

### HT12 DIGITAL MULTIMETER WITH AC/DC OPEN CLAMP SENSOR

HT12 is a pocket size digital multimeter with open clamp sensor ideal for the daily use. The fork current sensor and the test leads are welded to the instrument, making the use of HT12 extremely easy and convenient. HT12 is provided with 2x AAA 1.5V batteries and the user manual

#### Functions

AC current 0 ÷ 60A  
DC current 0 ÷ 60A  
AC voltage 0 ÷ 600V  
DC voltage 0 ÷ 600V  
Resistance 0 ÷ 34MΩ  
Continuity test  
Current frequency 0 ÷ 10kHz  
Voltage frequency 0 ÷ 300kHz  
AutoPowerOff to save the battery  
Safety: IEC/EN61010-1, CAT III 600V  
Pocket size and heavy duty design  
Display: 3400 counts with analog bargraph  
Size (LxWxH): 128x87x21mm  
Weight: 210g



**HT12**  
HR000012

### HT603 POCKET DIGITAL MULTIMETER

HT603 model is a digital multimeter in autorange easy to use and extremely compact thanks to the handy box containing tips test leads. This tool allows to perform AC/DC voltage measurement, resistance measurement, diode test and continuity test. HT603 is provided with tips test leads, battery and user manual.

#### Functions

DC voltage from 0.1mV to 600V  
AC voltage from 1mV to 600V  
Resistance from 0.1 to 30MΩ  
Continuity test  
Diode test  
Data HOLD, autorange, bargraph  
Selection of manual range  
AutoPowerOFF after 10 min of idleness  
Safety: IEC/EN61010-1, CAT III 300V, CAT II 600V  
Power supply: 1x3V battery type CR2032  
Display: LCD, 3 ¼ dgt, 3200 points  
Size (LxWxH): 78x118x16mm  
Weight: 110g



**HT603**  
HR000603

### HT21-HT210 HANDHELD DIGITAL MULTIMETERS

HT21 and HT210 handheld digital multimeters realised according to CAT III 600V headed to every electrical installer.

#### Accessories

HT21: test leads, battery, user manual, carrying bag

HT210: test leads, battery, user manual, carrying bag, type K probe.

Functions	HT21	HT210
DC Voltage	•	•
AC Voltage	•	•
Resistance	•	•
Continuity test	•	•
Frequency	•	•
Capacitance	•	•
Diode test	•	•
Duty cycle (%)	•	•
Temperature with K probe		•
Backlight	•	•
Data HOLD	•	•
Relative measurements	•	•
Safety IEC/EN61010-1	•	•



**HT210**  
HR000210

**HT21**  
HR000021

### HT410 PROFESSIONAL DIGITAL MULTIMETER PROTECTED AGAINST WRONG CONNECTIONS

HT410 is a digital multimeter for daily use. This instrument has been developed in compliance with IEC/EN 61010-1 safety standard with double insulation protection in CAT IV 600V and CAT III 1000V. HT410 is protected against wrong connections. The function selector switch is coupled with the Automatic terminal Blocking System (ABS) which allows access only to two correct sockets for each function. When the test leads are plugged-in, the terminal blocking systems prevents accidental switching to non-permissible functions.

#### Functions

DC voltage 0 ÷ 1000V  
AC voltage 0 ÷ 1000V  
DC current 0 ÷ 10A  
AC current 0 ÷ 10A  
Frequency 0 ÷ 100kHz  
Duty cycle 2% ÷ 98%  
Resistance 0 ÷ 20MΩ  
Diode test  
Continuity test  
Capacitance 0 ÷ 30uF  
Temperature -200 ÷ 850°C with Pt 100 / Pt 1000 probes



**HT410**  
HR004100



## 1. ELECTRICAL SPECIFICATIONS

Accuracy is indicated as  $\pm [(\% \text{ reading} + (\text{number of dgt}) * \text{resolution})]$  at  $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ ,  $<75\% \text{HR}$

