

PYROVIEW 640L compact

Uncooled Infrared Camera for Applications at 8 μm to 14 μm



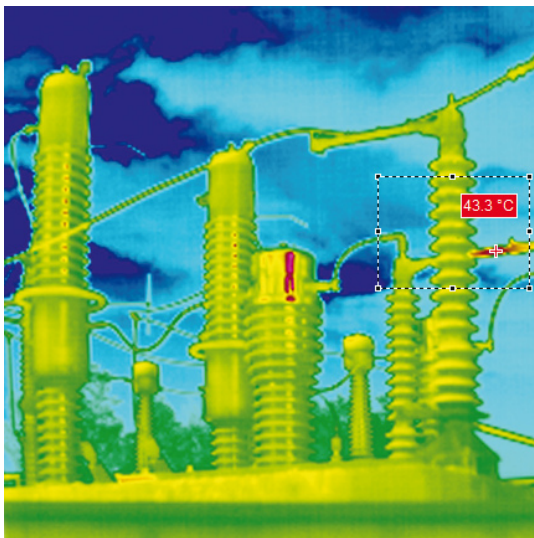
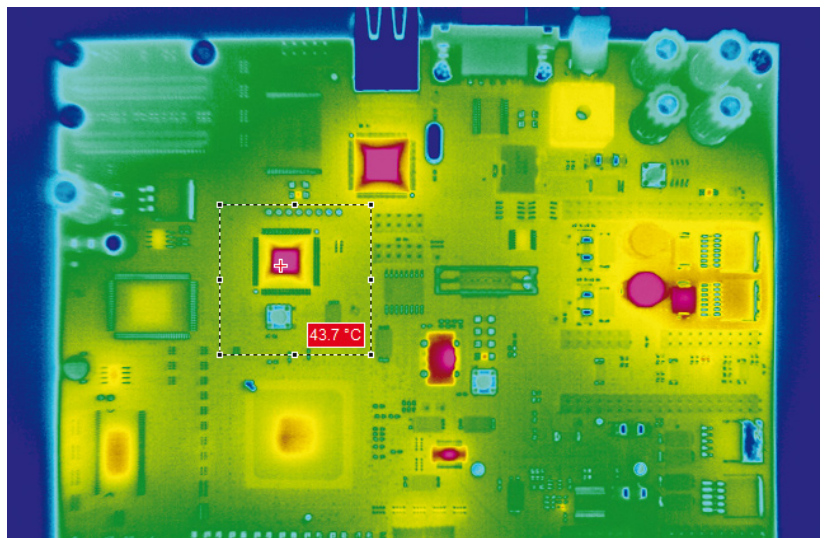
Features

- Temperature measurement range $-20\text{ }^{\circ}\text{C}$ to $500\text{ }^{\circ}\text{C}$
- Measurement frequency 50 frames per second
- Uncooled microbolometer with 640×480 pixels
- Lenses with different fields of view
- Real-time data acquisition via Gigabit Ethernet (50 frames per second max)
- Option of stand-alone operation without computer
- Triggered measurements
- Alarm and threshold monitoring
- Large dynamic range and 16 bit A/D conversion
- 2 years warranty
- Customized system solutions with modified hardware and software
- No US export license necessary

Applications

PYROVIEW 640L compact cameras provide instant non-contact measurement of 2D temperature distributions with high thermal and excellent spatial resolution at 8 μm to 14 μm . The camera is specially designed for long-term use in fixed-mounted applications.

Typical applications for the PYROVIEW 640L compact include process control and monitoring, quality control, fire detection and measurements in research and development.



Software

The powerful online software PYROSOFT for Windows® allows you to control the camera and record, view, manipulate and store the measured data. Specific features are:

- Real-time data recording
- Definition of zones and monitoring of alarm thresholds
- Analysis of trends
- Data export (text, bitmap, video)
- Process control via PROFIBUS, analog and digital inputs, outputs, and other interfaces

A programming interface (Windows®-DLL) is available for system integration.

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Spectral Range	8 μm to 14 μm
Temperature Measurement Range¹	range 1: -20 °C to 120 °C, range 2: 0 °C to 500 °C
Sensor	uncooled microbolometer array (640 × 480 pixels)
Lens¹	36° × 27°, measurement distance > 30 cm, spatial resolution 1.0 mrad, optional 67° × 53°, measurement distance > 50 cm, spatial resolution 1.8 mrad, optional 18° × 14°, measurement distance > 1 m, spatial resolution 0.5 mrad, optional 12° × 9°, measurement distance > 2 m, spatial resolution 0.3 mrad, ³ optional macro 60 μm
Measurement Uncertainty²	2 K (measured temperature < 100 °C) or 2 % of the measured value in °C
Noise equivalent temperature difference²	<80 mK (30 °C, 50 Hz, range 1)
Measurement Frequency	internal 50 Hz, selectable: 50 Hz, 25 Hz, 12.5 Hz, ...
Response Time	internal 40 ms, selectable: 2/ measurement frequency
Interface	Gigabit Ethernet (real-time, 50 Hz max)
Digital Inputs	2 electrically isolated digital inputs (trigger)
Digital Outputs	2 electrically isolated digital outputs (alarm)
Connectors	round plug connector HR10A (12 pins, power supply, digital inputs and outputs), round plug connector M12 (A-coded, 8 pins, Gigabit Ethernet)
Power Supply	18 V to 36 V DC, typical 10 VA
Weight	approx. 1.6 kg
Dimensions	85 mm (W) × 175 mm (D) × 107 mm (H), without lens and connectors
Housing	aluminium compact housing IP 54, optional with industrial housing IP 65 with water cooling system and air purge, weatherproof housing with pan-tilt-unit or ATEX housing
Camera Operating Temperature Range	-10 °C to 50 °C
Storage Conditions	-20 °C to 70 °C, rel. humidity 95 % max
Software	Control and imaging software PYROSOFT for Windows®, customized modifications on request

¹ Other available.

² Specification for black body reference and ambient temperature 25 °C.

³ NETD <0.2 K (30 °C, 50 Hz).

Technical details are subject to change without notice. March 2009.

