

Serval 640 Thermography



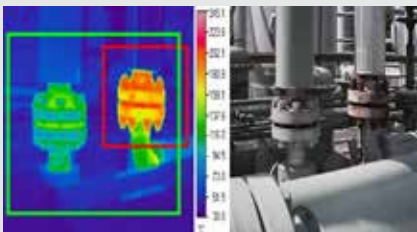
Serval 640 GigE Thermography

Thermal imaging in extreme conditions

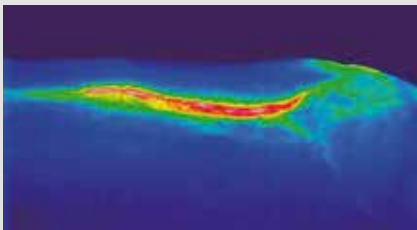
Developed for demanding indoor applications in extreme environments, the Serval 640 GigE Thermography offers the best price-performance ratio as a truly complete IP67 camera.



Test bench tire heating



Monitoring of critical installations



Waste combustion



In-line quality control

Rugged & Reliable

System integrators around the world are looking for an easy-to-integrate thermography camera to use in their industrial installations. The Serval 640 GigE thermography camera offers accurate temperature measurements in ranges of -20 to 120°C and 50 to 400°C. This broad range of calibrations guarantees thermography within a wide range of applications.

The compact form factor provides front window protection to protect the lens, plus an optional air purge system of the encapsulated optics to allow permanent use in dust-loaded atmospheres.

Benefits & Features

Compact form factor

Ready to use compact, low weight and power consumption for demanding industrial applications

High resolution thermal imaging

640 x 480 pixel resolution

Hassle free operation

Easy to install and service thermography camera

Ready for industrial use

Low cost of ownership with IP67 protection grade. Optional air purge, sun shroud and I/O connection terminals



GigE Vision-compatible

The Gigabit Ethernet interface is compatible to the GigE Vision standard

Thermography camera

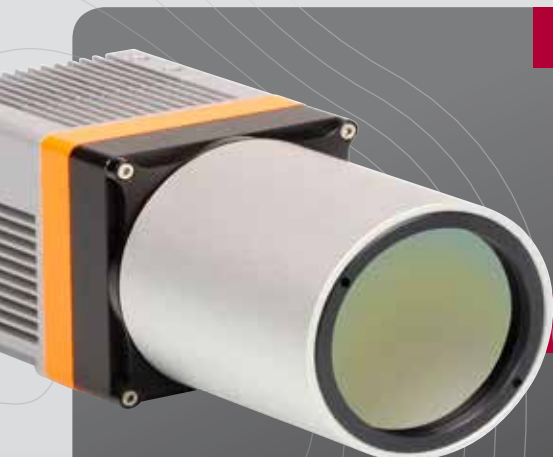
Temperature calibrations available for thermographic applications

Advantages

- Broad range of accessories for industrial applications
- IP67 protection rating
- Maintenance free operation

Designed for use in

- In-line process and quality control
- Crucial hot-spot, fire or smoke detection
- Monitoring of industrial plants
- Non-contact temperature measurement





- Software**
- Xeneth
 - Xeneth SDK (optional)
 - Xeneth LabVIEW SDK (optional)

Camera Specifications	Serval 640 GigE 18mm Thermography	Serval 640 GigE 25mm Thermography	Serval 640 GigE 40mm Thermography
Mechanical specifications			
Approximate Dimensions (width x height x length) [mm]	55 x 55 x 122	55 x 55 x 122	55 x 55 x 134
Weight [gr]	470	500	550
Connector GigE	Phoenix Contact 8P Female M12 connector (1553860)		
Connector power & I/O	Phoenix Contact 17P Male M12 connector (1437119)		
Environmental & power specifications			
Operating case temperature range [°C]	From -40 to +70		
Storage temperature [°C]	From -40 to +85		
Power consumption [W]	5		
Power supply voltage	DC 12 V		
Shock	50 g, 11 ms (MIL-STD810G & IEC60068-2-27)		
Vibration	5.4 g for 5-1000Hz (MIL-STD883) & IEC60068-2-64		
IP rating	IP67 (IEC600529)		
Electro-optical specifications			
Image format [pixels]	640x480		
Pixel pitch [µm]	17		
Detector type	a-Si microbolometer		
Integration type	Rolling shutter		
Active area and diagonal [mm]	10.88 x 8.16 (13.6 diagonal)		
Lens	LWIR 18 mm F/1	LWIR 25 mm F/1	LWIR 40 mm F/1
Field of view (FOV) [degrees]	38 (H) x 28.6 (V)	24.7 (H) x 18.6 (V)	15.5 (H) x 11.6 (V)
Thermography accuracy	Within +/-2°C for positive temperatures up to 100°C and 2% for higher temperatures (for camera operation ambient temperature between 10-60°C)		
Detector NETD (Noise Equivalent Temperature Difference) [mK]	<55 (at 30Hz, 300K, F/1)		
Spectral range [µm]	8 - 12		
Pixel operability	>99% (excluding 3 peripheral lines and columns)		
Max frame rate (full frame) [Hz]	50		
Region of interest	Yes		
Min region size [pixels]	160x120		
Analog-to-Digital (ADC) [bits]	16		
Command and control	GigE Vision		
Digital output format	16 bit GigE Vision		
Trigger	in or out configurable (via Power and I/O connector)		



Sunshroud



Air purge



I/O kit

Product selector guide

Product	Part number	Fixed lens	Detector NETD (mK)	Max frame rate (full frame)	Interface
Serval 640 GigE 18mm Thermography	XEN-000545	LWIR 18 mm F/1			
Serval 640 GigE 25mm Thermography	XEN-000547	LWIR 25 mm F/1	< 55 (at 30Hz, 300K, F/1)	50 Hz	GigE
Serval 640 GigE 40mm Thermography	XEN-000549	LWIR 40 mm F/1			

On-board thermography calibrations

Temperature range	Part number
-20°C to 120°C	ASY-001301
50°C to 400°C	ASY-001302

More information



Further information available at our product page:

- Access to technical documents, white papers;
- Information on lens compatibility;
- Contact form for pricing and general inquiries