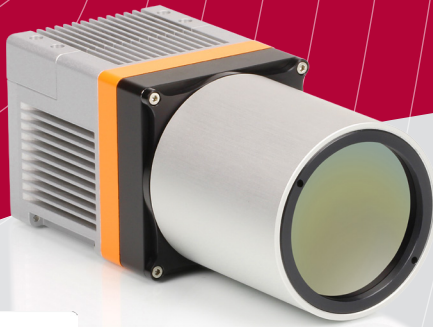


Imagine the invisible

Industrial

Serval-640-GigE Imaging

High resolution
IP67 LWIR camera



For thermal imaging in the toughest conditions

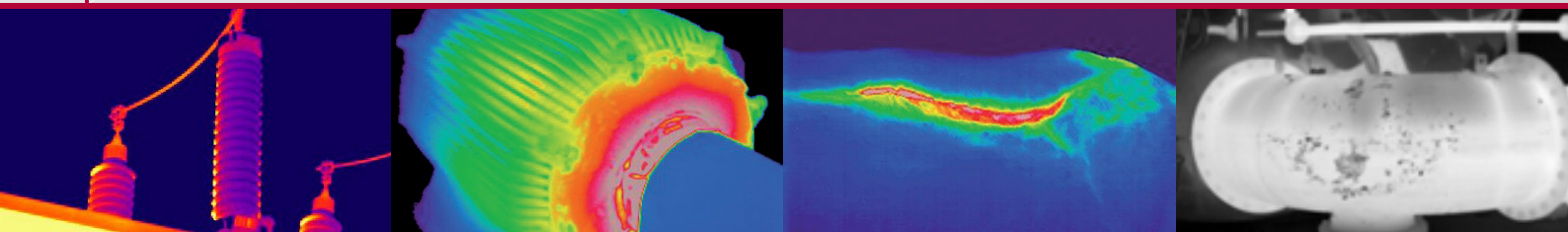
The Serval-640-GigE Imaging fulfils a growing demand for rugged and reliable end-user ready thermal cameras for industrial thermal imaging applications.

The Serval-640-GigE Imaging is directed at demanding indoor use, such as in-line process and quality control in harsh and hot industrial environments. In this highly specialized field, system integrators are looking for thermal cameras that offer an easy and

maintenance-free installation as well as long-term stability.

The Serval-640-GigE Imaging is designed for long-term stable and reliable operation under difficult ambient conditions. Its compact form factor provides front window protection to protect the lens, plus an optionally air purge system of the encapsulated optics to allow permanent use in dust-loaded atmospheres.

Designed for use in



⌘ Maintenance

⌘ Monitoring of critical installations

⌘ Waste combustion

⌘ Pipeline monitoring

Applications

- In-line process and quality control in harsh environments
- Crucial hot-spot, fire or smoke detection
- Monitoring of industrial plants

Benefits & Features

- High resolution
- Easy-to-integrate
- Large operating temperature range at factory floor use
- Ultra-compact industrial LWIR camera with small GigE interface
- Low cost of ownership with IP67 protection grade, optional air purge, sun shroud and I/O connection terminals

Complete and easy-to-integrate bundle

Accessories



Sunshroud

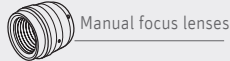


Air purge

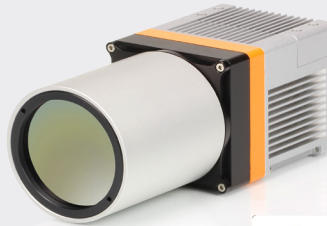


I/O kit

Lens configurations



Manual focus lenses



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

Inputs

Power 12 V
 Trigger in/out



GigE Vision

Software



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

Outputs

Specifications

| Camera Specifications | Serval-640-GigE Imaging |
|---|--|
| Lens (included) | |
| Focal length | One fixed lens configuration per camera part number More information is included the product selector guide |
| Imaging performance | |
| Maximum frame rate | 50 Hz |
| Window of Interest (WoI) | Minimum size 160 x 120 |
| Thermal time constant | 10 ms |
| Integration time range | 1 μ s - 80 μ s |
| Integration type | Rolling shutter |
| A to D conversion resolution | 16 bit |
| On-board image processing | NUC (Non-Uniformity Correction) Auto-offset and auto-gain with selectable region of interest XIE (Xenics Image Enhancement): sharpening or smoothing Histogram equalization |
| Interfaces | |
| Camera control | GigE Vision |
| Image acquisition | GigE Vision |
| Trigger | In or out (configurable) |
| Power requirements | |
| Power consumption | <5 W |
| Power supply | 12 V |
| Physical characteristics | |
| Shock | 40 G, 11 ms according to MIL-STD810G (preliminary) |
| Vibration | 5 G (20 Hz to 2000 Hz) according to MIL-STD883J (preliminary) |
| Protection rating | IP67 |
| Ambient operating temperature | - 40 °C to 70 °C |
| Storage temperature | - 45 °C to 85 °C |
| Dimensions (W x H x L mm ³) | 55 x 55 x 122* |
| Weight camera head | 470 g* |

*Depends on lens configuration

| Array Specifications | |
|----------------------|--------------------------------|
| Array type | Uncooled microbolometer (a-Si) |
| Spectral band | 8 μ m to 14 μ m |
| Resolution | 640 x 480 |
| Pixel pitch | 17 μ m |
| Sensitivity (NETD) | 55 mK @ 30°C with F/1 lens |
| Array cooling | Uncooled |
| Pixel operability | > 99 % |

Product selector guide

| Part number | Fixed lens | NETD (mK) | Frame rate (Hz) | Interface |
|-------------|------------|-----------|-----------------|-----------|
| XEN-000542 | 10 mm | 55 | 50 | GigE |
| XEN-000544 | 18 mm | | | |
| XEN-000546 | 25 mm | | | |
| XEN-000548 | 40 mm | | | |