# Clamp Meters

## MD 9273 Bluetooth® TRMS Leakage Clamp with Power Functions




The MD 9273 is the new Bluetooth-enabled expansion to the Metrel multifunctional testers MI 3155, MI 3152 and MI 3325. When used together, they form a team for measuring data from a safe distance. The multifunctional instruments can record inrush current from MD 9273 measurement and display data in table or graph form, or they can be used to generate a 128 Hz signal that MD 9273 can filter and follow for cable tracing. When acting as a remote probe, it can send data on current, voltage, power, and harmonics. On the other hand, it is an independent instrument with improved accuracy, construction, and new functions like VFD filter. It can accurately read the TRMS AC leakage current of a system, detect losses in the system, suggest possible reasons for the loss, sense the harmonics in the signal, and perform basic power quality tests.

### MEASUREMENT FUNCTIONS

- TRMS AC and DC voltage measurement;
- TRMS AC current measurement;
- Frequency measurement;
- VFD frequency and voltage measurement;
- Harmonics measurement;
- Power parameters measurement.

### KEY FUNCTIONS

- **Bluetooth** connection to MI 3155, MI 3152 and MI 3325.
- **Inrush current** recording with MI 3155, MI 3152 and MI 3325.
- **Online measurements** of current, voltage, power, current harmonics, and voltage harmonics.
- **128 Hz notch** filter for cable tracing.
- **TRMS:** accurate measurements on sinusoidal and non-sinusoidal signals.
- **Jaw size:** 28 mm.
- **Shielded jaw:** shielded jaw allows the clamp meter to be used in the noisiest environments.
- **Accurate:** readings of AC current with an accuracy of 0.8 % and a base resolution of 0.01 mA and voltage with an accuracy of 0.5 % and a base resolution of 0.01 V.
- **Power:** measures various power parameters (active, reactive, apparent power, THD, PF, phase displacement).
- **Intelligent loss analysis:** complex algorithms detect loss and allow determining possible reasons for current loss.
- **Harmonics:** measures current or voltage harmonic components and a percentage value of a harmonic up to the 19th.
- **THD and PF:** dual display allows readings to be displayed along with Total Harmonic Distortion (THD) or Power Factor (PF).
- **Peak value:** the peak value of the waveform or crest factor can be displayed.
- **MAX/MIN/HOLD mode:** displays maximum, minimum or last measured value.

### APPLICATIONS

- Basic power quality analysis.
- Troubleshooting in installations.
- Troubleshooting of devices and machines.
- Electric vehicles troubleshooting.
- General purpose.
- Cable tracing.



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## TECHNICAL SPECIFICATION

| FUNCTION | Ranges | Resolution | Accuracy |
|---|---|---|---|
| Current AC | 40 mA ... 100 A | 0.01 mA | ± 0.8 % of reading ± 3 digits |
| Voltage AC, DC | 40 V ... 600 V | 0.01 V | ± 0.5 % of reading ± 4 digits |
| THD | 0 ... 999 % | 0.1 % | ± 2 % of reading ± 3 digits |
| Frequency | 45 ... 100 Hz | 0.1 Hz | ± 0.1 % ± 2digit |
| Current Harmonics | 0 ... 100% Irange | N/A | ± 0.15 % × Irange ± 3 digits |
| Voltage harmonics | 0 ... 100% Urange | N/A | ± 0.1 % × Urange ± 2 digits |
| Crest factor voltage/current | 1.00 ... 9.99 | 0.01 | ± 2 % of reading ± 2 digits |
| Peak value voltage | 40 V ... 600 V | 0.01 V | ± 5 % of reading ± 5 digits |
| Peak value current | 40 mA ... 100 A | 0.01 mA | ± 5 % of reading ± 5 digits |
| VFD | 40 V ... 600 V | 0.01 V | ± 2 % of reading ± 2 digits |
| Power | 0.000 W ... 60 kW | 0.001 W | ± 1 % of reading ± 50 digits |
| PF | 0.00 ... 1.00 | 0.01 | ± 5 digits |
| Phase | -180.0 ... 180.0 | 0.1 | ± 30 digits |
| Power Supply | 2 x 1,5 V AAA alkaline battery | | |
| Overvoltage category | CAT IV / 300 V, CAT III / 600 V | | |
| Dimensions | 185 mm x 62 mm x 42 mm | | |
| Weight | 210 g | | |

## ORDERING INFORMATION



**Standard set (MD 9273)**

- MD 9273 Bluetooth® TRMS Leakage Clamp with Power Functions
- Test lead with probe, 2 pcs
- AMD 9028 Alligator clip, 2 pcs
- 1.5 V battery, type AA, 2 pcs
- Pouch
- Instruction manual
- Calibration certificate

## OPTIONAL ACCESSORIES

| Photo | Order No. | Acc. decription |
|---|---|---|
|  | AMD 9026 | Test lead with probe, 2 pcs |
|  | AMD 9028 | Alligator clip, 2 pcs |
|  | A 1778 | Magnetic contact probe |
|  | A 1013 | Crocodile clip, black |
|  | A 1064 | Crocodile clip, red |
|  | S 2025 | Test lead, 1.5 m, 2 pcs (black, red) |

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Note! Photographs in this catalogue may slightly differ from the instruments at the time of delivery.
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