 °C to 50 °C.