

## MFM 10-1

# Mobile, battery operated sheath fault location system up to $\pm 10$ kV DC

# Megger<sup>®</sup>



- Testing, prelocation and pinpointing of sheath faults
- Audio frequency option with 8.44 kHz
- High current of up to 750 mA
- Only one HV connection cable
- Automatic measurement and protocolling
- Safe operation via connection box
- In line with DIN EN 50191, VDE 0104 and BGI 891

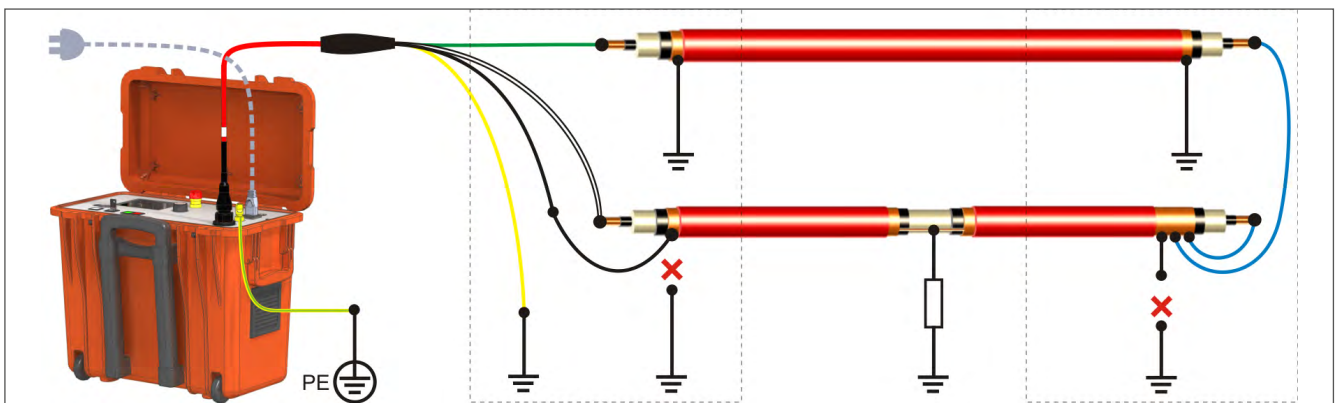
### DESCRIPTION

The MFM 10-1's intuitive menu-driven operation and automatic measurement and evaluation system enables cable sheaths to be tested and sheath faults to be pre-located and pinpointed as simply as possible. Data is entered using the proven Megger rotary encoder principle and is supported by a touch screen.

The very powerful 10 kV DC source with positive and negative polarity allows HV cables to be tested. The

bi-polar function ensures that external thermoelectric and galvanic influences are eliminated. A multi-section facility permits the entry of cable segments with different parameters. Difficult cable faults can be "burned" thanks to the available high current of up to 750 mA.

MFM 10-1 can also use its integrated protocolling feature with the approved MeggerBook RE software to easily generate test reports.



Connection plan

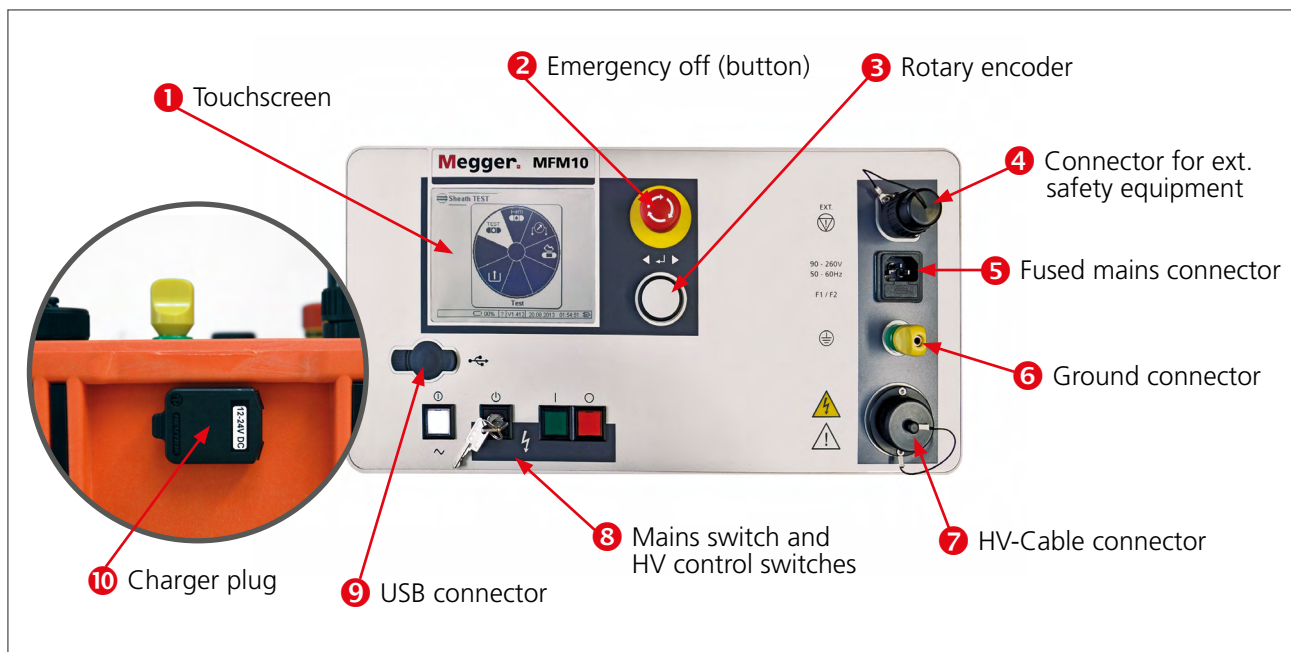
**MFM 10-1**  
**Mobile, battery operated**  
**sheath fault location system up to ± 10 kV DC**

