

Selection Guide for Clamp Meters

Part No.:	MD 9272	MD 9250	MD 9240
			
True RMS	✓	✓	✓
DC current range	–	2000 A	–
Basic accuracy (%)	–	2.0	–
AC current range	100 A	2000 A	1000 A
Basic accuracy (%)	0.8	2.0	1
DC voltage range	–	1000	600 V
Basic accuracy (%)	–	0.5	0.5
AC voltage range	600 V	1000	600 V
Basic accuracy (%)	0.5	1.2	0.5
Resistance range	–	40.00 MΩ	999.9 Ω
Basic accuracy (%)	–	0.5	1
Acoustic continuity test	–	✓	✓
Diode test	–	✓	–
Capacitance measurement	–	✓	–
Frequency measurement	–	✓	✓
Temperature measurement (Type K probe)	–	✓	✓
Autocheck® V-Ω	–	✓	Auto V-A
Variable frequency drive	–	✓	–
Lo-Z (low input impedance)	–	✓	–
Power measurement (W, VA, VAR)	✓	–	✓
3-Phase Power measurement 3-wire/4-wire	–	–	–
Count	3000	6000	4000, 6000, 9999
Backlight	✓	✓	✓
COM port (data transfer)	–	✓	✓
Automatic and manual range selection	Auto	✓	Auto
Automatic switch off	✓	✓	✓
Non-contact electrical field detection	–	✓	–
MAX hold	✓	✓	–
Peak value	✓	✓	✓
Data hold	✓	✓	✓
Relative value	–	✓	–
Jaw opening	31 mm	55 mm	45 mm
Overvoltage category	CAT IV / 300 V CAT III / 600 V	CAT IV / 1000 V	CAT IV / 300 V CAT III / 600 V
Dimensions (mm)	190 x 60 x 13	264 x 97 x 43	224 x 78 x 40
Weight (g)	255	608	224
CE mark	✓	✓	✓

MD 9235	MD 9230	MD 9225	MD 9220	MD 9210
				
✓	✓	✓	✓	–
–	1000 A	400 A	–	–
–	1.5	1	–	–
600 A	800 A	400 A	2000 A	600 A
1	1.5	1	1.5	1.5
600 V	600 V	600 V	600 V	600 V
0.5	0.3	0.3	0.5	0.3
600 V	600 V	600 V	600 V	600 V
0.5	1	1	1.5	1.5
999.9 Ω	40.00 MΩ	40.00 MΩ	6.000 MΩ	40.00 MΩ
1	0.6	0.8	1	0.6
✓	✓	✓	✓	✓
–	✓	✓	✓	✓
–	✓	✓	✓	✓
✓	–	✓	✓	✓
–	–	✓	–	–
–	–	Auto V-A	✓	–
–	–	–	–	–
–	–	–	–	–
✓	–	–	–	–
6000	4000	4000	6000	4000
✓	✓	✓	✓	–
✓	–	–	–	–
Auto	✓	Auto	✓	Auto
–	✓	✓	✓	✓
–	–	–	✓	–
–	✓	✓	–	✓
✓	–	–	–	–
✓	✓	✓	✓	✓
–	✓	✓	–	✓
26 mm	50 mm	26 mm	45 mm	26 mm
CAT IV / 300 V CAT III / 600 V	CAT IV / 300 V CAT III / 600 V	CAT IV / 300 V CAT III / 600 V	CAT IV / 300 V CAT III / 600 V	CAT IV / 300 V CAT III / 600 V
189 x 78 x 40	227 x 78 x 40	188 x 63 x 40	224 x 78 x 40	190 x 63 x 32
192	290	192	220	139
✓	✓	✓	✓	✓

MD 9272 Leakage Clamp TRMS Meter with Power Functions

The MD 9272 is a unique earth leakage clamp meter. It not just has the ability to accurately read the TRMS AC leakage current of a system, it can also detect losses in the system and suggest possible reasons for the loss. The voltage, power, harmonic, power factor (PF), total harmonic distortion (THD) and crest factor measurements make this instrument suitable for any electrician and engineer.

