

#### DC/AC TRMS professional clamp meter 1000A in Autorange

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# 1. ELECTRICAL SPECIFICATIONS

Accuracy is indicated as [% rdg + dgt]. It is referred to the following reference conditions: 23°C ± 5°C with RH < 75%.

DC Voltage					
Range	Resolution Accuracy		Input impedance	Overload protection	
0 – 400.0V	0.1V	1/0.70/ rdg 1.2 dgt)	1MO 11005F	1000V DC	
400 - 1000V	1V	$\pm$ (0.7% rdg + 2 dgt)	1MΩ, <100pF	750Vrms AC	

Readings less than 10% of full scale: add  $\pm$  4 dgt to accuracy

AC Voltage TRMS					
Range	Resolution	Accuracy	Input impedance	Frequency range	Overload protection
0 – 400.0V	0.1V	±(1.0% rdg + 5 dgt)	1MΩ,	50 - 500Hz	1000V DC
400 - 750V	1V		<100pF	50 - 500HZ	750Vrms AC

Readings less than 15% of full scale: add  $\pm$  4 dgt to accuracy. Readings more than 80% of full scale: add 1.6% to accuracy.

For non-sine wave measuring add to accuracy the following Crest Factor corrections:

- $\pm\,1.0\%$  for CF between 1.4 and 2.0
- $\pm\,2.5\%$  for CF between 2.0 and 2.5
- $\pm$  4.0% for CF between 2.5 and 3.0.

AC Current TRMS						
Range	Resolution	Accuracy Frequency range		Overload protection		
0 – 200.0A	0.1A	$\pm$ (1.9% rdg + 3A)	50 - 400Hz	1000Arms		
200.0 - 400.0A	0.14	±(1.9% rdg + 2A)	30 - 400i iz			
400 – 1000A	1A	±(2.9% rdg + 5A)	50 - 200Hz			

Readings less than 10% of full scale: add  $\pm$  4 dgt to accuracy.

For non-sine wave measuring add to accuracy the following Crest Factor corrections:

- $\pm$  1.0% for CF between 1.4 and 2.0
- $\pm$  2.5% for CF between 2.0 and 2.5
- $\pm$  4.0% for CF between 2.5 and 3.0.

Position error: ± 1.0%.

DC Current			
Range	Resolution	Accuracy	Overload protection
0 – 200.0A	0.1A	$\pm$ (2.9% rdg + 3A)	
200.0 – 400.0A	0.17	±(1.9% rdg + 2A)	1000Arms
400 – 1000A	1A	$\pm (2.9\% \text{ rdg} + 5A)$	

Position error: ± 1.0%

Resistance				
Range	Resolution	Accuracy	Buzzer	Overload protection
$0 - 400.0\Omega$	0.1Ω	±(1.0% rdg + 3 dgt)	≤ 30Ω	600Vrms AC

Max open voltage: 3V

	Frequency (from clamp jaw)					
I	Range	Resolution	Accuracy	Input	Overload protection	
	20 - 400Hz	1Hz	±(0.1%rdg + 2 dgt)	3 – 1000 A	1000Arms AC	



## HT7021

Rel. 1.02 of 06/06/08

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### 2. GENERAL SPECIFICATIONS

**Mechanical characteristics** 

Size: 275(L) x 90(La) x 51(H)mm

Weight (including battery): about 420g
Jaws opening: 53mm
Max conductor size: 51mm

Supply

Battery type: 1 battery 9V NEDA 1604 IEC 6F22 JIS 006P.
Low battery indication: "FT" is displayed when the battery level is too low.

Battery life: about 200 hours.

AutoPowerOff: About 30 minutes after power-on

**Display** 

Characteristics: 3¾ LCD (max 4000 counts), decimal point, unit symbol

indication, bargraph and backlight.

Sample rate: 1.5 times/sec.

Conversion mode: TRMS.

**Special function** 

Analog Bargraph Continuity Beeper

Data Hold

Peak Hold (10ms) Min Max Function Auto Power off DCA Zeroing Key

**Climatic conditions** 

Reference temperature: $23^{\circ} \pm 5^{\circ}$ COperating temperature: $0 \div 40^{\circ}$ COperating humidity:< 75% RHStorage temperature: $-20 \div 60^{\circ}$ CStorage humidity:< 80% RH

Temperature coefficient:: <0.2 x Specified accuracy /°C, <18°C, > 28°C

Reference standards

Comply with: EN 61010-1

Insulation: Class 2, Double insulation

Pollution: Level 2 For inside use, max height: 2000m

Installation category: CAT IV 600V, CAT III 1000V between inputs,

CAT IV 600V, CAT III 1000V to the ground

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





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