

**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 II 600V,  
CAT III 300V  
Pocket size and heavy duty design  
Display: 3400 counts with analog bargraph  
Size (LxWxH): 128x87x21mm  
Weight: 210g



**HT603  
POCKET DIGITAL MULTIMETER**

HT603 is a digital multimeter, extremely compact and friendly in use. It is provided with carrying bag and test leads. The instrument carries out measurements of AC/DC voltage, resistance, continuity test, capacitance, frequency, duty cycle and diode test.

**Standard accessories**

Test leads + batteries + user manual

**Functions**

AC/DC voltage up to 600V  
Resistance up to 40MΩ  
Continuity test  
Frequency  
Duty cycle  
Capacitance  
Diode test  
Data HOLD  
Range Automatic/Manual  
Auto Power OFF after 30 minutes  
Safety:  
IEC/EN61010-1, CAT III 300V, CAT II 600V  
Display: LCD, 4 digits, 5000 counts  
Power supply: 2x1.5V battery type LR44  
Dimensions (LxWxH): 112x56x12mm  
Weight (batteries included): 115g



**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	•	•
Dimensions (LxWxH):	70x144x40	138x68x37
Weight	280g	210g

**HT210**  
HR000210



**HT21**  
HR000021



## 1. ELECTRICAL SPECIFICATIONS

Accuracy is indicated as  $\pm$  (% reading + number of dgt) at 18°C  $\div$  28°C, <70%HR

### DC VOLTAGE (Autorange)

Range	Resolution	Accuracy	Overload protection
4.000V	0.001V	$\pm(1.2\%rdg+2dgt)$	600VDC/ACrms
40.00V	0.01V		
400.0V	0.1V		
600V	1V	$\pm(1.5\%rdg+2dgt)$	

Input impedance: 7.8M $\Omega$

### AC VOLTAGE (Autorange)

Range	Resolution	Accuracy (50 $\div$ 400Hz)	Overload protection
4.000V	0.001V	$\pm(1.2\%rdg+4dgt)$	600VDC/ACrms
40.00V	0.01V	$\pm(1.5\%rdg+3dgt)$	
400.0V	0.1V		
600V	1V	$\pm(2.0\%rdg+4dgt)$	

Input impedance: 7.8M $\Omega$

### RESISTANCE (Autorange)

Range	Resolution	Accuracy	Overload protection
400.0 $\Omega$	0.1 $\Omega$	$\pm(1.2\%rdg+4dgt)$	250VDC/ACrms
4.000k $\Omega$	0.001k $\Omega$	$\pm(1.0\%rdg+2dgt)$	
40.00k $\Omega$	0.01k $\Omega$	$\pm(1.2\%rdg+2dgt)$	
400.0k $\Omega$	0.1k $\Omega$		
4.000M $\Omega$	0.001M $\Omega$	$\pm(2.0\%rdg+3dgt)$	
40.00M $\Omega$	0.01M $\Omega$		

### DIODE TEST

Range	Resolution	Accuracy	Open voltage	Overload protection
	1mV	$\pm(10\%rdg+5dgt)$	circa 1.5VDC	250VDC/ACrms

### CONTINUITY TEST

Range	Buzzer	Test current	Overload protection
	R<150 $\Omega$	<0.3VmA	250VDC/ACrms

### FREQUENCY (Autorange)

Range	Resolution	Accuracy	Sensitivity	Overload protection
5.000Hz	0.001Hz	$\pm(1.5\%rdg+5dgt)$	>8Vrms	250VDC/ACrms
50.00Hz	0.01Hz			
500.0Hz	0.1Hz	$\pm(1.2\%rdg+3dgt)$		
5.000kHz	10Hz			
50.00kHz	10Hz			
500.0kHz	100Hz	$\pm(1.5\%rdg+4dgt)$		
5.000MHz	1kHz			
10.00MHz	10kHz			

Note: on AC Voltage the frequency range is: 10Hz  $\div$  10kHz ; Sensitivity: > 15Vrms



**DUTY CYCLE (Autorange)**

Range	Resolution	Accuracy	Sensitivity	Overload protection
0.5 - 99%	0.1%	$\pm(1.2\%rdg + 2dgt)$	>8Vrms	250VDC/ACrms

100 $\mu$ s < pulse duration < 100ms ; Frequency range: 5Hz  $\div$  150Hz

**Note:** on AC Voltage the frequency range is: 10Hz  $\div$  10kHz ; Sensitivity: > 15Vrms

**CAPACITANCE (Autorange)**

Range	Resolution	Accuracy	Overload protection
40.00nF	0.01nF	$\pm(5.0\%rdg+7dgt)$	250VDC/ACrms
400.0nF	0.1nF	$\pm(3.0\%rdg+5dgt)$	
4.000 $\mu$ F	0.001 $\mu$ F		
40.00 $\mu$ F	0.01 $\mu$ F		
100.0 $\mu$ F	0.1 $\mu$ F	$\pm(5.0\%rdg+5dgt)$	

**TEMPERATURE WITH TYPE K PROBE (Autorange)**

Range	Resolution	Accuracy	Overload protection
-20°C $\div$ 400°C	0.1°C	$\pm(3.0\%rdg+5^\circ C)$	250VDC/ACrms
400°C $\div$ 760°C	1°C		
-4°F $\div$ 752°F	0.1°F	$\pm(3.0\%rdg+9^\circ F)$	
752°F $\div$ 1400°F	1°F		



## 2. GENERAL SPECIFICATIONS

### Display:

- LCD, 3 ½ dgt, 4000 points plus sign and decimal point
- Automatic polarity indication
- Backlight
- "OL" overrange indication

### Features:

- HOLD
- REL
- AutoPowerOFF after 30 minutes of idleness

### Low battery indication:

- "⊕-⊖" appears when the battery voltage is low

### Operating temperature:

- 0 °C to 50 °C, <70%HR

### Storage temperature:

- -20 °C to 60 °C, <80%HR

### General information:

- Max altitude: 2000m
- Pollution degree: 2
- Insulation: double insulation

### Power supply:

- 1x9V battery NEDA 1604 IEC 6F22

### Size:

- 138(L)x68(W)x37(H) mm

### Weight (included battery):

- 210g

### Applied standards:

- LVD: IEC/EN 61010-1 CAT III 600V
- EMC: EN60326

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

