

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.

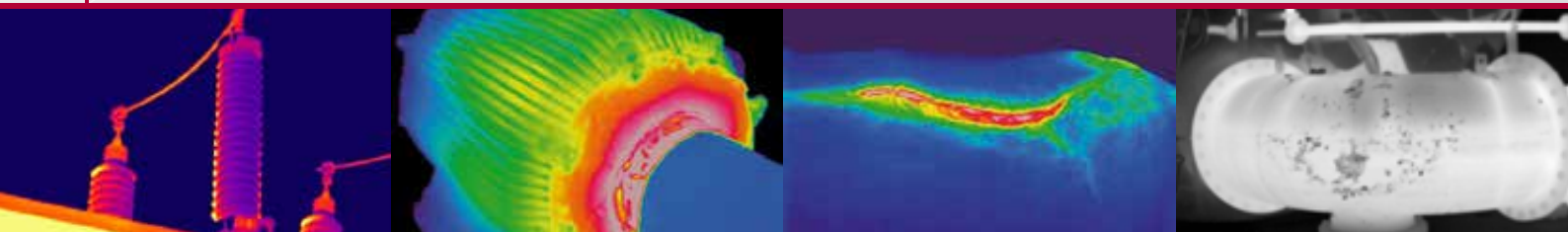
The Serval-640-GigE Imaging is directed at demanding indoor use, such as in-line process and quality control in harsh and hot industrial environments. In this highly specialized field, system integrators are looking for thermal cameras that offer an easy and

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

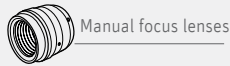


Air purge



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	50 G, 11 ms according to MIL-STD810G & IEC 60068-2-27
Vibration	5.4 G (5 Hz to 1000 Hz) according to MIL-STD883J & IEC 60068-2-64
Protection rating	IP-67 according to IEC 600529
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-000544	18 mm			
XEN-000546	25 mm	55	50	GigE
XEN-000548	40 mm			