

# Digital multimeter

## MD 9221 TRMS AC Current Clamp Meter



The MD 9221 is a professional TRMS AC current clamp meter capable of measuring temperature with a Type K probe, capacitance and frequency. It is equipped with a built-in VFD feature that enables the instrument to measure true values in accordance with frequency. The MD 9221 has a wide range of extra features, including data and MAX hold functions, peak value, auto power off, auto-ranging, relative zero and a 3-phase rotation function. It uses state-of-the-art measurement technology and is housed in a sturdy industrial-grade case.

### MEASURING FUNCTIONS

- DC and TRMS AC voltage up to 600 V;
- TRMS AC current measurement up to 600 A;
- 3-phase rotation function;
- Resistance measurement;
- Acoustic continuity test;
- Diode test;
- Frequency measurement;
- Capacitance measurement;
- Temperature measurement.

### KEY FEATURES

- **Auto-ranging.**
- LCD display with **backlight**, 3-5/6 digit, 6000 count.
- Automatic, **non-contact detection** of electromagnetic fields to locate and trace live conductors.
- **Data hold** function.
- **MIN/MAX/AVG** function.
- **Peak value.**
- **Relative zero.**
- **30 mm** jaw opening.
- **CAT IV / 300 V**, CAT III / 600 V overvoltage categories.

### APPLICATION

- System maintenance;
- Power system checking;
- High level industrial testing;
- High level electrical testing.

### STANDARDS

- CAN/CSA C22.2 No. 61010-1 Ed. 3.0
- EN61326-1:2006
- EN55022
- EN61000-3-2
- EN61000-3-3
- EN61000-4-2
- EN61000-4-3
- EN61000-4-4
- EN61000-4-5
- EN61000-4-6
- EN61000-4-8
- EN61000-4-11
- IEC/UL/EN61010-1 Ed. 3.0
- IEC/EN61010-2-033 Ed. 1.0
- IEC/EN61010-2-032 Ed. 3.0
- IEC/EN61010-031 Ed. 1.1

### Directives

- 2004/108/EC EMC
- 2006/95/EC LVD

## TECHNICAL SPECIFICATION

Function	Range	Accuracy
DC Voltage	600.0 V	±(1.0% of reading + 5 digits)
AC Voltage (50 Hz ... 60 Hz)	600.0 V	±(1.0% of reading + 5 digits)
PEAK-rms (ACV & ACA)	Response: 80 ms to > 90%	
Audible Continuity Tester	Audible Threshold: At between 10 Ω and 250 Ω	Response time: 32ms approx.
Ohm	600.0 Ω, 6.000 KΩ, 60.00 KΩ	±(1.0% of reading + 5 digits)
Capacitance	200.0 nF, 2500 nF	±(2.0% of reading + 4 digits)
Diode Tester	2.000 V	±(1.5% of reading + 5 digits)
DC μA	200.0 nA, 2000 nA	±(1.0% of reading + 5 digits)
Temperature	-40.0 °C ... 400 °C	From ±(1.0% of reading + 0.8 °C) to ±(1.0% of reading + 1 °C)
	-40.0 °F ... 752 °F	From ±(1.0% of reading + 1.5 °F) to ±(1.0% of reading + 2 °F)
AmpTip™ clamp-on ACA (50 Hz ... 60 Hz)	60.00 A	±(1.5% of reading + 5 digits)
Regular Clamp-on ACA (50 Hz ... 400 Hz)	60.00 A ... 600.0 A	From ±(1.8% of reading + 5 digits) to ±(2.0% of reading + 5 digits)
Hz Line Level Frequency	5.00 Hz ... 999.9 Hz	±(1.0% of reading + 5 digits)
Non-Contact EF-Detection	20 V ... 440 V	Tolerance: 10 V ... 600 V
Detection Frequency	50/60Hz	
Transient Protection	6.0 kV (1.2/50 μs surge)	
Overload Protections	Current & Hz functions via jaws: 600 A DC / A AC rms at < 400 Hz Voltage & 3-Phase Rotation functions via terminals: 660 V DC / 920 V AC rms Other functions via terminals: 600 V DC / V AC rms	
Power Supply	1.5 V AAA Size battery X 2	
Power Consumption	4.3 mA	
Dimension (L x W x H)	217 x 76 x 37 mm	
Weight	186 g	
Jaw opening & Conductor diameter	30 mm	

## ORDERING INFORMATION



### Standard set MD 9221

- MD 9221 Current clamp
- Test lead, 3 pcs
- Crocodile clip, 3 pcs
- Type K temperature sensor, 1 pcs
- Battery, 2 pcs
- Pouch, 1 pcs
- User manual

### METREL D.D.

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