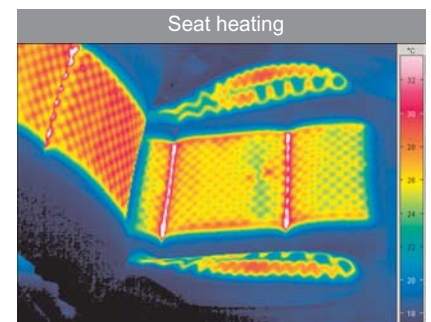
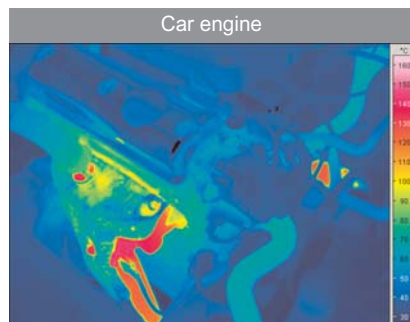
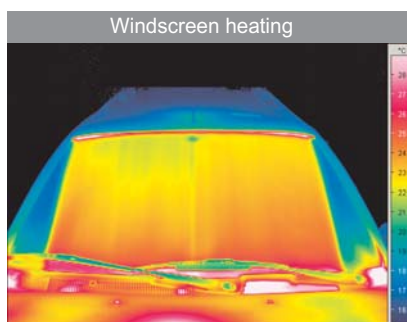
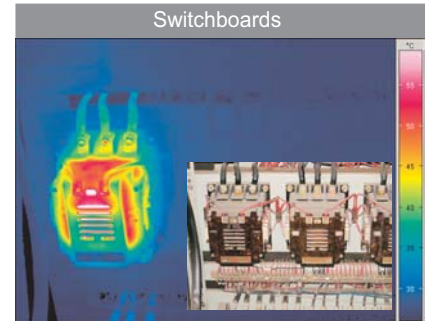
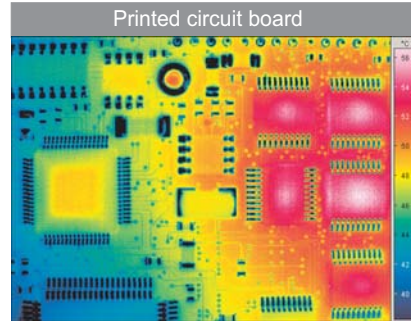
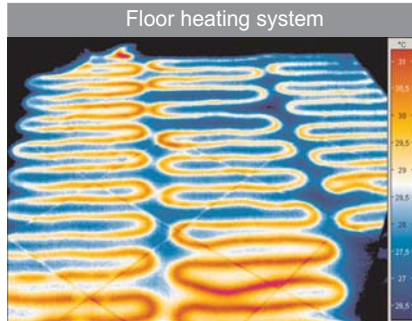


VarioCAM

Portable thermographic system for use in industry and research



Features

- uncooled FPA-microbolometer-Detector with (320 x 240) pixel
- spectral range (8 ... 13) µm
- wide standard temperature measuring range
- 50 Hz real-time thermography
- PC based remote control via RS232
- optional real-time digital interface via Fire Wire (IEEE 1394)
- compact design, lightweight, suitable for many applications
- rugged light metal housing (IP 54)
- integrated video camera
- integrated LCD colour viewfinder
- 3.8"-LCD bright colour display
- latest Li-Ion battery, running time ~3 h
- numerous AUTO functions to simplify handling
- Compact Flash card for image recording
- easy handling
- digital voice recording

VarioCAM

Portable thermographic system for use in industry and research

Technical specifications

Spectral range	(8...13) μm
Image principle / image format (pixel)	Focal plane array, FPA (320 x 240)
Detector type	uncooled microbolometer
Temperature measurement range	(- 40 ... 1200) $^{\circ}\text{C}$, optional > 2000 $^{\circ}\text{C}$
Measurement accuracy	$\pm 2 \text{ K}$, $\pm 2 \%$
Temperature resolution @ 30 $^{\circ}\text{C}$	better than 0.1 K
IR-image rate	50/60 Hz
Standard lens	25 mm, FOV 32 $^{\circ}$ x 25 $^{\circ}$, IFOV 1.8 mrad
Image storage	CF-card (128MB) / optional FireWire (IEEE1394)
Dynamic range	16 bit
Interfaces	PAL/NTSC-FBAS, S-Video, RS232, optional FireWire
Power supply	Rechargeable battery, fast charging (operating time approx 3 h)
Operation temperature, Encapsulation	(-15 ... 50) $^{\circ}\text{C}$, IP 54
Dimensions (complete system)	(235 x 185 x 110) mm
Weight	approx 2.2 kg

Specifications subject to change without prior notice

VarioCAM is the latest generation of thermographic systems and is based on an uncooled microbolometer detector FPA with (320 x 240) pixel. The new development of the German manufacturer JENOPTIK Laser, Optik, Systeme GmbH has been designed for portable use and can be operated with one hand. The bright colour display shows thermal images with remarkable brilliance and are sun lightreadable. It provides a quick overview of the current measuring situation and the operating condition of the system. The colour viewfinder is activated as soon as the retractable display is in its hinged position. The viewfinder has a dioptrre reconciliation. Numerous AUTO functions assist the operator and help to concentrate on the measuring process.

VarioCAM is a modular system with a multitude of integrated measuring functions and is offered in various versions according to its specific application. The system is suited for a wide range of industrial applications; from predictive maintenance of electrical plants and mechanical assemblies, over process monitoring to quality assurance. The VarioCAM system has a wide standard measuring range and a large assortment of accessories, including various additional optics, and a powerful thermographic analysis software series are available. The latest Lithium Ion batteries and a very low power consumption provide a running time of up to 3h on a single battery charge. Via the optional FireWire Interface the infrared data stream can be transmitted in real-time to a computer making this system a high efficient tool for thermographic real-time analysis for measuring tasks of research and development.

Applications

- thermal inspections of engines
- thermal inspections of electrical installations
- real-time thermography in research and development
- thermal analysis of buildings
- leakage detection
- process control
- quality assurance
- medical diagnostics

Lenses

Lens	Focal distance (mm)	min. Focus (m)	FOV ($^{\circ}$)
Wide angle lens	12.5	0.2	(64 x 50)
Standard lens	25	0.5	(32 x 25)
Telephoto lens	50	2.0	(16 x 12)

Close-Up-Lenses (for standard lens)

Close-up-lens	Focus (mm)	Image field (mm 2)
0.17x	149	(87 x 66)
0.5x	50	(28 x 22)

