

# Clamp Meter



CAT III 1000V  
CAT IV 600V

## Features

- ◆ Motor Inrush Current measurement
- ◆ Check 3 $\phi$  phase sequence
- ◆ Variable-frequency drive (VFD) V & Hz measurement.
- ◆ Lo-Z voltage measurement to drain ghost voltages.
- ◆ Crest Factor & Harmonic ratio measurement. (3901)
- ◆ True RMS reading on AC and DC+AC mode. (3901)

## TES-3900 / 3901 Clamp Meter (1000A)

- ◆  $\mu$ A measurement for HVAC flame sensors (3901)
- ◆ mV measurement range to interface with other accessories (3901)
- ◆ Data Hold, Auto hold & Peak hold mode
- ◆ Max / Min record mode
- ◆ Data memory & read function (10 readings)

### AC Current (50Hz to 400Hz) :

Range	Resolution	Accuracy	Sensitivity
99.99A	10mA	$\pm 2\% \pm 20$ dgts (50, 60Hz)	0.10A
999.9A	100mA	$\pm 4\% \pm 20$ dgts (40 to 400Hz)	1.0A

### ACA Inrush Current :

Range	Resolution	Sensitivity	Measurement Time
99.99A	0.01A	>5A	100mS
999.9A	0.1A	>50A	

### $\mu$ ATrms : (AC+DC) (Burden Voltage : 5mV/ $\mu$ A) (3901)

Range	Resolution	Accuracy	Sensitivity
99.99 $\mu$ A	10nA	$\pm 1\% \pm 20$ dgts	0.20 $\mu$ A
999.9 $\mu$ A	A100nA		2.0 $\mu$ A

### AC Voltage (50Hz to 400Hz) :

Range	Resolution	Accuracy	Sensitivity
999.9mV	0.1mV	$\pm 1\% \pm 20$ dgts (50, 60Hz)	2.0mV
9.999V	1mV	$\pm 2\% \pm 20$ dgts (40 to 400Hz)	0.020V
99.99V	10mV		0.20V
600.0V	100mV		2V

### DC Voltage :

Range	Resolution	Accuracy	Sensitivity
999.9mV	0.1mV	$\pm 1\% \pm 20$ dgts	2.0mV
9.999V	1mV		0.020V
99.99V	10mV		0.20V
600.0V	100mV		2V

### Resistance (Continuity<40 $\Omega$ on the 999.9 $\Omega$ range) :

Range	Resolution	Accuracy	Overload Protection
999.9 $\Omega$	100m $\Omega$	$\pm 1\% \pm 10$ dgts	1000V
9.999K $\Omega$	1 $\Omega$		
99.99K $\Omega$	10 $\Omega$		
999.9K $\Omega$	100 $\Omega$		

### 3 $\phi$ Phase sequence indication :

Range	Frequency Response	Overload Protection
80V to 480V	50Hz / 60Hz	1000V

### Diode (Continuity<40mV) :

Range	Resolution	Accuracy	Overload Protection
3.000V	1mV	$\pm 2\% \pm 1$ dgts	1000V

### Frequency :

Range	Resolution	Accuracy	Sensitivity
40Hz/1KHz	0.1Hz	$\pm 0.5\%$ rdg $\pm 2$ dgts	ACV>1.2V, ACA>6A



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## Features

- ◆ Variable-frequency drive (VFD) V & Hz measurement.
- ◆ Lo-Z voltage measurement to drain ghost voltages.
- ◆ Check 3 $\phi$  phase sequence.
- ◆ True RMS reading on AC and DC+AC mode.
- ◆ Inrush current measurement.
- ◆  $\mu$ A measurement for HVAC flame sensors.
- ◆ mV measurement range to interface with other accessories.
- ◆ Crest Factor & Harmonic ratio measurement.

## TES-3910 Trms Clamp Meter (DC/AC 1000A)

- ◆ Data hold, Auto hold & Peak hold mode.
- ◆ Max/Min/Avg record mode.
- ◆ Data memory & read function.

### AC Current (40Hz to 400Hz) : $\sqrt{VFD}$ Trms

Range	Resolution	Accuracy	Sensitivity
99.99A	10mA	$\pm 2\% \pm 20$ dgts (50, 60Hz)	> 0.25A
999.9A	100mA	$\pm 4\% \pm 20$ dgts (40 to 400Hz)	> 2.5A

Overload Protection : 1000A

### DC Current :

Range	Resolution	Accuracy	Sensitivity
99.99A	10mA	$\pm 2\% \pm 20$ dgts	> 0.25A
999.9A	100mA		> 2.5A

Overload Protection : 1000A

### ACA Inrush Current : $\sqrt{VFD}$ Trms

Range	Resolution	Sensitivity	Measurement Time
99.99A	0.01A	>5A	100mS
999.9A	0.1A	>50A	

Overload Protection : 1000AAC

### DC $\mu$ A : (Burden Voltage : 3.6mV/ $\mu$ A)

Range	Resolution	Accuracy	Sensitivity
99.99 $\mu$ A	10nA	$\pm 1\% \pm 20$ dgts	> 0.30 $\mu$ A
999.9 $\mu$ A	A100nA		> 3.0 $\mu$ A

Overload Protection : 1000AAC

### AC $\mu$ A : $\sqrt{VFD}$ Trms (Burden Voltage : 3.6mV/ $\mu$ A)

Range	Resolution	Accuracy	Sensitivity
99.99 $\mu$ A	10nA	$\pm 1\% \pm 10$ dgts (50, 60Hz)	> 0.30 $\mu$ A
999.9 $\mu$ A	100nA	$\pm 2\% \pm 10$ dgts (40~400Hz)	> 3.0 $\mu$ A

Overload Protection : 1000AAC

### AC Voltage (40Hz to 400Hz) : $\sqrt{VFD}$ Trms

Range	Resolution	Accuracy	Sensitivity
999.9mV	0.1mV	$\pm 1\% \pm 10$ dgts (50, 60Hz)	> 2mV
9.999V	1mV	$\pm 2\% \pm 10$ dgts (40~400Hz)	> 20mV
99.99V	10mV	40~300Hz on mV range >2mV	> 200mV
999.9V	100mV		> 2V

Overload Protection : 1000V

### DC Voltage :

Range	Resolution	Accuracy	Sensitivity
999.9mV	0.1mV	$\pm 1\% \pm 20$ dgts	> 2mV
9.999V	1mV		> 20mV
99.99V	10mV		> 200mV
999.9V	100mV		> 2V

### Resistance (Continuity<40 $\Omega$ on the $\rightarrow$ range) :

Range	Resolution	Accuracy	Overload Protection
999.9 $\Omega$	100m $\Omega$	$\pm 1\% \pm 10$ dgts	1000V
9.999K $\Omega$	1 $\Omega$		
99.99K $\Omega$	10 $\Omega$		
999.9K $\Omega$	100 $\Omega$		

### 3 $\phi$ Phase sequence indication :

Range	Frequency Response	Overload Protection
80V to 480V	50Hz / 60Hz	1000V

### Diode (Continuity<40mV) :

Range	Resolution	Accuracy	Overload Protection
3.000V	1mV	$\pm 1\% \pm 10$ dgts	1000V

### Frequency :

Range	Resolution	Accuracy	Sensitivity
40Hz/1KHz	0.1Hz	$\pm 0.5\%$ rdg $\pm 2$ dgts	V > 5% range $\mu$ A, A > 30%