



DT-9979

Professional True RMS Industrial Digital Multimeter with Bluetooth Smartphone Interface



This is a professional multimeter that can be used for almost all possible application for any engineer, for whom accuracy matters. This is a completely software calibrated instrument and therefore keeping the error levels extremely low. This measures AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency, Duty Cycle, Diode Test, Continuity test and temperature.

The data store and recall feature helps collecting data at various sites. It is waterproof, rugged and is heavy-duty product to provide years of reliable and efficient service. The product confirms to EN-61010-1 and IEC61010-1, CAT-IV 600V and CAT III 1000V. This also meets UL 61010-1, CAN/CSA C22.2 No. 61010-1.

- Extra Large Backlit 50,000 Counts, full graphics LCD display.
- Multiple sets of measurement information can be displayed simultaneously.
- Measures AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Frequency, Duty Cycle, Diode Test, Continuity test and temperature.
- Trend Capture curve on the meter display.
- It plots measurements as a single line to help detect signal anomalies over time.
- Stores up to 10,000 recorded events
- 100kHz Bandwidth
- Log multiple sessions or log data continuously for over 200 Hours.
- Real Time Clock – for automatic time stamping of saved readings.
- Allows saving and naming the measurements, and also recalling them at any time.
- Min/Max/Average with time stamping to record signal fluctuations.
- Auto Zeroing Function.
- T-RMS AC Voltage and Current for accurate measurements on complex signals or non linear loads.
- Peak Hold Function with calibration mode
- IP-67 Dust and Waterproof
- Auto Power Off
- Li-Ion Rechargeable battery
- Bluetooth Interface
- MeterboxiMM& Cloud Service

Specifications

Function	Range	Resolution	Accuracy
DC Voltage	50mV ^[1]	0.01mV	(0.05% ± 20)
	500mV ^[1]	0.01mV	(0.025% ± 5digits)
	5V	0.0001V	
	50V	0.001V	
	500V	0.01V	(0.05% ± 5digits)
	1000V	0.1V	(0.1% ± 5)

[1] When using the relative mode (REL Q) to compensate for offsets.

Function	Range	Resolution	Accuracy
AC Voltage T-RMS	50 to 10000Hz		
	50mV	0.001mV	50/60Hz (0.3% ± 25)
	500mV	0.01mV	<1KHz (0.5% ± 25)
	5V	0.0001V	<5KHz (3% ± 25)
	50V	0.001V	
	500V	0.01V	
	1000V	0.1V	
All AC voltage ranges are specified from 5% of range to 100% of range.			

Function	Range	Resolution	Accuracy
(AC + DC) Voltage	0 to 1000Hz		
	50mV	0.001mV	<1KHz (1% ± 25)
	500mV	0.01mV	
	5V	0.0001V ^[1]	
	50V	0.001V	<10KHz (3.5% ± 25)
	500V	0.01V	
	1000V	0.1V	

Function	Range	Resolution	Accuracy
DC Current	500µA	0.01µA	0.1% ± 20
	5000µA	0.1µA	0.15% ± 20
	50mA	0.001mA	
	500mA	0.01A	
	10A	0.001A	0.3% ± 20
	(20A : 30 sec max with reduced accuracy)		

Function	Range	Resolution	Accuracy
AC Current T-RMS	50 to 10000Hz		
	500µA	0.01µA	50/60Hz (0.6% ± 25)
	5000µA	0.1µA	<1KHz (1.5% ± 25)
	50mA	0.001mA	<10KHz (3% ± 25)
	500mA	0.01A	
10A	0.001A		
(20A : 30 sec max with reduced accuracy)			
All AC current ranges are specified from 5% of range to 100% of range.			

Function	Range	Resolution	Accuracy
(AC + DC) Current	0 to 1000Hz		
	500µA	0.01µA	(1.0% ± 25)
	5000µA	0.1µA	
	50mA	0.0001mA	
	500mA	0.001mA	
	10A	0.001A	(1.5% ± 40)

Function	Range	Resolution	Accuracy
AC Voltage (5000+Count)			5K-100K
	50mV	0.001mV	(5.0% ± 40)
	500mV	0.01mV	
	5V	0.0001V	(6.0% ± 40)
50V	0.001V		

NOTE: Accuracy is stated at 18 to 28°C (65 to 83°F) and less than 75%RH. AC switch according to the calibration of sine wave. It generally increase ± (2% reading + 2% Full scale) if non sine wave in the wave crest less than 3.0.

Function	Range	Resolution	Accuracy
Resistance	50Ω	0.001Ω	0.5% ± 20
	500Ω	0.01Ω	0.05% ± 10
	5kΩ	0.0001kΩ	0.05% ± 10
	50kΩ	0.001kΩ	
	500kΩ	0.01kΩ	0.1% ± 10
	5MΩ	0.0001MΩ	0.2% ± 20
	50MΩ	0.001MΩ	2% ± 20

Function	Range	Resolution	Accuracy
Capacitance	5nF	0.001nF	± (2% ± 40)
	50nF	0.01nF	
	500nF	0.1nF	± (2% ± 40 digits)
	5µF	0.001µF	
	50µF	0.01µF	
	500µF	0.1µF	± (5% ± 40 digits)
	10mF	0.01mF	

Function	Range	Resolution	Accuracy
Frequency (electronic)	50Hz	0.001Hz	± (0.01% ± 10)
	500Hz	0.01Hz	
	5kHz	0.0001kHz	
	50kHz	0.001kHz	
	500kHz	0.01kHz	
	5MHz	0.0001MHz	
	10MHz	0.001MHz	
Sensitivity : 2V RMS min. @ 20% to 80% duty cycle and <100kHz; 5V RMS min @ 20% to 80 duty cycle and > 100kHz.			
Frequency (electrical)	40.00 - 10kHz	0.01 - 0.001kHz	± (0.5% reading)
	Sensitivity : 2V RMS		

Function	Range	Resolution	Accuracy
Duty Cycle	0.1 to 99.90%	0.01%	± (1.2% reading ± 2digits)
	Pulse width: 100µs - 100ms, Frequency: 5Hz to 150kHz		

Function	Range	Resolution	Accuracy
Temp (type-K)	-50 to 1000°C	0.1°C	± (1.0% reading ± 2.5°C)
	-58 to 1832°F	0.1°F	± (1.0% reading ± 4.5°F) (Probe accuracy not included)

Included Accessories:

Testing Leads, Li-ion Batteries, K type Temperature Sensor, Software, Carrying Case and Instruction manual.