InfraTec mobileIR E4

Rugged and ergonomical design

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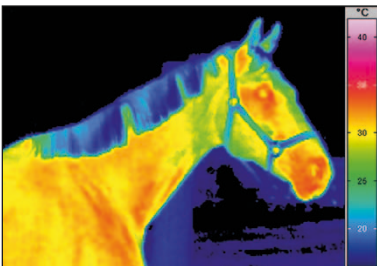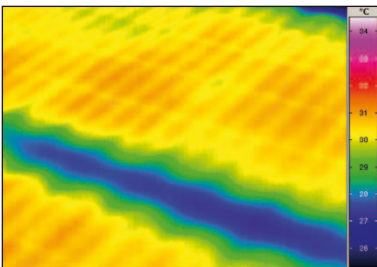
Features

- Very handy and rugged thermografic camera
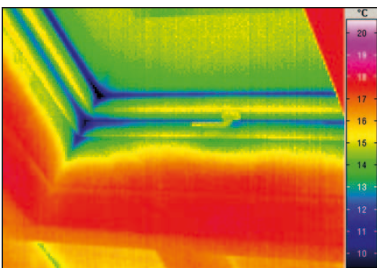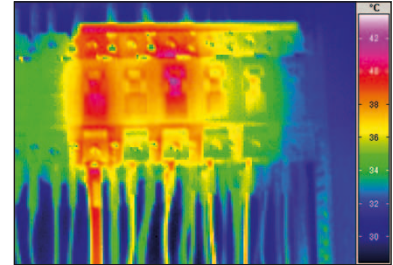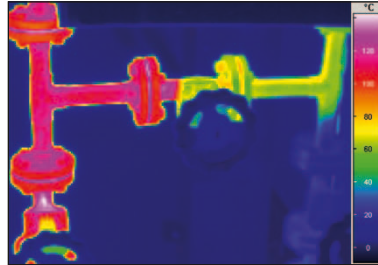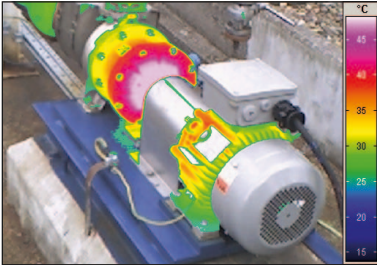- Uncooled microbolometer FPA detector with (160 x 120) IR pixels
- Built-in 2 MegaPixel colour video camera (24 bit colour depth)
- Image merging, direct overlay of infrared and visual image (optional)
- Light intensive high-resolution 3.6" TFT colour display
- Integrated image storage, expandable with 2 GB Mini-SD card
- AA batteries (rechargeable on-board), operating time for more than 3 hours

- Single hand operation, intuitive and self-explanatory
- Automatic indication of hotspots
- Adjustable alarm threshold
- Laser pointer to determine the location of hotspots
- Manual and automatic focus
- Transfer of thermogram and visual images via USB 2.0
- Digital zoom

* Product displayed with telephoto lens (30 mm)

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Robust and ergonomical design

Technical specifications

Spectral range	(8 ... 14) µm
Detector	Microbolometer Focal Plane Array, uncooled
Detector format (IR pixel)	(160 x 120)
Built-in colour video camera	digital CMOS, (1,600 x 1,200) pixel, 24 bit colour depth
Temperature measuring range	(-20 ... 250) °C, optional up to 1,200 °C
Measurement accuracy	±2 K, ±2 %
Temperature resolution @ 30 °C	better than 0.1 K
IR-frame rate	50/60 Hz
Normal lens (field of view)	(21 x 16)°
Focus	manual and automatic
Image merging	direct overlay of infrared and visual image
Voice annotation	annotation of audio recordings (60 s per image file)
Image storage	integrated flash storage, 2 GB SD card
Internal laser pointer	laser protection class 2, < 1 mW / 635 nm (red)
Interfaces	USB 2.0, PAL/NTSC-Video
LCD display	light intensive high-resolution 3.6"-TFT colour display
Power supply	AA batteries (rechargeable on-board), Power supply 110/220 VAC
Operation temperature, encapsulation	(-10 ... 50) °C, IP 54
Dimensions	(110 x 125 x 235) mm
Weight	700 g

Design and specifications will constantly be improved and thus be subject to technical progress.

InfraTec mobileIR E4 is a low-priced, efficient and completely equipped thermographic camera. This robust and very handy high-tech system convinces with its intuitively learnable handling and user-friendly single hand oparation. Ready for operation, InfraTec mobileIR E4 displays, after adjusting focus optionally by autofocus, the optimal thermographic image of the desired measurement object on a 3.6" TFT colour display. Apart from automatic hotspot detection, the current temperature is indicated at a movable measurement spot. Dangerous incidents of temperature exceeding its limits at inspections can be signalised by adjusting alarm thresholds. The optional overlay of thermographic and visual image as well as the application of a laser pointer facilitates accurate measuring of objects. Inspection results can be saved by a simple keystroke and analysed on-site. Audio comments are also savable for thermographic images supporting an effective analysis. After data being transferred automatically via USB 2.0 interface, a convenient analysis of measurement data and a complete report generation (through an internal report writer) can be carried out with the aid of the included analysis software IRBIS® 3. The wide temperature measurement range of (-20 to 250) °C, amplitude of features and the user-friendly operation makes the InfraTec mobileIR E4 a trustful companion for a variety inspection applications.

Lenses

Lens	Focal length	FOV (°)	FOV @ d = 1 m	IFOV (mrad)	Min. focus (m)
Wide angle lens	7 mm	(32 x 24)°	(57 x 43) cm	3.6 mrad	approx. (0,2 ... ~) m
Standard lens	11 mm	(21 x 16)°	(36 x 27) cm	2.3 mrad	approx. (0,3 ... ~) m
Telephoto lens	30 mm	(7.6 x 5.7)°	(13 x 10) cm	0.8 mrad	approx. (1 ... ~) m