Imagine the invisible



Gobi-640

High resolution uncooled thermal camera

Smart thermal Gobi-640 manages your processes

With its excellent image quality, allowing for detection of temperature differences as small as 0.05°C, the Gobi-640 is designed for use by researchers and engineers. Its easy plug-and-play infrared camera system and on-board image processing allows for real-time image correction and recognition. This combination makes it ideal for instant, accurate and cost-effective evaluation of your thermal imaging. Using the Gobi-640 will bring your analysis to the next level of accuracy!

Need for customizing? A variety of industry standard accessories is available.

Designed for use in

8

9

7

10

11 12 13 14

Wavelength (µm)

15 16 17

Absorption Efficiency (Relative to maximum)

1.00

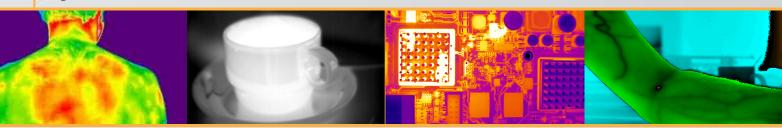
0.80

0.60

0.40

0.20

0.00



✤ Medical: infection

♣ Stress analysis

✤ PCB inspection

✤ Thermal imaging: veins

Applications

- Medical imaging
- 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
- Complete infrared system
- High speed in smaller window
- Connects directly to a video monitor
- Interfaces to various standard frame grabbers

Broad range of accessories available to simplify your inspection



• Specifications

Camera Specifications	9 Hz	50 Hz		
Lens (included)				
Focal length	18 mm f/1, HFOV 47.9°, standard manual focus			
Optical interface	Adaptation rings for various lenses			
Imaging performance				
Frame rate:	9 Hz	50 Hz		
Window of interest	Minimum size 160 x 120			
Max. frame rate in smallest window	9 Hz	630 Hz		
Temperature stabilization	No thermoelectric cooling required (TEC-less)			
Integration type	Rolling Shutter			
A to D conversion resolution	16 bit			
Interfaces				
Camera control	CameraLink: XSP (Xenics Serial Protocol) RS232: XSP (Xenics Serial Protocol)			
Digital output	CameraLink: 16 bit base			
Analog out	PAL or NTSC			
Trigger	Trigger in and out; LVCMOS			
Operating mode	Stand-alone or PC-controlled			
Power requirements				
Power consumption	3.3 W at room temperature			
Power supply	12 V and 24 V			
Physical characteristics				
Shock	70 G, 2 ms halfsine profile (without shutter)			
Vibration	4.5 G, (5Hz to 500 Hz)			
Ambient operating temperature	O°C to 50°C			
Dimensions	74 W x 70 H x 65 L mm³ (without lens)			
Weight camera head	< 500 g (Lens not included)			

Array Specifications	9 Hz	50 Hz	
Array type	Uncooled microbolometer (a-Si)		
Spectral band	8 µm to 14 µm		
# Pixels	640 x 480		
Pixel pitch	25 μm		
NETD	≈ 50 mK @ 30°C with F/1 lens		
Array cooling	Uncooled		
Pixel operability	> 99%		

Product selector guide

Part number	NETD (mK)	Frame rate (Hz)	Analog out
XEN-000030	50	9	PAL
XEN-000031		9	NTSC
XEN-000043		50	PAL
XEN-000029			NTSC



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ISO 9001:2008 certified