

PYROLINE compact

High-Speed Uncooled Infrared Line Cameras

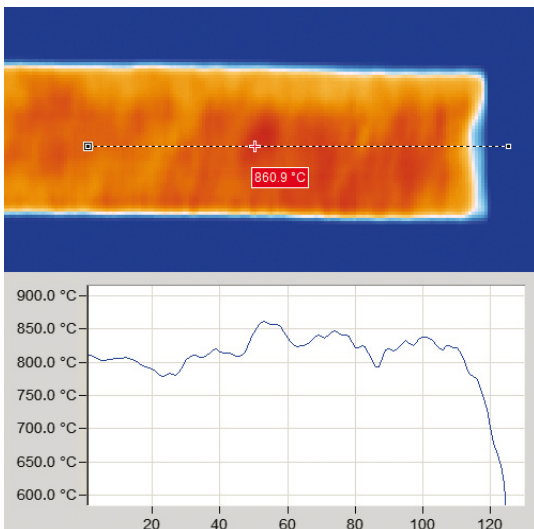
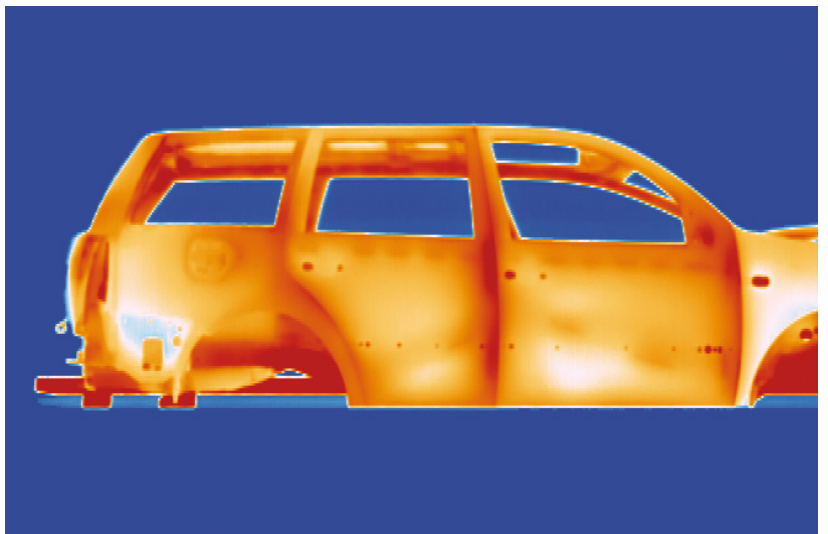


Features

- Temperature measurement range 0 °C to 1300 °C
- Uncooled infrared linear array with 128 or 256 pixels
- Measurement frequency 256 lines per second, optional up to 512 lines per second
- 4 spectral ranges for different applications
- Different lenses with up to 90° field of view
- Aluminium compact housing (IP 54)
- Real-time data acquisition via Fast Ethernet with up to 512 lines per second
- 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

Applications

PYROLINE compact cameras provide instant non-contact measurement of temperature distributions. The cameras are specially designed for long-term use in fixed-mounted applications. For general purpose use the spectral ranges of 8 μm to 14 μm and 3 μm to 5 μm are available. The spectral ranges of 4.8 μm to 5.2 μm (which is particularly suitable for the measurement of temperature distributions in glass) and 1.4 μm to 1.8 μm (for metal) are for special applications.



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)
- 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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Model	Pixels	Temperature Measurement Range ¹	NETD ² at 32 Hz/ f _{meas}	Field of View ¹
8 μm to 14 μm				
Standard Models (256 Hz Measurement Frequency)				
PYROLINE 128L compact	128 × 1	50 °C to 550 °C	0.5 K/1.5 K	40° (optional 56°, 90° ³)
PYROLINE 256L compact	256 × 1			
PYROLINE 128LS compact	128 × 1	0 °C to 80 °C	0.2 K/0.5 K	
High-Speed Models (512 Hz Measurement Frequency)				
PYROLINE 128L/512Hz compact	128 × 1	50 °C to 550 °C	0.5 K/2 K	40° (optional 56°, 90° ³)
PYROLINE 256L/512Hz compact	256 × 1	100 °C to 800 °C		
PYROLINE 128LS/512Hz compact	128 × 1	0 °C to 80 °C		
3 μm to 5 μm				
Standard Models (256 Hz Measurement Frequency)				
PYROLINE 128M compact	128 × 1	450 °C to 1250 °C	0.5 K/1.5 K	60° (optional 40°)
PYROLINE 256M compact	256 × 1			
PYROLINE 128MS compact	128 × 1	200 °C to 800 °C		
4.8 μm to 5.2 μm				
Standard Models (256 Hz Measurement Frequency)				
PYROLINE 128G compact	128 × 1	450 °C to 1250 °C	1 K/3 K	60° (optional 40°)
PYROLINE 256G compact	256 × 1			
PYROLINE 128GS compact	128 × 1	250 °C to 800 °C		
1.4 μm to 1.8 μm				
Standard Models (256 Hz Measurement Frequency)				
PYROLINE 128N compact	128 × 1	600 °C to 1300 °C	1 K/3 K	60° (optional 40°, 20°)
PYROLINE 256N compact	256 × 1			

Measurement Uncertainty²

2 K (measured temperature < 100 °C) or 1 K + 1 % of the measured value in °C

Interfaces

Fast Ethernet, electrically isolated digital inputs (trigger) and digital outputs (alarm)

Power Supply

18 V to 36 V DC, 7 VA

Camera Housing

Aluminium compact housing IP 54, optional with industrial housing IP 65 with water cooling system and air purge, weatherproof housing or ATEX housing

Dimensions/Weight

85 mm (W) × 175 mm (D) × 107 mm (H), without lens and connectors, approx. 1.6 kg

Camera Operating Temperature Range

-10 °C to 50 °C

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 Increase of NETD by a factor of 2. Technical details are subject to change without notice. March 2009.