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DATASHEET

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WHY BUY WHEN YOU CAN HIRE

Technical Data
FLIR E30bx

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Corporate Headquarters

Website

http://www.flir.com

Customer support

http://support.flir.com

Legal disclaimer

Imaging and optical data

Field of view (FOV) / Minimum focus distance	25° × 19° / 0.4 m (1.31 ft.)
Spatial resolution (IFOV)	2.72 mrad
Thermal sensitivity/NETD	< 0.1°C @ +30°C (+86°F) / 100 mK
Image frequency	60 Hz
Focus	Manual
Focal Plane Array (FPA) / Spectral range	Uncooled microbolometer / 7.5–13 µm
IR resolution	160 × 120 pixels

Image presentation

Display	Touch screen, 3.5 in. LCD, 320 × 240 pixels
Image modes	IR image, thumbnail gallery

Measurement

Object temperature range	−20°C to +120°C (−4°F to +248°F)
Accuracy	±2°C (±3.6°F) or ±2% of reading

Measurement analysis

Spotmeter	1
Area	Box with max./min./average
Automatic hot/cold detection	Auto hot or cold spotmeter markers within area
Isotherm	Detect high/low temperature/interval
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Reflected temperature, optics transmission and atmospheric transmission
Humidity alarm	1 humidity alarm, including dew point alarm
Insulation alarm	1 insulation alarm

Set-up

Color palettes	Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC
Set-up commands	Local adaptation of units, language, date and time formats
Languages	21

Storage of images

Image storage	Standard JPEG, including measurement data, on memory card
Image storage mode	IR images

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Image annotations

Report generation	• Separate PC software with extensive report generation

Laser pointer

Laser	Activated by dedicated button

Data communication interfaces

Interfaces	USB-mini, USB-A, composite video
USB	• USB-A: Connect external USB device • USB Mini-B: Data transfer to and from PC
Video out	Composite

Power system

Battery	Li Ion, 4 hours operating time
Charging system	In camera (AC adapter or 12 V from a vehicle) or 2-bay charger
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode (user selectable)

Environmental data

Operating temperature range	−15°C to +50°C (+5°F to +122°F)
Storage temperature range	−40°C to +70°C (−40°F to +158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles
Encapsulation	IP 54 (IEC 60529)
Bump	25 g (IEC 60068-2-29)
Vibration	2 g (IEC 60068-2-6)

Physical data

Camera weight, incl. battery	0.825 kg (1.82 lb.)
Camera size (L × W × H)	246 × 97 × 184 mm (9.7 × 3.8 × 7.2 in.)
Tripod mounting	UNC ¼"-20 (adapter needed)

Scope of delivery

• Hard transport case
• Infrared camera with lens
• Battery
• Calibration certificate
• Camera lens cap
• FLIR Tools software CD-ROM
• Handstrap
• Memory card
• Power supply, incl. multi-plugs
• Printed Getting Started Guide
• Printed Important Information Guide
• USB cable
• User documentation CD-ROM
• Video cable
• Warranty extension card or Registration card

The **sheath fault location system** with **bi-polar measuring** voltage method – easy, precise and fast

Special features

- **Testing, prelocation and pinpointing of sheath faults**

- **Voltage up to ±10 kV DC**

- **High current of up to 750 mA**

- **Only one HV connection cable**

- **Automatic measurement and protocolling**

Description

The intuitive menu-driven operation of the **MFM 10** with fully automatic measurement and evaluation enables the testing of cable sheaths as well as the prelocation and pinpointing of cable sheath faults in the most simple way possible.

The entry of data is done according to the well-proven SebaKMT rotary encoder principle and is supported by a touch screen.

The very powerful 10 kV DC source with positive and negative polarity allows the testing of HV cables. The bi-polar function ensures the elimination of external thermoelectric and galvanic influences. A multi-section facility permits the entry of cable segments with different parameters.

The available high current of up to 750 mA enables also the "burning" of difficult cable faults.

