

Imagine the invisible

Scientific



Gobi-640

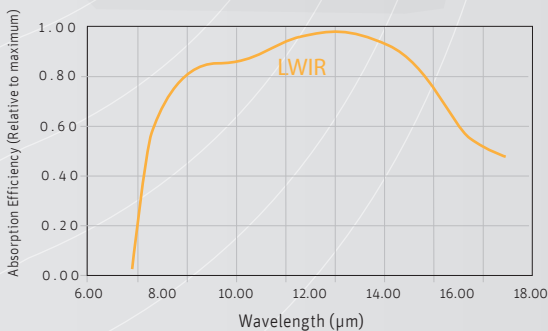
High resolution
uncooled thermal camera

Smart thermal Gobi-640 simplifies the way your work

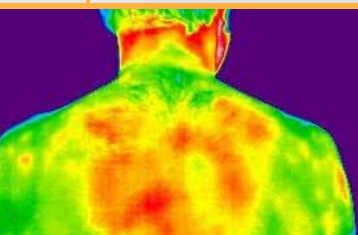
With its excellent image quality, allowing for detection of temperature differences as small as 0.05°C, the Gobi-640 is designed for use by researchers and engineers. Its easy plug-and-play infrared camera system and on-board image processing allows for real-time image correction and recognition.

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 customization?
A variety of industry standard accessories is available.



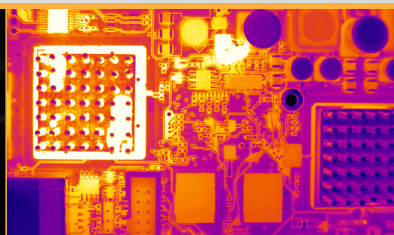
Designed for use in



Medical: infection



Stress analysis



PCB inspection



Fuel injection

Applications

- Medical imaging
- Non-Destructive Testing: Lock-in thermography
- Temperature measurement
- Quality control and quality assurance
- Real-time process control and process monitoring

Benefits & Features

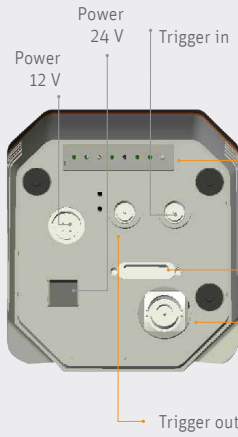
- High sensitivity
- High frame rate
- High image resolution
- Complete infrared system
- Connects directly to a video monitor
- Interfaces to various standard frame grabbers

Broad range of accessories available to simplify your research

▶ Lens & filter options



▶ Inputs



▶ Software



- Xeneth radiometric
- Xeneth SDK
- Thermography studio (optional)

▶ Outputs

Specifications

| Camera Specifications | Gobi-640 |
|---------------------------------|---|
| Lens (included) | |
| Focal length | 18 mm f/1, HFOV 48°, standard manual focus |
| Optical interface | Adaptation rings for various lenses |
| Imaging performance | |
| Frame rate | Max 50 Hz |
| Window of interest | Minimum size 160 x 4 |
| Temperature stabilization | No thermoelectric cooling required (TEC-less) |
| Integration type | Rolling shutter |
| A to D conversion resolution | 14 bit |
| Interfaces | |
| Camera control | CameraLink: XSP (Xenics Serial Protocol) RS232: XSP (Xenics Serial Protocol) |
| Digital output | CameraLink: 14 bit base |
| Analog out | PAL or NTSC |
| Trigger | Trigger in and out; LVCMOS |
| Operating mode | Stand-alone or PC-controlled |
| Power requirements | |
| Power consumption | 2.5 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 | 0°C to 50°C |
| Dimensions | 74 W x 70 H x 65 L mm ³ (without lens) |
| Weight camera head | < 500 g (Lens not included) |

| Array Specifications | Gobi-640 |
|----------------------|--------------------------------|
| 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 | Frame rate (Hz) | Analog out |
|-------------|-------|-----------------|------------|
| XEN-000199 | 50 mK | 50 | PAL |
| XEN-000029 | | | NTSC |
| XEN-000030 | | 9 | PAL |
| XEN-000031 | | | NTSC |