MFM 10-1

Mobile, battery operated sheath fault location system up to ± 10 kV DC



- 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

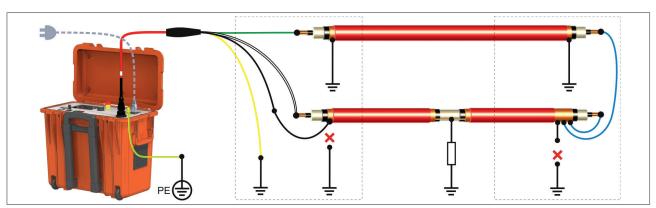
The MFM 10-1's intuitive menu-driven operation and automatic measurement and evaluation system enables cable sheaths to be tested and sheath faults to be pre-located and pinpointed as simply as possible. Data is entered using the proven Megger rotary encoder principle and is supported by a touch screen.

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.

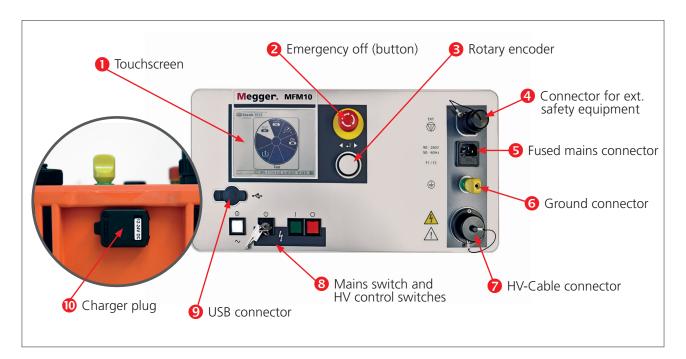
MFM 10-1 can also use its integrated protocolling feature with the approved Easyprot software to easily generate test reports.



Connection plan

Megger.

MFM 10-1 Mobile sheath fault location system



TECHNICAL DATA*

MFM 10-1

Functions Testing, prelocation and pinpointing,

burning, direct resistance measurement, voltage and current limiter, quick event/transient recognition 5.7" 320 x 240; LCD, LED backlight

Display **User Interface** Rotary encoder & touch screen

Output voltage 0 ... 10 kV DC, bipolar

750 mA @ 0.4 kV,

Output current 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% for the fault location

relative to the cable length

Audio frequency (option)

8.44 kHz, 15 W **Protocolling** Easyprot via USB stick

Mains Supply 88 ... 264 V, 50 ... 60 Hz, 800 VA NIMH, 340 Wh, for all operations **Battery** DC supply 12 V ... 24 V DC / charge only

Max. discharge capacity

Operation conditions -25 °C ... +55 °C, 93 % rel. humidity

500 x 457 x 305 mm **Dimensions** Weight 25 kg including cable **Protection class** IP53, with lid closed

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 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**



OPTIONS



19" version for vehicle



ESG NT earth fault probe for DC step voltage



Cable set, HV connection cable 10 m / 15 m / 20 m $\,$



HV connection set for large terminals

ORDERING INFORMATION	
Product	Order no.
Sheath fault location system	118303882
Sheath fault location unit 10 kV MFM 10-1	1004818
Set of cables for MFM 10	118303899
USB stick with software EasyProt	890017185
Velcro bag, black	820008838
Sheath fault location unit AF (with audio frequency generator)	1003419
Sheath tester / fault locator with AF generator	1004819
Set of cables for MFM 10	118303899
USB stick with software EasyProt	890017185
Velcro bag, black	820008838
Accessories (optional):	
External emergency switchbox	893024147
Connection cable 5m for external emergency switchbox	820003129
HV connection set for HV accessories	1003344
HV test cable HSK 36-10, 10 m	118307484
HV test cable HSK 36-20, 20 m	2003859
HV test cable HSK 36-15, 15 m	2003858
Connection clamps	118308004

^{*} We reserve the right to make technical changes.

SALES OFFICES

Megger GmbH

Obere Zeil 2 D-61440 Oberursel Germany T 0049 6171 92987-0 E info@megger.de Seba Dynatronic Mess- und Ortungstechnik GmbH Dr.-Herbert-lann-Str. 6 96148 Baunach Germany T 0049 9544 68-0 E team.international@megger.de MFM101_DS_EN_V03

www.megger.com

ISO 9001

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