



## 1. ELECTRICAL SPECIFICATIONS

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

### DC VOLTAGE

| Range   | Resolution | Accuracy                               | Input impedance | Overload protection |
|---------|------------|----------------------------------------|-----------------|---------------------|
| 600.0mV | 0.1mV      | $\pm(1.0\% \text{rdg} + 2 \text{dgt})$ | 10M $\Omega$    | 1000VDC/ACrms       |
| 6.000V  | 0.001V     |                                        |                 |                     |
| 60.00V  | 0.01V      |                                        |                 |                     |
| 600.0V  | 0.1V       |                                        |                 |                     |
| 1000V   | 1V         |                                        |                 |                     |

### AC TRMS VOLTAGE

| Range  | Resolution | Accuracy (*)<br>50Hz $\div$ 60Hz       | Accuracy (*)<br>61Hz $\div$ 400Hz      | Overload protection |
|--------|------------|----------------------------------------|----------------------------------------|---------------------|
| 6.000V | 0.001V     | $\pm(1.0\% \text{rdg} + 8 \text{dgt})$ | $\pm(2.0\% \text{rdg} + 8 \text{dgt})$ | 1000VDC/ACrms       |
| 60.00V | 0.01V      |                                        |                                        |                     |
| 600.0V | 0.1V       |                                        |                                        |                     |
| 1000V  | 1V         | $\pm(1.2\% \text{rdg} + 3 \text{dgt})$ | $\pm(2.5\% \text{rdg} + 3 \text{dgt})$ |                     |

Input impedance: 10M $\Omega$ , Crest factor:  $\leq 3$  (up to 500V),  $\leq 1.5$  (up to 1kV)

(\*) Accuracy specified from 5% to 100% of measurement range

### DC CURRENT

| Range         | Resolution  | Accuracy                               | Overload protection                          |
|---------------|-------------|----------------------------------------|----------------------------------------------|
| 600.0 $\mu$ A | 0.1 $\mu$ A | $\pm(1.0\% \text{rdg} + 3 \text{dgt})$ | Fast Fuse 0.8A/1kVAC/DC (inputs mA, $\mu$ A) |
| 6000 $\mu$ A  | 1 $\mu$ A   |                                        |                                              |
| 60.00mA       | 0.01mA      |                                        |                                              |
| 600.0mA       | 0.1mA       |                                        |                                              |
| 6.000A        | 0.001A      | $\pm(1.5\% \text{rdg} + 3 \text{dgt})$ | Fast Fuse 10A/1kVAC/DC (input 10A)           |
| 10.00A (*)    | 0.01A       |                                        |                                              |

(\*) 20A for max 30s with not declared accuracy

### AC TRMS CURRENT

| Range         | Resolution  | Accuracy (*)<br>40Hz $\div$ 400Hz      | Overload protection                          |
|---------------|-------------|----------------------------------------|----------------------------------------------|
| 600.0 $\mu$ A | 0.1 $\mu$ A | $\pm(1.5\% \text{rdg} + 3 \text{dgt})$ | Fast Fuse 0.8A/1kVAC/DC (inputs mA, $\mu$ A) |
| 6000 $\mu$ A  | 1 $\mu$ A   |                                        |                                              |
| 60.00mA       | 0.01mA      |                                        |                                              |
| 600.0mA       | 0.1mA       |                                        |                                              |
| 6.000A        | 0.001A      | $\pm(2.0\% \text{rdg} + 3 \text{dgt})$ | Fast Fuse 10A/1kVAC/DC (inputs 10A)          |
| 10.00A (**)   | 0.01A       |                                        |                                              |

(\*) Accuracy specified from 5% to 100% of measurement range

(\*\*) 20A for max 30s with not declared accuracy

### DIODE TEST

| Range | Max test current | Open volatge | Overload protection |
|-------|------------------|--------------|---------------------|
|       | 0.9mA            | 2.8V         | 1000VDC/ACrms       |



# HT61

Rel. 1.01 del 28/01/16

## CAT IV and 6000 counts TRMS multimeter

Pag 2 di 3

### RESISTANCE AND CONTINUITY TEST

| Range   | Resolution | Accuracy              | Open voltage | Buzzer | Overload protection |
|---------|------------|-----------------------|--------------|--------|---------------------|
| 600.0Ω  | 0.1Ω       | $\pm(1.0\%rdg+4dgt)$  | 2.8V         | <100Ω  | 1000VDC/ACrms       |
| 6.000kΩ | 0.001kΩ    |                       |              |        |                     |
| 60.00kΩ | 0.01kΩ     |                       |              |        |                     |
| 600.0kΩ | 0.1kΩ      |                       |              |        |                     |
| 6.000MΩ | 0.001MΩ    | $\pm(2.0\%rdg+10dgt)$ |              |        |                     |
| 60.00MΩ | 0.01MΩ     |                       |              |        |                     |

### FREQUENCY (Electronic circuits)

| Range    | Resolution | Accuracy             | Sensitivity                                                                                  | Overload protection |
|----------|------------|----------------------|----------------------------------------------------------------------------------------------|---------------------|
| 9.999Hz  | 0.001Hz    | $\pm(0.1\%rdg+2dgt)$ | 0.8Vrms min<br>(20% < duty < 80%,<br><100kHz)<br>5Vrms min<br>(20% < duty < 80%,<br>>100kHz) | 1000VDC/ACrms       |
| 99.99Hz  | 0.01Hz     |                      |                                                                                              |                     |
| 999.9Hz  | 0.1Hz      |                      |                                                                                              |                     |
| 9.999kHz | 0.001kHz   |                      |                                                                                              |                     |
| 99.99kHz | 0.01kHz    |                      |                                                                                              |                     |
| 999.9kHz | 0.1kHz     |                      |                                                                                              |                     |
| 9.999MHz | 0.001MHz   |                      |                                                                                              |                     |

### FREQUENCY (Electrical circuits)

| Range      | Resolution | Accuracy             | Sensitivity      | Overload protection |
|------------|------------|----------------------|------------------|---------------------|
| 10 ÷ 400Hz | 0.001Hz    | $\pm(1.5\%rdg+5dgt)$ | 15Vrms<br>10Arms | 1000VDC/ACrms       |

### DUTY CYCLE

| Range       | Resolution | Accuracy             | Overload protection |
|-------------|------------|----------------------|---------------------|
| 0.1 ÷ 99.9% | 0.01%      | $\pm(1.2\%rdg+2dgt)$ | 1000VDC/ACrms       |

Pulse width: 100μs ÷ 100ms ; Frequency: 5Hz ÷ 150kHz



## 2. GENERAL SPECIFICATIONS

**Display:**

- LCD, 3½dgt, 6000 counts, sign, decimal point and bargraph
- Automatic polarity indication
- Backlight
- “OL” over range indication
- Response time: 2/s

**Features:**

- Data HOLD
- MAX/MIN
- RANGE
- REL
- Auto Power OFF after 15 minutes 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, <80%HR

**General informations:**

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

**Power supply:**

- 1x9V alkaline battery NEDA 1604 IEC 6F22

**Dimensions (L x W x H)**

- 175 x 85 x 55mm

**Weight (included battery)**

- 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)**