

**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  $\pm [\%rdg + (\text{numbers of digits} \times \text{resolution})]$  at  $23^\circ\text{C} \pm 5^\circ\text{C}$ ,  $<80\%HR$ 

### DC VOLTAGE

| Range   | Resolution | Accuracy             | Input impedance        | Overload protection |
|---------|------------|----------------------|------------------------|---------------------|
| 400.0mV | 0.1mV      | $\pm(0.7\%rdg+5dgt)$ | 10M $\Omega$ // <100pF | 600Vrms             |
| 4.000V  | 0.001V     | $\pm(0.6\%rdg+2dgt)$ |                        |                     |
| 40.00V  | 0.01V      |                      |                        |                     |
| 400.0V  | 0.1V       |                      |                        |                     |
| 600V    | 1V         | $\pm(0.7\%rdg+5dgt)$ |                        |                     |

### AC VOLTAGE

| Range   | Resolution | Accuracy             | Frequency         | Overload protection |
|---------|------------|----------------------|-------------------|---------------------|
| 400.0mV | 0.1mV      | $\pm(0.9\%rdg+5dgt)$ | 50Hz $\div$ 500Hz | 600Vrms             |
| 4.000V  | 0.001V     | $\pm(1.5\%rdg+5dgt)$ |                   |                     |
| 40.00V  | 0.01V      |                      |                   |                     |
| 400.0V  | 0.1V       |                      |                   |                     |
| 600V    | 1V         |                      |                   |                     |

Input impedance: 10M $\Omega$  // <100pF

### RESISTANCE AND CONTINUITY TEST

| Range           | Resolution      | Accuracy             | Buzzer       | Overload protection |
|-----------------|-----------------|----------------------|--------------|---------------------|
| 400.0 $\Omega$  | 0.1 $\Omega$    | $\pm(0.9\%rdg+5dgt)$ | <50 $\Omega$ | 600Vrms             |
| 4.000k $\Omega$ | 0.001k $\Omega$ | $\pm(0.9\%rdg+2dgt)$ |              |                     |
| 40.00k $\Omega$ | 0.01k $\Omega$  |                      |              |                     |
| 400.0k $\Omega$ | 0.1k $\Omega$   |                      |              |                     |
| 4.000M $\Omega$ | 0.001M $\Omega$ | $\pm(1.5\%rdg+5dgt)$ |              |                     |
| 40.00M $\Omega$ | 0.01M $\Omega$  |                      |              |                     |

### FREQUENCY

| Range               | Resolution              | Accuracy             | Overload protection |
|---------------------|-------------------------|----------------------|---------------------|
| 0.001Hz $\div$ 5MHz | 0.001Hz $\div$ 0.001MHz | $\pm(0.3\%rdg+5dgt)$ | 600Vrms             |

Sensitivity: 1.0Vp-p (square wave) ; Vmax: 5.0Vp-p, 240V (50/60Hz)

### DUTY CYCLE

| Range             | Resolution | Accuracy             | Overload protection |
|-------------------|------------|----------------------|---------------------|
| 0.1% $\div$ 99.9% | 0.1%       | $\pm(0.5\%rdg+3dgt)$ | 600Vrms             |

Sensitivity: 1.0Vp-p 30%  $\leq$  Duty  $\leq$  70% (square wave) ; Vmax: 5.0Vp-p

### CAPACITANCE

| Range         | Resolution    | Accuracy              | Overload protection |
|---------------|---------------|-----------------------|---------------------|
| 50.00nF       | 0.01nF        | $\pm(5.0\%rdg+0.2nF)$ | 600Vrms             |
| 500.0nF       | 0.1nF         | $\pm(2.9\%rdg+5dgt)$  |                     |
| 5.000 $\mu$ F | 0.001 $\mu$ F |                       |                     |
| 50.00 $\mu$ F | 0.01 $\mu$ F  |                       |                     |
| 100.0 $\mu$ F | 0.1 $\mu$ F   |                       |                     |





## 2. GENERAL SPECIFICATIONS

**Display:**

- LCD display, 4 digit with maximum reading 5000 counts with sign, decimal point
- Automatic polarity indication
- "OL" over range indication

**Features:**

- Data HOLD
- RANGE for manual range selection
- REL for relative measurement (Capacitance)
- Auto Power OFF after 30 minutes of idleness

**Low battery indication:**

- The symbol "E3" appears when the battery voltage is low

**Environmental conditions:**

- Working temperature/humidity: 0 °C ÷ 50 °C, <80%HR
- Storage temperature/humidity: -20 °C ÷ 60 °C, <80%HR

**General information:**

- Max height of use: 2000m
- Pollution degree: 2
- Insulation: double insulation

**Power supply:**

- 2 x 1.5V batteries type LR44

**Sizes:**

- 112(L)x56(W)x12(H) mm

**Weight (included batteries):**

- 115g

**Applied standards:**

- Safety: IEC/EN61010-1
- Measurement category: 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**

