

PYROVIEW 640L compact

Uncooled infrared camera for applications at 8 μm to 14 μm



Features

- Non-contact temperature measurements between $-20\text{ }^{\circ}\text{C}$ and $500\text{ }^{\circ}\text{C}$
- Measurement frequency 50 frames per second
- Uncooled mikrobolometer array with 640×480 pixels
- Optics with motor or manual focussing
- Real-time data acquisition via Gigabit Ethernet with 50 frames per second (maximum)
- Option of stand-alone operating without computer
- Alarm and threshold monitoring
- Large dynamic range and 16 bit A/D converter
- 2 years warranty
- Customized system solutions with modified hardware and software

Description and 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..

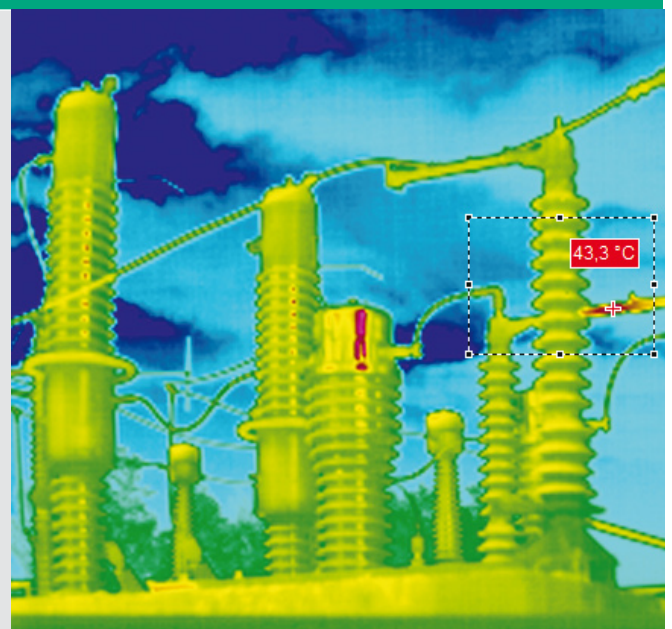
Software

The powerful online software PYROSOFT for Windows [®] allows you to control the camera and record, view, manipulate and store the measured data.

Special features are:

- Real-time data recording
- Definition of zones and monitoring of alarm thresholds
- Analysis of trends
- Data export (text, bitmap, video)
- Support of process interfaces, e.g. Profibus, analogue and digital inputs/outputs, and other

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



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Technical data

Spectral range	8 μm to 14 μm
Temperature range ¹	range 1: – 20 °C to 120 °C, range 2: 0 °C to 500 °C
Sensor	uncooled microbolometer array (640 × 480 pixels)
Lens ^{1,3}	30° × 23°, measuring distance > 20 cm, spatial resolution 1.0 mrad, optional 60° × 47°, measuring distance > 20 cm, spatial resolution 1.8 mrad, optional 18° × 14°, measuring distance > 1.5 m, spatial resolution 0.5 mrad
Measurement uncertainty ²	2 K (object temperature < 100 °C) or 2 % of measured value in °C
Noise equivalent temperature difference ²	< 80 mK (30 °C, 50 Hz, range 1)
Measurement frequency ⁴	internal 50 Hz, selectable: 50 Hz, 25 Hz, 12.5 Hz, ...
Response time	internal 40 ms, selectable: 2 / measurement uncertainty
Interface	Gigabit Ethernet (real-time, 50 Hz)
Digital inputs	2 galvanically isolated inputs (trigger)
Digital outputs	2 galvanically isolated outputs (alarm)
Connectors ³	circular connector HR10A (12 pin, operating voltage, digital inputs and outputs), circular connector M12 (A-coded, 8 pin, Gigabit Ethernet)
Power supply	12 V to 36 V DC, typical 10 VA
Weight	appr. 1.6 kg
Housing	aluminium compact housing IP54, 85 mm (W) × 175 mm (L) × 107 mm (H), without lens and connectors, optional built in weatherproof housing with pan-tilt-unit
Operating temperature	–10 °C to 50 °C
Storage conditions	–20 °C to 70 °C, max. 95 % relative humidity
Software	control and imaging software PYROSOFT for Windows®, customized modifications on request

¹ Other available. ² Specifications for black body and ambient temperature 25 °C. ³ Optics with motor or manual focussing. ⁴ Export version with < 9 Hz available.

Dimensional drawing

