



DT-9939

Waterproof, Dustproof, Industrial Digital Multimeter with Wireless PC Interface

This is a brand new DT-9939 **CE** certified industrial true RMS digital multimeter. DT-9939 provides safe measurements with double molded plastic housing design and IP67 waterproof function. DT-9939 performs datalogger & True RMS AC Voltage and Current measurements, 40,000 counts resolution and a 0.06% basic DC accuracy. The large LCD display with analog bargraph and backlit ensure that readings are easy to read under all circumstances. All inputs are protected to EN 61010-1 CATIV 600V/CATIII 1000V.

This device with the included software allows the data to be stored and recalled wirelessly to/from a Windows PC.

Safety Conformance: EN61010-1 CAT IV 600V, CAT III 1000V 1000V input protection on all ranges 10A/1000V & 0.5A/1000V fuses

FEATURES

- 40,000 Counts Backlit LCD triple display with analogue bargraph
- AC and AC+DC, T-RMS measurement for any kind of waveforms.
- 1kHz bandwidth for Voltage / Current
- Records 9,999 data at site.
- Real time datalogging or wireless data transmission directly to your PC (30ft/10m)
- Diode open circuit voltage of 2.8V DC
- Double molded construction for waterproof (IP67) protection
- CAT IV-600V safety rating for industrial applications.
- TUV & GS approved
- 8kV Surge Protection as per IEC 61010
- 1000V input protection on all functions
- Dual sensitivity frequency functions
- Backlit triple LCD display includes two sub-displays for simultaneous indication of frequency with voltage and memory data/location information
- Auto power off with disable feature
- Peak Hold / Data Hold functions.

- Min/Max Recording function
- AC TRMS, DC, AC+ DC Voltage / Current Measurements
- Resistance, Capacitance, Frequency, Duty Cycle, Temperature, 4-20mA Process measurements
- Peak: Captures peaks > 1mS
- Shock / Drop proof 6.5 ft (2m)
- Diode Test, Audible Continuity Test
- Over-range, Low Battery Indication
- 9V Battery Operated
- Fuse Protection
- Operating Temperature: 5 to 40°C (41°F to 104°F)
- Storage Temperature: -20 to 60°C (-4°F to 140°F)
- Operating Humidity: Max 80% up to 31°C decreasing linearly to 50% at 40°C
- Storage Humidity < 80% RH
- Operating Altitude 7000 ft
- Size: 187 x 81 x 50 mm / Weight: 350g.
- Safety: IEC 61010-1, CAT IV 600V, CAT III 600V, CE

SPECIFICATIONS

Function	Range	Resolution	Accuracy
AC + DC Current (50 to 1000Hz)	400uA	0.01uA	$\pm (1.0\% \pm 3 \text{ Digits})$
	4000uA	0.1uA	
	40mA	0.001mA	
	400mA	0.01mA	
	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
DC Current	400uA	0.01uA	$\pm (1.0\% \pm 3 \text{ Digits})$
	4000uA	0.1uA	
	40mA	0.001mA	
	400mA	0.01mA	
	10A	0.001A	
	20A: 30 Sec max		with reduced accuracy

Function	Range	Resolution	Accuracy
DC Voltage	400mV	0.01mV	$\pm (0.06\% \pm 4 \text{ Digits})$
	4V	0.0001V	
	40V	0.001V	
	400V	0.01V	
	1000V	0.1V	
	2000V	0.1V	$\pm (0.1\% \pm 3 \text{ Digits})$

Input Protection: 1000V DC / AC RMS.

Function	Range	Resolution	Accuracy
AC Voltage (AC + DC) (50 to 1000Hz)	400mV	0.01mV	$\pm (1\% \pm 40 \text{ Digits})$
	4V	0.0001V	
	40V	0.001V	
	400V	0.01V	
	1000V	0.1V	
	2000V	0.1V	$\pm (1.0\% \pm 30 \text{ Digits})$

Input Protection: 1000V AC RMS.

All AC Voltage Ranges are specified from 5% of range to 100% of range

Function	Range	Resolution	Accuracy
Resistance	400Ω	0.01Ω	$\pm (0.3\% \pm 9 \text{ Digits})$
	4 KΩ	0.0001 KΩ	
	40 KΩ	0.001 KΩ	
	400 KΩ	0.01 KΩ	
	4 MΩ	0.0001 MΩ	
	40 MΩ	0.001 MΩ	$\pm (2\% \pm 10 \text{ Digits})$

Input Protection: 1000V DC or 1000V AC RMS.

Function	Range	Resolution	Accuracy
Capacitance	40nF	0.001nF	$\pm (3.5\% \pm 40 \text{ Digits})$
	400nF	0.01nF	
	4uF	0.0001uF	
	40uF	0.001uF	
	400uF	0.01uF	
	4000uF	0.1uF	
	40mF	0.001mF	$\pm (5\% \pm 10 \text{ Digits})$

Input Protection: 1000V DC or 1000V AC RMS.

Function	Range	Resolution	Accuracy
Frequency (Electronic)	40Hz	0.001Hz	$\pm (0.1\% \pm 1 \text{ Digits})$
	400Hz	0.01Hz	
	4kHz	0.0001kHz	
	40kHz	0.001kHz	
	400kHz	0.01kHz	
	4MHz	0.0001MHz	
	40MHz	0.001MHz	
	100MHz	0.01MHz	Not Spec'd

Sensitivity : 0.8V RMS min. @20% to 80% Duty Cycle and < 100kHz;
5Vrms min @20% to 80% Duty Cyle and > 100kHz

Function	Range	Resolution	Accuracy
Frequency (Electrical)	40.00Hz - 10kHz	0.01Hz - 0.001kHz	$\pm (0.5\%)$

Sensitivity : 1V RMS

Function	Range	Resolution	Accuracy
Duty Cycle	0.1 to 99.90%	0.01%	$\pm (1.2\% \pm 2 \text{ Digits})$

Pulse Width: 100uS - 100MS, Frequency: 5Hz to 150kHz

Function	Range	Resolution	Accuracy
Temperature (type-K) (probe accuracy not included)	-50 to 1200°C	0.1°C	$\pm (1.0\% \pm 2.5^\circ\text{C})$
	-58 to 2192°C	0.1°F	$\pm (1.0\% \pm 4.5^\circ\text{F})$

Input Protection: 1000V DC or 1000V AC RMS.

Function	Range	Resolution	Accuracy
4 - 20mA	-25 to 125%	$\pm 50 \text{ Digits}$	0.01%

0mA = -25%, 4mA=0%, 20mA=100%, 24mA=125%

INCLUDED ACCESSORIES:

- Hard Carrying Case
- Wireless PC Interface Dongle
- Software
- Testing Leads
- Temperature Probe
- Battery
- Instruction Manual