**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 MeggerBook RE Software
- Burning
- Slim HV connector and just one HV cable
- Fault locating of high-resistive faults inside cables
- Integrated discharge up to 10 µF
- Graphical display of voltage and current
- Very fast pulse rate of 0.5:1 in connection with the ESG NT

**TECHNICAL DATA\***

<b>Functions</b>	Testing, prelocation and pinpointing, burning, direct resistance measurement, voltage and current limiter, quick event/transient recognition
<b>Display</b>	5.7" 320 x 240; LCD, LED backlight
<b>User Interface</b>	Rotary encoder & touch screen
<b>Output voltage</b>	0 ... 10 kV DC, bipolar
<b>Output current</b>	750 mA @ 0,4 kV, 200 mA @ 0,4 ... 1,5 kV 60 mA @ 5 kV, 30 mA @ 10 kV
<b>Pinpointing</b>	0 ... 10 kV DC pulsed
<b>Pulse rates</b>	0,5:1; 1:2; 1,5:0,5; 1,5:3,5
<b>Accuracy</b>	4.8 Hz for the use with A-Frame ± 0,1% for the fault location relative to the cable length
<b>Audio frequency (option)</b>	8,44 kHz, 15 W
<b>Protocolling</b>	MeggerBook RE Software via USB stick
<b>Mains Supply</b>	88 ... 264 V, 50 ... 60 Hz, 800 VA
<b>Battery</b>	NIMH, 340 Wh, for all operations
<b>DC supply</b>	12 V ... 24 V DC / charge only
<b>Max. discharge capacity</b>	10 µF
<b>Operation conditions</b>	- 25 °C ... + 55 °C, 93 % rel. humidity
<b>Dimensions</b>	500 x 457 x 305 mm
<b>Weight</b>	25 kg including cable
<b>Protection class</b>	IP 53, with lid closed



\* We reserve the right to make technical changes.

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ORDERING INFORMATION		
Sets:	Description	Order No.
MFM10-1 Standard set	consisting of: MFM10-1 sheath fault locator, USB stick with EasyProt software for data transfer and test report generation, KST10 Velcro bag, VL MFM10 cable set (mains lead EU/UK/US, HV test lead 4 m, ground lead 5 m, crocodile clamps green/yellow blue, measuring lead blue, automotive adapter)	1012572
MFM10-1 audio frequency set	consisting of: MFM10-1 sheath fault locator with audio frequency generator function, USB stick with EasyProt software for data transfer and test report generation, KST10 Velcro bag, VL MFM10 cable set (mains lead EU/UK/US, HV test lead 4 m, ground lead 5 m, crocodile clamps green/yellow blue, measuring lead blue, automotive adapter)	1012573
<b>Test leads (optional):</b>		
HSK_36_5	HV test lead 5 m	90035172-001
HSK_36_10	HV test lead 10 m	118307484-001
HSK_36_15	HV test lead 15 m	2003858-001
HSK_36_20	HV test lead 20 m	2003859-001
<b>Accessories (optional):</b>		
External emergency switchbox		2010012
Connection cable 5 m for external emergency switchbox		820003129
HV connection set for large terminals		118308004



19" version for vehicle



ESG NT earth fault probe for DC step voltage



Test lead 5, 10, 15, 20 m



HV connection set for large terminals

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 ISO 9001  
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