### DC VOLTAGE

Range	Resolution	Accuracy	Overload protection
0.000 ÷ 340.0mV	0.001mV	$\pm(1.5\% \text{rdg} + 4 \text{dgt})$	720VDC/AC for 10s
0.000 ÷ 3.400V	0.001V		
0.00 ÷ 34.00V	0.01V		
0.0 ÷ 340.0V	0.1V		
0 ÷ 600V	1V		

Impedenza di ingresso:  $10 \text{M}\Omega$

### AC VOLTAGE

Range	Resolution	Accuracy (50 ÷ 400Hz)	Overload protection
0.000 ÷ 3.400V	0.001V	$\pm(1.5\% \text{rdg} + 5 \text{dgt})$	720VDC/AC for 10s
0.00 ÷ 34.00V	0.01V		
0.0 ÷ 340.0V	0.1V		
0 ÷ 600V	1V		

Input impedance:  $10 \text{M}\Omega$  ; Frequency range: 50Hz ÷ 400Hz

### DC CURRENT (with integrated clamp sensor)

Range	Resolution	Accuracy	Overload protection
0.0 ÷ 60.0A	0.1A	$\pm(2.0\% \text{rdg} + 5 \text{dgt})$	72A AC/DC for 10s

### AC CURRENT (with integrated clamp sensor)

Range	Resolution	Accuracy	Overload protection
0.0 ÷ 60.0A	0.1A	$\pm(2.0\% \text{rdg} + 5 \text{dgt})$	72A AC/DC for 10s

Frequency range: 50Hz ÷ 60Hz

### RESISTANCE

Range	Resolution	Accuracy	Overload protection
0.0 ÷ 340.0 $\Omega$	0.1 $\Omega$	$\pm(1.0\% \text{rdg} + 3 \text{dgt})$	720VDC/AC for 10s
0.000 ÷ 3.400k $\Omega$	0.001k $\Omega$		
0.00 ÷ 34.00k $\Omega$	0.01k $\Omega$		
0.0 ÷ 340.0k $\Omega$	0.1k $\Omega$	$\pm(5.0\% \text{rdg} + 5 \text{dgt})$	
0.000 ÷ 3.400M $\Omega$	0.001M $\Omega$	$\pm(15.0\% \text{rdg} + 5 \text{dgt})$	

### CONTINUITY TEST

Range	Buzzer	Measurement range	Overload protection
·)))	$R < 30 \Omega \pm 10 \Omega$	Buzzer on in 340 $\Omega$ range	720VDC/AC for 10s

### FREQUENCY

Type of measure	Range	Accuracy	Resolution	Overload protection
Current	0 ÷ 10kHz	$\pm(0.1\% \text{rdg} + 1 \text{dgt})$	0.001k ÷ 0.01M	72A AC/DC for 10s
Voltage	0 ÷ 300kHz			720VDC/AC for 10s

Minimum measured current: 15A ; Minimum measured voltage: 30V



## 2. GENERAL SPECIFICATIONS

### Display:

- LCD, 3 ¾ dgt, 3400 points plus sign, decimal point and bargraph
- Automatic polarity indication
- "OL" overrange indication

### Features:

- Data HOLD
- Auto / Manual range
- Auto Power OFF after 10 minutes of idleness

### Low battery indication:

- " **BATT** " appears when the battery voltage is low

### Operating temperature:

- 0°C to 40°C, <75%HR

### Storage temperature:

- -20°C to 60°C, <85%HR

### General information:

- Max altitude: 2000m
- Pollution degree: 2
- Insulation: double insulation
- Max diameter conductor: 6mm

### Power supply:

- 2x1.5V alkaline batteries type AAA LR03 UM-4

### Dimensions:

- 128(L) x 87(W) x 24(H)mm

### Weight (included battery):

- 210g

### Applied standards:

- Safety: IEC/EN61010-1, IEC/EN61010-2-031, IEC/EN61010-2-032
- Category of measurement : CAT III 300V , CAT II 600V

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