MEASURING FUNCTIONS:

- TRMS AC voltage measurement;
- TRMS AC current measurement;
- Frequency measurement;
- Power parameters measurement.

KEY FEATURES:

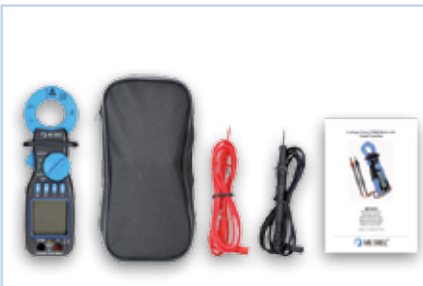
- **TRMS:** accurate measurements on sinusoidal and non-sinusoidal signals.
- **Jaw size:** 28 mm.
- **Shielded Jaw:** shielded jaw allows the clamp meter to be used in the noisiest environments.
- **Accurate:** readings of AC current with an accuracy of 0.8 % and a base resolution of 0.01 mA and voltage with an accuracy of 0.5 % and a base resolution of 0.1 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 49th.
- **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 average measured value.

APPLICATION:

- Load and leakage current measurement;
- System maintenance;
- Power system checking;
- RCD fault finding;
- Process engineering.

STANDARD SET:

- Current clamp MD 9272
- Test lead with probe, 2 pcs
- 1.5 V battery, type AAA, 2 pcs
- Pouch
- Instruction manual
- Warranty



TECHNICAL SPECIFICATION:

Function	Range	Accuracy
AC current	40.00 mA, 400.0 mA, 4000 mA	±(0.8 % of reading + 3 digits)
	40.00 A	±(1.0 % of reading + 3 digits)
	150.0 A	±(1.2 % of reading + 3 digits)
AC/DC voltage	40.0 V	±(0.5 % of reading + 4 digits)
	400.0 V, 600.0 V	±(0.5 % of reading + 2 digits)
THD	0 ... 99.9 %	±(2.0 % of reading + 3 digits)
	100 ... 999 %	±(2.0 % of reading + 3 digits)
Crest Factor	1.00 ... 2.99	±(2.0 % of reading + 2 digits)
	3.00 ... 9.99	±(3.0 % of reading + 5 digits)
Peak value	40.00 ... 100.0 A	±(3.0 % of reading + 3 digits)
	40.00 ... 600.0 V	±(3.0 % of reading + 3 digits)
Power factor (PF)	0.00 ... 1.00	±(1.0 % of reading + 0.01)
Phase	-180.0° ... +180.0°	±(1.0 % of reading + 0.4)
Power (W, Var, VA)	0 ... 9999	±(1 % of reading + 30)
Power (kW, kVar, kVA)	10.00 ... 99.99	±(2 % of reading + 30)
Power supply	2 x 1.5 V batteries, type AAA	
Overvoltage category	CAT IV / 300 V; CAT III / 600 V	
Dimensions	190 x 60 x 43 mm	
Weight	255 g	

MD 9250 Industrial TRMS AC/DC CAT IV /1000 V

The MD 9250 is the first Clamp Meter that meets overvoltage category CAT IV 1000 V. MD 9250 is a high quality clamp meter specially designed for single-hand operation, built-in measuring functions; TRMS AC/DC (current, voltage), capacitance, temperature and full range resistance makes this instrument an ideal tool for the most demanding applications in the industrial sector. The large jaws capacity of (max. 55 mm) in diameter allows AC/DC - current measurements up to 2000 A. High resolution and accuracy, 2-line LCD display fast data acquisition and transfer (via optical interface), non-contact voltage detection, and auto-check function are highlights of the instrument.

