

Clamp Meter

MD 9260 Photovoltaic current clamp 1500 VDC

Clamp Meter



The MD 9260 is the first Metrel instrument to support measurements up to 1500 V with CAT III safety. Its voltage range and safety make it useful in highly demanding environments like solar power plants, wind power plants, or other high power environment using DC current. It has 2000 A AC/DC current range and can additionally measure resistance, capacitance, frequency and temperature – in short a well-rounded multimeter-style tool for use in power applications.

MEASUREMENT FUNCTIONS

- TRMS AC and DC voltage measurement;
- TRMS AC and DC current measurement;
- Capacitance measurement;
- Resistance measurement;
- Frequency measurement with VFD;
- Diode test;
- Temperature measurement;
- Acoustic continuity;
- Non-contact electrical field detection.

KEY FUNCTIONS

- **1500 V DC range** with CAT III safety.
- **TRMS** for accurate measurement of sine and non-sine signals.
- **VFD**: low-pass filter for accurate frequency measurements of noisy signals.
- High current range of **2000 A**.
- **CAT III 1500 VDC** and **CAT IV 1000 V** safety
- Protection against **12 kV transients**.
- **Auto and manual** ranging.
- **Relative zero**: easily compare consecutive measurements.
- **Crest** function catches peaks as short as 5 ms.
- **Temperature** measurements up to 1000 °C.
- **PC connection** (optional): logging directly to a PC.

APPLICATIONS

- Testing solar power systems up to 1500 V.
- Testing wind power systems.
- High level industrial testing.
- Testing of UPS and other large battery systems.

TECHNICAL SPECIFICATION

FUNCTION	Range	Accuracy
DC Voltage	6.000 V ... 1500 V	±(0.5 % 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)
Variable Frequency Drive AC	10 Hz ... 400 Hz	±(4.0 % of reading + 80 digits)
DC Current	200.0 A ... 2000 A	±(2.0 % of reading + 5 digits)
AC Current (50 Hz ... 400 Hz)	200.0 A ... 2000 A	±(2.0 % of reading + 5 digits)
Resistance	600.0 Ω ... 40.00 MΩ	±(0.5 % of reading + 5 digits)
Capacitance	60.00 nF ... 2000 μF	±(2.0 % of reading + 5 digits)
Temperature	-50 °C ... 1000 °C	±(0.3 % of reading + 4 digits)
	-58 °F ... 1832 °F	±(0.3 % of reading + 6 digits)
Mains frequency	10 Hz ... 1999 Hz	±(0.1 % of reading + 4 digits)
Diode Test	1.000 V	±(1.0 % of reading + 3 digit)
Power supply	2 x 1.5 V batteries, type AA	
Overvoltage category	CAT IV / 1000 V, CAT III 1500 V	
Dimensions	264 x 97 x 43 mm	
Weight	608 g	

GENERAL SPECIFICATION

Display	3-5/6 digits 6000 counts 3-1/2 digits 1,999 counts for Hz
Update Rate	5 per second nominal
Operating Temperature	0 °C ... 40 °C
Relative Humidity	Maximum relative humidity 80 % for temperature up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C
Storage Temperature	-20 °C ... 60 °C, < 80 % R.H. (with battery removed)
Altitude	Operating below 2000 m
Temperature Coefficient	nominal 0.15 x (specified accuracy) / °C @(0°C -18°C or 28°C -40°C), or otherwise specified
Sensing	True RMS
Safety	IEC/EN/BSEN/CSA_C22.2_No./UL 61010-1 Ed. 3.1, 61010-2-032 Ed. 4.0 to measurement categories CAT IV 1000 V
Transient Protection	12 kV (1.2/50 μs surge)
Overload Protections:	
- Clamp-on jaws	2000 A rms continuous
- Voltage on terminals	1650 V DC / 1100 V AC rms
- Other functions	1500 V DC / 1000 V AC rms
E.M.C.:	Meets EN61326-1:2006
- In an RF field of 3V/m	Capacitance function is not specified
- Other function ranges	Total Accuracy = Specified Accuracy + 200 digits
- Performance above 3V/m	not specified
Power Supply	1.5 V AA Size (IEC LR6) battery X 2
Power Consumption	Typical 14 mA for Current functions, and 5.2 mA for others
Low Battery	Below approx. 2.4 V
APO Timing	Idle for 34 minutes
APO Consumption	10 μA typical
Jaw opening	55 mm max
Special Features	AutoCheck™ V&Ω; VFD-V & VFD-Hz; Backlighted LCD; 5 ms CREST-MAX Capture mode (Peak Hold); Auto-ranging Relative-Zero mode; Display Hold; EF-Detection (NCV); Optional Interface capabilities with PC computers

METREL D.D.

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ORDERING INFORMATION



Standard set MD 9260

- MD 9260 Photovoltaic current clamp 1500 VDC
- AMD 9026 Test lead with probe, 2 pcs
- AMD 9023 Thermocouple probe type K
- 1.5V AA battery, 2 pcs
- User manual

OPTIONAL ACCESSORIES

Photo	Order No.	Acc. decription
	AMD 9026	Test lead with probe, 2 pcs
	AMD 9023	Thermocouple probe, type K
	AMD 9024	Adapter for thermocouple probe AMD 9023