



The new series of HT professional multimeters is the result of an important research conducted at the most demanding users of this kind of equipment, namely laboratories where the choice of a measuring instrument is subject to strict tests concerning **precision, reliability and safety of measurements even in extreme conditions**. Therefore, a complete range multimeters, all able to measure in **TRMS**, all within **CAT IV 600V**, autorange function available on all models, with backlight display. The design is extremely modern and attractive, but also ergonomic, to ensure maximum ease of use. Display with high resolution, even in color version, for the premium model HT64. In the summary table you can find all the features that make this innovative set of professional instruments unique and valuable

1. ELECTRICAL SPECIFICATIONS

Accuracy calculated as $\pm[\% \text{reading} + (\text{num dgt} * \text{resolution})]$ ta 18°C ÷ 28°C, <75%HR

DC VOLTAGE

Range	Resolution	Accuracy	Input impedance	Overload protection
600.0mV	0.1mV	$\pm(0.1\% \text{rdg} + 5 \text{dgt})$	10M Ω	1000VDC/ACrms
6.000V	0.001V			
60.00V	0.01V			
600.0V	0.1V	$\pm(0.2\% \text{rdg} + 5 \text{dgt})$		
1000V	1V			

AC TRMS VOLTAGE

Range	Resolution	Accuracy (*) 50Hz ÷ 60Hz	Accuracy (*) 61Hz ÷ 1kHz	Overload protection
600.0mV	0.1mV	$\pm(0.9\% \text{rdg} + 5 \text{dgt})$	$\pm(3.0\% \text{rdg} + 5 \text{dgt})$	1000VDC/ACrms
6.000V	0.001V			
60.00V	0.01V			
600.0V	0.1V			
1000V	1V			

(*) Accuracy specified from 5% to 100% of measurement range, Input impedance: >9M Ω ,
Response time PEAK function: >1ms, Accuracy PEAK function: $\pm 10\% \text{rdg}$

AC+DC TRMS VOLTAGE

Range	Resolution	Accuracy (*) 50Hz ÷ 1kHz	Input impedance	Overload protection
6.000V	0.001V	$\pm(3.0\% \text{rdg} + 20 \text{dgt})$	>9M Ω	1000VDC/ACrms
60.00V	0.01V			
600.0V	0.1V			
1000V	1V			

DC CURRENT

Range	Resolution	Accuracy	Overload protection
600.0 μ A	0.1 μ A	$\pm(0.9\% \text{rdg} + 5 \text{dgt})$	Fast Fuse 0.8A/1kVAC/DC (inputs mA, μ A)
6000 μ A	1 μ A		
60.00mA	0.01mA		
600.0mA	0.1mA	$\pm(0.9\% \text{rdg} + 8 \text{dgt})$	Fast Fuse 10A/1kVAC/DC (input 10A)
10.00A	0.01A	$\pm(1.5\% \text{rdg} + 8 \text{dgt})$	

AC, AC+DC TRMS CURRENT


Range	Resolution	Accuracy (*) 50Hz ÷ 1kHz	Overload protection
600.0 μ A	0.1 μ A	$\pm(1.2\% \text{rdg} + 5 \text{dgt})$	Fast Fuse 0.8A/1kVAC/DC (inputs mA, μ A)
6000 μ A	1 μ A		
60.00mA	0.01mA		
600.0mA	0.1mA		
10.00A	0.01A	$\pm(1.5\% \text{rdg} + 5 \text{dgt})$	Fast Fuse 10A/1kVAC/DC (input 10A)

(*) Accuracy specified from 5% to 100% of measurement range
Response time PEAK function: >1ms, Accuracy PEAK function: $\pm 10\% \text{rdg}$
AC+DC TRMS Current: accuracy (50Hz÷1kHz): $\pm(3.0\% \text{rdg} + 20 \text{dgt})$

4-20mA% READINGS

Range	Resolution	Accuracy	Reading
-25% ÷ 125%	0.1%	$\pm 50 \text{dgt}$	0mA=-25%, 4mA=0%, 20mA=100%, 24mA=125%

DIODE TEST

Range	Max test current	Open voltage	Overload protection
	<1.5mA	3.2V	1000VDC/ACrms