Integrated protocolling feature in combination with the approved Easyprot Software for an easy and reliable test generation.

easy**GO**
by seba**KMT**

Supported by:

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on the basis of a decision by the German Bundestag

For more informations please visit www.sebakmt.com/mfm10

MFM 10

Technical data

Functions	Testing, prelocation and pinpointing, burning, direct resistance measurement, voltage and current limiter, quick event/ transient recognition
Display	5.7" 320 x 240; LCD, LED backlight
User interface	Rotary encoder & touch screen
Output voltage	0 … 10 kV DC, bipolar
Output current	750 mA@ 0.4 kV, 200 mA@ 0.4 … 1.5 kV 60 mA@ 5 kV, 30 mA@ 10 kV
Pinpointing	0 … 10 kV DC pulsed
Pulse rates	0.5:1; 1:2; 1.5:0.5; 1.5:3.5 4.8 Hz for the use with A-Frame
Accuracy	±0,1%
Audio frequency (option)	8.44 kHz, 15 W
Protocolling	Easyprot via USB stick
Mains supply	88...264 V, 50…60 Hz, 800 VA
Battery	NIMH, 340 Wh, for all operations
DC supply	12 V … 24 V DC / charge only
Max. discharge capacity	10 µF
Operation conditions	-25 °C … +55 °C, 93% rel. humidity
Dimensions	500 x 457 x 305 mm
Weight	25 kg including cable
Protection class	IP53, with lid closed

Scope of delivery

» MFM 10
» Set of connection cables
» USB stick with Easyprot Software
» Accessory bag

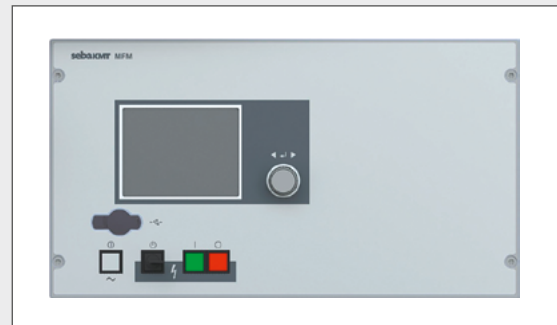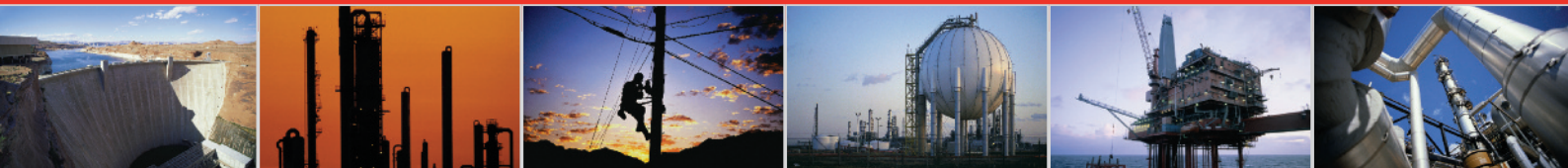### All features at a glance

» Solid IP53 PELI trolley case – easy handling
» Wide range input for all supply voltages
» Powerful rechargeable battery
» Improved prelocation with voltage drop method
» Highest accuracy by bi-polar measurement
» Independent from the resistance of supplementary wires and test leads
» Very fast and fully automatic measurement
» Detection, storage and indication of fast events
» Protocolling by Easyprot Software
» Burning
» Slim HV connector and just one cable
» Detection of correct hook-up to cable under test
» Fault locating of high-resistive faults inside cables
» Integrated discharge
» Graphical display of voltage and current
» Detection of multiple faults
» Very fast pulse rate of 0.5:1 in connection with the ESG NT

Options

» 19" version for vehicle installation (no battery)
» ESG NT earth fault probe for DC step voltage
» 10 m HV connection cable
» Connection clamps for large terminals
» Audio frequency option

sebaKMT

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