



## 1. ELECTRICAL SPECIFICATIONS

Accuracy is calculated as [% rdg + (number of dgt x resolution)]. It is referred to 18°C ÷ 28°C <75%RH

### DC Voltage (Autorange)

| Range   | Resolution | Accuracy               | Input impedance | Overload protection |
|---------|------------|------------------------|-----------------|---------------------|
| 400.0mV | 0.1mV      | $\pm(0.8\%rdg + 2dgt)$ | 10M $\Omega$    | 600VDC/ACrms        |
| 4.000V  | 0.001V     | $\pm(1.5\%rdg + 2dgt)$ |                 |                     |
| 40.00V  | 0.01V      |                        |                 |                     |
| 400.0V  | 0.1V       |                        |                 |                     |
| 600.0V  |            | $\pm(2.0\%rdg + 2dgt)$ |                 |                     |

### AC Voltage (Autorange)

| Range  | Resolution | Accuracy               | Input impedance | Bandwidth  | Overload protection |
|--------|------------|------------------------|-----------------|------------|---------------------|
| 4.000V | 0.001V     | $\pm(1.8\%rdg + 8dgt)$ | 10M $\Omega$    | 50 ÷ 400Hz | 600VDC/ACrms        |
| 40.00V | 0.01V      |                        |                 |            |                     |
| 400.0V | 0.1V       |                        |                 |            |                     |
| 600V   | 1V         | $\pm(2.5\%rdg + 8dgt)$ |                 |            |                     |

Integrated sensor for AC voltage detection: LED turn on for phase-earth voltage > 100V, 50/60Hz

### Resistance and Continuity test (Autorange)

| Range   | Resolution | Accuracy           | Buzzer | Overload protection |
|---------|------------|--------------------|--------|---------------------|
| 400.0Ω  | 0.1Ω       | ±(1.0%rdg + 5dgt)  | ≤ 60Ω  | 600VDC/ACrms        |
| 4.000kΩ | 0.001kΩ    |                    |        |                     |
| 40.00kΩ | 0.01kΩ     |                    |        |                     |
| 400.0kΩ | 0.1kΩ      |                    |        |                     |
| 4.000MΩ | 0.001MΩ    |                    |        |                     |
| 40.00MΩ | 0.01MΩ     | ±(2.0%rdg + 10dgt) |        |                     |

Test current of continuity test: < 0.35mA

### AC Current

| Range  | Resolution | Accuracy               | Bandwith  | Overload protection |
|--------|------------|------------------------|-----------|---------------------|
| 40.00A | 0.01A      | $\pm(2.5\%rdg + 8dgt)$ | 50 ÷ 60Hz | 400Arms             |
| 400.0A | 0.1A       | $\pm(2.8\%rdg + 8dgt)$ |           |                     |

### Capacitance (Autorange)

| Range   | Resolution | Accuracy           | Overload protection |
|---------|------------|--------------------|---------------------|
| 40.00nF | 0.01nF     | ±(4.0%rdg + 20dgt) | 600VDC/ACrms        |
| 400.0nF | 0.1nF      | ±(3.0%rdg + 5dgt)  |                     |
| 4.000μF | 0.001μF    |                    |                     |
| 40.00μF | 0.01μF     | ±(4.0%rdg + 10dgt) |                     |
| 400.0μF | 0.1μF      |                    |                     |

### Diode test

| Feature | Test current  | Open voltage |
|---------|---------------|--------------|
|         | 0.3mA typical | 1.5VDC       |



# HT4011

Rel. 1.00 of 12/09/13

AC clamp meter up to 400A

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## Frequency with test leads (Autorange)

| Range               | Resolution | Accuracy               | Sensitivity | Overload protection |
|---------------------|------------|------------------------|-------------|---------------------|
| 10.00Hz ÷ 49.99Hz   | 0.01Hz     | $\pm(1.5\%rdg + 2dgt)$ | >15Vrms     | 600VDC/ACrms        |
| 50.0Hz ÷ 499.9Hz    | 0.1Hz      |                        |             |                     |
| 0.500kHz ÷ 4.999kHz | 0.001kHz   |                        |             |                     |
| 5.00kHz ÷ 10.0kHz   | 0.01kHz    |                        |             |                     |

## Duty Cycle (Autorange)

| Range        | Resolution | Accuracy               |
|--------------|------------|------------------------|
| 0.5% ÷ 99.0% | 0.1%       | $\pm(1.2\%rdg + 2dgt)$ |

## Temperature with type K probe (Autorange)

| Range          | Resolution | Accuracy (*)     | Overload protection |
|----------------|------------|------------------|---------------------|
| -20.0÷399.0°C  | 0.1°C      | ±(3.0%rdg + 5°C) | 600VDC/ACrms        |
| 400 ÷ 760°C    | 1°C        |                  |                     |
| -4.0 ÷ 750.0°F | 0.1°F      | ±(3.0%rdg + 9°F) |                     |
| 752 ÷ 1400°F   | 1°F        |                  |                     |

(\*) Accuracy of type K probe not considered



## 2. GENERAL SPECIFICATIONS

### Mechanical characteristics

|                             |                 |
|-----------------------------|-----------------|
| Size (L x W x H):           | 200 x 66 x 37mm |
| Weight (including battery): | 205g            |
| Max conductor size:         | 30mm            |

### Supply

|                         |                                             |
|-------------------------|---------------------------------------------|
| Battery type:           | 2x1.5V batteries type AAA LR03              |
| Low battery indication: | " <b>+ III</b> " is displayed               |
| Auto Power OFF:         | after 30 minutes of idleness (not disabled) |

### Display

|                  |                                                                |
|------------------|----------------------------------------------------------------|
| Characteristics: | 4 LCD (max 4000 counts), decimal point, unit symbol indication |
| Sample rate:     | 2 times/sec                                                    |
| Conversion mode: | mean value                                                     |

### Climatic conditions

|                        |             |
|------------------------|-------------|
| Reference temperature: | 18°C ÷ 28°C |
| Operating temperature: | 5 ÷ 40 °C   |
| Operating humidity:    | <80%RH      |
| Storage temperature:   | -20 ÷ 60 °C |
| Storage humidity:      | <80%RH      |

### Reference standards

|                             |                        |
|-----------------------------|------------------------|
| Comply with:                | IEC/EN61010-1          |
| Insulation:                 | double insulation      |
| Pollution level:            | 2                      |
| For inside use, max height: | 2000m                  |
| Installation category:      | CAT III 600V to ground |

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