



## 1. ELECTRICAL SPECIFICATIONS

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

### DC VOLTAGE

Range	Resolution	Accuracy	Input impedance	Overload protection
600.0mV	0.1mV	$\pm(1.0\%rdg + 3dgt)$	10M $\Omega$	600VDC/ACrms
6.000V	0.001V			
60.00V	0.01V			
600V	0.1V			

### AC TRMS VOLTAGE

Range	Resolution	Accuracy	Input impedance	Bandwidth	Overload protection
600.0mV	0.1mV	$\pm(1.0\%rdg + 3dgt)$	10M $\Omega$	40Hz ÷ 400Hz	600VDC/ACrms
6.000V	0.001V				
60.00V	0.01V				
600.0V	0.1V				

Integrated sensor for AC voltage detection: LED turn on for phase-earth voltage > 25V, 50/60Hz

Accuracy for not sinusoidal waveform:  $\pm(3.5\%rdg + 5dgt)$ , Max crest factor: 2, Fundamental: 50/60Hz

### DC CURRENT

Range	Resolution	Accuracy	Overload protection
60.00A	0.01A	$\pm(2.0\%rdg + 5dgt)$	400Arms
400.0A	0.1A		

### AC TRMS CURRENT

Range	Resolution	Accuracy (*, **)	Bandwidth	Overload protection
60.00A	0.01A	$\pm(2.0\%rdg + 5dgt)$	40Hz ÷ 400Hz	400Arms
400.0A	0.1A			

(\*) Accuracy specified from 2% to 100% of measurement range

(\*\*) Error due to not centered cable  $<\pm 1.5\%rdg$  (@ sinusoidal waveform)

Accuracy for not sinusoidal waveform:  $\pm(3.5\%rdg + 5dgt)$ , Max crest factor: 2, Fundamental: 50/60Hz

### RESISTANCE AND CONTINUITY TEST

Range	Resolution	Accuracy	Buzzer	Overload protection
600.0 $\Omega$	0.1 $\Omega$	$\pm(1.0\%rdg + 5dgt)$	$\leq 30\Omega$	600VDC/ACrms
6.000k $\Omega$	0.001k $\Omega$			
60.00k $\Omega$	0.01k $\Omega$			
600.0k $\Omega$	0.1k $\Omega$			
6.000M $\Omega$	0.001M $\Omega$			
60.00M $\Omega$	0.01M $\Omega$	$\pm(1.2\%rdg + 3dgt)$		

### CAPACITANCE

Range	Resolution	Accuracy	Overload protection
60.00nF	0.01nF	$\pm(3.0\%rdg + 5dgt)$	600VDC/ACrms
600.0nF	0.1nF		
6.000 $\mu$ F	0.001 $\mu$ F		
60.00 $\mu$ F	0.01 $\mu$ F		
600.0 $\mu$ F	0.1 $\mu$ F		
6.000mF	0.001mF		



# HT3013

Rel. 1.00 of 21/01/21

AC/DC TRMS clamp meter up to 400A

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## DIODE TEST

Function	Resolution	Open voltage	Overload protection
	0.001V	>3VDC	600VDC/ACrms

## FREQUENCY WITH TEST LEADS AND JAWS

Range	Resolution	Accuracy	Sensitivity	Overload protection
60.00Hz	0.01Hz	$\pm(1.0\%rdg + 5dgt)$	$\geq 0.1Vrms$ $\geq 1Arms$	600VDC/ACrms 400ADC/ACrms
600.0Hz	0.1Hz			
6000Hz	1Hz			
60.00kHz	0.01kHz			

Frequency range: 10Hz ÷ 60kHz

## DUTY CYCLE

Range	Resolution	Resolution	Sensitivity
1.0% ÷ 99.0%	0.1%	$\pm(1.2\%rdg+2dgt)$	$\geq 3Vp-pVrms / \geq 1Arms$

## TEMPERATURE WITH TYPE K PROBE

Range	Resolution	Accuracy (*)	Overload protection
-50.0°C ÷ 599.9°C	0.1°C	$\pm(2.0\%rdg+3dgt)$	600VDC/ACrms
600 ÷ 760°C	1°C	$\pm(2.0\%rdg+5dgt)$	
-58.0°F ÷ 1111.8°F	0.1°F	$\pm(2.0\%rdg+5.4dgt)$	
1112F ÷ 1400°F	1°F	$\pm(2.0\%rdg+9dgt)$	

(\*) Accuracy of type K probe not considered




## 2. GENERAL SPECIFICATIONS

### Mechanical characteristics

Size (L x W x H):	220 x 81 x 42mm
Weight (including battery):	320g
Max conductor size:	30mm
Mechanical protection:	IP40

### Supply

Battery type:	3x1.5V batteries type AAA LR03
Battery life:	ca 40 hours (backlight ON), ca 240 hours (backlight OFF)
Low battery indication:	“  ” symbol is displayed
Auto Power OFF:	after 15 minutes of idleness (disabled)

### Display

Characteristics:	4 LCD (max 6000 counts), sign, decimal point, backlight
Sample rate:	3 times/sec
Conversion mode:	TRMS

### Climatic conditions

Reference temperature:	18°C ÷ 28°C
Operating temperature:	0°C ÷ 40°C
Operating humidity:	<75%RH
Storage temperature:	-10°C ÷ 50°C
Storage humidity:	<75%RH

### Reference guidelines

Safety:	IEC/EN61010-1, IEC61010-2-032, IEC61010-2-033
EMC:	IEC/EN61326-1
Insulation:	double insulation
Pollution level:	2
For inside use, max height:	2000m
Measurement category:	CAT III 600V to ground

**This instrument satisfies the requirements of Low Voltage Directive 2014/35/EU (LVD)  
and of EMC Directive 2014/30/EU  
This instrument satisfies the requirements of 2011/65/EU (RoHS) directive  
and 2012/19/EU (WEEE) directive**