

PYROVIEW 380 & PYROVIEW 320

Industrial Infrared Cameras



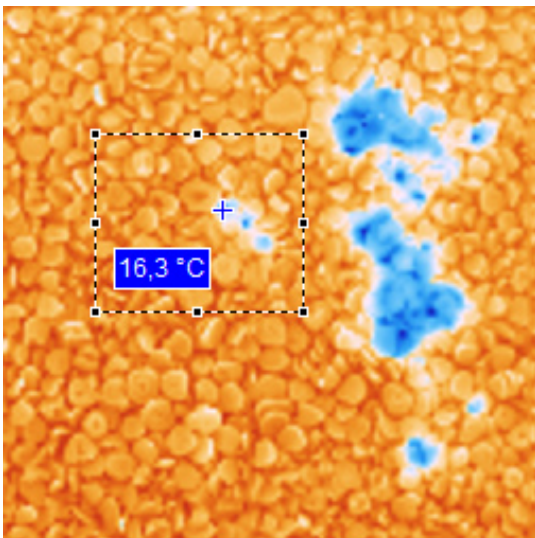
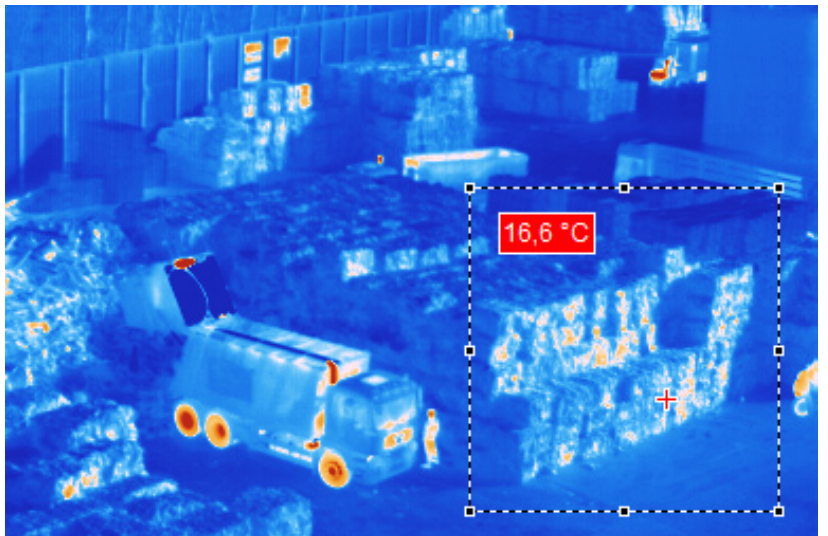
Features

- Precise non-contact temperature measurement over the range $-20\text{ }^{\circ}\text{C}$ to $1250\text{ }^{\circ}\text{C}$ in different spectral ranges
- Measurement frequency 50 frames per second
- Robust housing for use in harsh environments (to IP 65 Standard) with optional water-cooling system and air purge
- Uncooled microbolometer with 384×288 pixels or 320×240 pixels
- Optics with motor or manual focussing
- Real-time data acquisition via Fast Ethernet or Gigabit Ethernet, optional via fibre optics
- Option of stand-alone operation without computer
- Triggered measurements
- Alarm and threshold monitoring
- 16 bit A/D converter
- Customized system solutions with modified hardware and software
- No US export license necessary

Applications

PYROVIEW cameras provide instant non-contact measurement of 2D temperature distributions with high thermal and spatial resolution. All models are specially designed for long-term use in harsh industrial environments.

For general measurements the spectral ranges $8\text{ }\mu\text{m}$ to $14\text{ }\mu\text{m}$ and $3\text{ }\mu\text{m}$ to $5\text{ }\mu\text{m}$ are available. The spectral range $4.8\text{ }\mu\text{m}$ to $5.2\text{ }\mu\text{m}$ has been specially designed for measurements on glass.



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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Industrial Infrared Cameras

Model	Spectral Range ¹	Temperature Measurement Range ¹	NETD ²	Field of View ^{1,5}
PYROVIEW 380 (384 × 288 pixels)				
PYROVIEW 380L	8 μm to 14 μm	Range 1: -20 °C to 120 °C, Range 2: 0 °C to 500 °C	0.08 K (30 °C, 50 Hz)	30° × 23° (optional 43° × 33°, 22° × 16°, 11° × 8° ⁴ , macro 60 μm)
PYROVIEW 380M	3 μm to 5 μm	Range 1: 100 °C to 300 °C, Range 2: 200 °C to 500 °C	0.5 K (200 °C, 50 Hz)	30° × 23° (optional 51° × 40°, 15° × 12°)
PYROVIEW 380G	4.8 μm to 5.2 μm	Range 1: 200 °C to 500 °C, Range 2: 400 °C to 1250 °C	1 K (300 °C, 50 Hz)	30° × 23° (optional 51° × 40°, 15° × 12°)
PYROVIEW 380F	3.9 μm	600 °C to 1250 °C	1 K (600 °C, 50 Hz)	30° × 23° (optional 51° × 40°, 15° × 12°) ³
PYROVIEW 320 (320 × 240 pixels)				
PYROVIEW 320L	8 μm to 14 μm	Range 1: -20 °C to 120 °C, Range 2: 0 °C to 500 °C	0.08 K (30 °C, 50 Hz)	25° × 19° (optional 37° × 28°, 18° × 14°, 9° × 7° ⁴ , 6° × 5°, makro 60 μm)
PYROVIEW 320M	3 μm to 5 μm	Range 1: 100 °C to 300 °C, Range 2: 200 °C to 500 °C	0.5 K (200 °C, 50 Hz)	25° × 19° (optional 44° × 33°, 13° × 10°)
PYROVIEW 320G	4.8 μm to 5.2 μm	Range 1: 200 °C to 500 °C, Range 2: 400 °C to 1250 °C	1 K (300 °C, 50 Hz)	25° × 19° (optional 44° × 33°, 13° × 10°)
PYROVIEW 320F	3.9 μm	600 °C to 1250 °C	1 K (600 °C, 50 Hz)	25° × 19° (optional 44° × 33°, 13° × 10°) ³

Measurement Uncertainty²

2 K (measured temperature < 100 °C) or 2 % of the measured value in °C

Measurement Frequency⁶

internal 50 Hz, selectable: 50 Hz, 25 Hz, 12.5 Hz, ...

Response Time

internal 40 ms, selectable: 2/measurement frequency

Interfaces

Fast Ethernet (real time, 50 Hz), optional fibre optics
electrically isolated digital inputs (trigger) and digital outputs (alarm)

Power Supply

10 V to 36 V DC, typical 4 VA to 10 VA

Camera Housing

Protection to IP 65 Standard. Options include integrated water cooling system and air purge, and fixed or swivel mounting base.
Wt. approx. 3.2 kg

Camera Operating Temperature Range

-10 °C to 50 °C (without water-cooling), -25 °C to 150 °C (with water-cooling)

Storage Conditions

-20 °C to 70 °C, rel. humidity 95 % max

Software

Control and imaging software PYROSOFT for Windows®, customized modifications on request

¹ Others available. ² Specification for black body reference and ambient temperature 25 °C. ³ On request with special lens for combustion chambers e.g. (43° × 33°, 61° × 48° with inclination). ⁴ NETD < 0.2 K (30 °C, 50 Hz). ⁵ Optics with motor or manual focussing. ⁶ Export version < 9 Hz available.

Technical details are subject to change without notice. May 2010.