MEASURING FUNCTIONS:

- TRMS AC, DC voltage measurement;
- TRMS AC, DC current measurement;
- Capacitance measurement;
- Resistance measurement;
- Diode test;
- Frequency measurement;
- Electric field detection;
- Continuity test (acoustic signaling);
- Temperature measurement.

KEY FEATURES:

- **Large jaws:** for measuring on 55mm size conductors.
- **TRMS:** accurate measurements on sinusoidal and non-sinusoidal signals.
- **VFD:** feature makes the instrument capable of measuring the true values in accordance with frequency.
- **High current:** 2000 A DC & AC clamp on measurement.
- **Lo-Z:** AutoCheck® mode provides low (ramp-up) input impedance to drain ghost voltages.
- **Auto-check function:** automatic detection of AC voltage, DC voltage or resistance.
- **Auto-ranging:** user can switch between auto and manual ranging.
- **Transient protection:** it protects user in case of lightning strike or switching surge up to 12 kV.
- **Relative zero mode:** relative function for comparing the difference between signals or removing background noise.
- **PC Link:** test results can be downloaded to the computer via the optional PC software.
- **In-rush:** fast 5ms Crest-MAX mode to capture in-rush currents.
- **Temperature:** measures temperature in Celsius up to 1000 °C and in Fahrenheit up to 1832 °F.
- **Hold:** data hold function freezes the display for later view.
- **Backlight:** large bright 3-5/6 digits 6,000 counts + 1,999 counts dual LCD display with backlight for working in dark conditions.
- **Safe:** CAT IV / 1000 V overvoltage protection.

APPLICATION:

- Solar and wind power system testing;
- UPS system testing;
- Utility scale battery system testing;
- High level industrial testing;
- High level electrical testing.

STANDARD SET:

- Current clamp MD 9250
- Test lead with probe, 2 pcs
- Thermocouple probe, type K
- Pouch
- 1.5 V battery, type AAA, 2 pcs
- Instruction manual
- Warranty



TECHNICAL SPECIFICATION:

Function	Range	Accuracy
DC Voltage	6.000 V ... 1000 V	±(0.5% of reading + 5 digits)
Autocheck (DCV)	6.000 V ... 1000 V	±(1.3% of reading + 5 digits)
AC Voltage (50 Hz ... 400 Hz)	6.000 V ... 1000 V	±(1.2% of reading + 5 digits)
AC+DC Voltage (DC, 50Hz ... 400 Hz)	6.000 V ... 1000 V	±(1.4% of reading + 7 digits)
Autocheck (ACV)	6.000 V ... 1000 V	±(1.5% of reading + 5 digits)
Variable Frequency Drive AC	10 Hz ... 400 Hz	from ±(4.0% of reading + 80 digits) to ±(7.0% of reading + 80 digits)
DC Current	200.0 A ... 2000 A	From ±(2.0% of reading + 5 digits) to ±(2.5% of reading + 5 digits)
AC Current (50 Hz ... 400 Hz)	200.0 A ... 2000 A	from ±(2.0% of reading + 5 digits) to ±(3.5% of reading + 5 digits)
Diode Test	1.000 V	±(1.0% of reading + 3 digit)
Resistance & Autocheck	Open-circuit voltage < 1.8 V DC, Test current 0.56 mA	from ±(0.5% of reading + 5 digits) to ±(2.3% of reading + 5 digits)
Capacitance	60.00 nF ... 2000 µF	from ±(2.0% of reading + 5 digits) to ±(4.0% of reading + 5 digits)
Temperature	-50 °C ... 1000 °C	±(0.3% of reading + 4 digits)
Mains frequency	-58 °F ... 1832 °F	±(0.3% of reading + 6 digits)
Power supply	10 Hz ... 1999 Hz	±(0.1% of reading + 4 digits)
Overvoltage category	2 x 1.5 V batteries, type AA	
Dimensions	CAT IV / 1000 V	
Weight	264 x 97 x 43 mm	
	608 g	