

MPD SCAN

Handheld scanner for PD surveying in MV and HV plants

Megger[®]



- For fast verification of partial discharge activity in MV and HV plants
- Universal application range, thanks to wide variety of sensors
- Integrated camera and QR code scanner
- Easy to use via keypad and touchscreen
- Reporting via MeggerBook RE software

DESCRIPTION

Defects in medium and high voltage systems not only require costly repairs, but can lead to failures of network sections with corresponding consequences. Therefore, it is in the interest of all network operators to recognize signs of impending defects as early as possible and to be able to take appropriate countermeasures in time.

With the MPD Scan, Megger offers a lightweight, robust and portable PD scanner that can quickly inspect various types of equipment for partial discharge signals.

The MPD Scan is used for the early detection of partial discharges emanating from defects in medium voltage switchgears and other electric equipment. For this purpose, the device has two internal sensors (TEV, airborne acoustic) and can also be operated with various types of external sensors.

The operation of the device is simple; it can be controlled via the three soft keys as well as via the intuitive touch display. Thanks to the auto-recognition of the connected external sensor, malfunction operation, as well as bothersome browsing through individual screens, can be eliminated.

Thanks to the large variety of sensors, the MPD Scan can be used for multiple application ranges. PD within the cable insulation can be detected using the HFCT sensor. Partial discharges in switchgears can be measured by using the TEV sensor and corona and surface discharges in MV and HV systems can be identified with the parabolic acoustic sensor.

The variety of sensors have made this handheld scanner a unique measuring device. To support the end user, measurement data will be automatically evaluated and interpreted, and pictures of the identified defects can be made and directly integrated into the report by using the integrated camera. Furthermore, the QR code scanner can directly take over the switchgear/asset data; there is no need to inconveniently rename the folder for each different test object. Make life easier by reducing the number of loose cables in the workspace through using the comfortable Bluetooth® headset, which can also be used with a helmet.

Establishing detailed and individual test reports can be performed quickly by using the supplied MeggerBook RE reporting software.

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TECHNICAL DATA*

MPD SCAN

TEV Measurement (capacitive)

| | |
|-------------------|-----------------|
| Measurement range | -10 ... 80 dBmV |
| Bandwidth | 2 ... 80 MHz |
| Resolution | 1 dBmV |
| Accuracy | ±1 dBmV |

Acoustic sensor

| | |
|-----------------------------|-------------------|
| Measurement range | -10 ... 70 dBμV |
| Resolution | 1 dBμV |
| Accuracy | ±1 dBμV |
| Transducer centre frequency | 30, 40 und 80 kHz |

HFCT sensor (inductive)

| | |
|-------------------|--------------------|
| Measurement range | -10 ... 80 dB |
| Bandwidth | 100 kHz ... 20 MHz |
| Resolution | 1 dB |
| Accuracy | ±1 dB/ < ±10% |
| Impedance | 50 Ohm |

Housing Display

Injection molded
3.5 inch touchscreen,
320 x 240 pixel

Interfaces

Lemo (external sensors)
USB type C (charging, headphone,
PC) Bluetooth[®]

Control

via 3 soft keys and touchscreen

IP rating

IP 54

Temperature

| | |
|-----------|---------------|
| Operation | 14 ... 131 °F |
| Storage | -4 ... 158 °F |

Relative humidity

93 % at 86 °F
(non-condensing)

Power supply

| | |
|------------------|---|
| Charger | Input voltage 90 ... 264 V, 50/60 Hz |
| | Output voltage 5 V DC |
| Internal battery | Li-Ion 3.6 V / 3.35 Ah |
| Operating time | > 8 hours |
| Charging time | ± 2 hours |

Dimensions (W x H x D)

| | |
|----------|-----------------------------|
| MPD Scan | 8.7 in. x 3.1 in. x 1.2 in. |
|----------|-----------------------------|

Weight

| | |
|----------|---------|
| MPD Scan | 0.9 lbs |
|----------|---------|

FEATURES

- Three PD measurement methods in one device
- Plug and Play; MPD Scan automatically recognizes which external sensor has been connected
- Easy to use via soft keys and touchscreen
- Universal operating range due to large variety of sensor
- Automatic evaluation and interpretation of the results
- Comfortable Bluetooth[®] headphones
- Integrated camera
- QR code scanner for asset recognition
- Different views and PRPD (phase-resolved partial discharge) display for defect type recognition
- MeggerBook RE reporting software
- Use your own mobile device for wireless data transfer by USB



*We reserve the right to make technical changes

| ORDERING INFORMATION | |
|---|------------------|
| Product | Order no. |
| MPD Scan Set DIS MPD Scan main device, Parabolic receiver, HFCT SC40 sensor, function tester, charger + USB cable, Bluetooth® headphone, transport case, USB Stick with operating manual and reporting software | 1012 889 |
| Options: | |
| MPD Scan demo box for training MPD Scan demonstrator, transport case and batteries | 1011 423 |
| Optional accessories: | |
| HFCT 20, permanent HFCT sensor for cable screen, inner-diameter 20mm | 1006 296 |
| HFCT SC40, HFCT Sensor for cable screen, inner-diameter 40mm | 1009 667 |
| HFCT SC60, HFCT Sensor for cable screen, inner-diameter 60mm | 1012 681 |
| VK 132, connection cable HFCT for MPD Scan | 9 0026 538 |
| AA PR400-1, detachable parabolic receiver | 1012 287 |
| THS 55; temperature humidity sensor for MPD Scan | 1010 217 |
| FC 1; function tester MPD Scan | 1010 219 |
| Bluetooth® headphone | 9 0028 677 |
| MPD Scan-WMSD, wireless mass storage device for MPD Scan | 1012 538 |



SALES OFFICE

Megger USA -
Valley Forge Corporate Center
2621 Van Buren Avenue, Norristown,
Pennsylvania, 19403, USA
T. 1-610 676 8500
F. 1-610-676-8610

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www.megger.com
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