RESISTANCE AND CONTINUITY TEST

Range	Resolution	Accuracy	Buzzer	Overload protection
600.0Ω	0.1Ω	±(0.8%rdg+10dgt)	<50Ω	1000VDC/ACrms
6.000kΩ	0.001kΩ	±(0.8%rdg+5dgt)		
60.00kΩ	0.01kΩ			
600.0kΩ	0.1kΩ			
6.000MΩ	0.001MΩ	±(2.5%rdg+10dgt)		
60.00MΩ	0.01MΩ			

FREQUENCY (Electronic circuits)

Range	Resolution	Accuracy	Sensitivity	Overload protection
60.00Hz	0.01Hz	±(0.09%rdg+5dgt)	2Vrms min (20% < duty < 80%, <100kHz) 5Vrms min (20% < duty < 80%, >100kHz)	1000VDC/ACrms
600.0Hz	0.1Hz			
6.000kHz	0.001kHz			
60.00kHz	0.01kHz			
600.0kHz	0.1kHz			
1.000MHz	0.001MHz			

FREQUENCY (Electrical circuits)

Range	Resolution	Accuracy	Sensitivity	Overload protection
40Hz ÷ 10kHz	0.01Hz÷0.001kHz	±(0.5%rdg)	2Vrms	1000VDC/ACrms

DUTY CYCLE

Range	Resolution	Accuracy	Overload protection
0.1 ÷ 99.9%	0.01%	±(1.2%rdg+2dgt)	1000VDC/ACrms

Pulse frequency range: 40Hz ÷ 10kHz, Pulse width: ±5V (100μs ÷ 100ms)

CAPACITANCE

Range	Resolution	Accuracy	Overload protection
60.00nF	0.01nF	±(1.5%rdg+20dgt)	1000VDC/ACrms
600.0nF	0.1nF	±(1.2%rdg+8dgt)	
6.000μF	0.001μF	±(1.5%rdg+8dgt)	
60.00μF	0.01μF	±(1.2%rdg+8dgt)	
600.0μF	0.1μF	±(1.5%rdg+8dgt)	
6.000mF	0.001mF	±(2.5%rdg+20dgt)	

TEMPERATURE WITH TYPE K PROBEK

Range	Resolution	Accuracy (*)	Overload protection
-40.0°C ÷ 600.0°C	0.1°C	±(1.5%rdg+3°C)	1000VDC/ACrms
600°C ÷ 1350°C	1°C		
-40.0°F ÷ 600.0°F	0.1°F	±(1.5%rdg+5.4°F)	
600°F ÷ 2462°F	1°F		

(*)Accuracy referred to instrument without probe

2. GENERAL SPECIFICATIONS

Display:

- TFT LCD, colours, 4½ dgt, 6000 counts, decimal point and bargraph
- Automatic polarity indication
- Backlight
- "OL" over range indication
- Response time: 3/s

Features:

- Data HOLD
- MAX/MIN/AVG
- PEAK (Voltage and Current) ; AC+DC feature
- Data Logger and Graph of measured parameters
- Internal memory for measurements, graphs and recordings
- Icons internal menu
- REL
- DC 4-20mA% current readings
- Auto Power OFF programmable up to 60min of idleness

Low battery indication:

- The symbol  appears when the battery voltage is low

Environmental conditions:

- Operating Temperature/Humidity: 5 °C + 40 °C, <80%HR
- Storage Temperature/Humidity: -20 °C + 60 °C, <50%HR (@40°C)

General information:

- Altitude max of use: 2000m
- Pollution degree: 2
- Insulation: double insulation

Power supply:

- 1 x 7.2V Li-ION rechargeable battery
- Adapter battery charger: 100/240VAC, 50/60Hz, 10VDC, 1A

Dimensions (L x W x H)

- 175 x 85 x 55mm

Weight (included batteries)

- 390g

Reference guidelines:

- Safety : IEC/EN61010-1
- EMC : IEC/EN61326-1
- Measurement category: CAT IV 600V – CAT III 1000V

This product conforms to the prescriptions of the **European directive on low voltage 2006/95/EEC** and to **EMC directive 2004/108/EEC**

This product conforms to the prescriptions of the **European directive 2011/65/EU (RoHS)** and the **European directive 2012/19/EU (WEEE)**

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