



PHT 4545

## AC Clamp-On Power and Harmonics Tester

### Power Analysis

- W, KW, HP, VA, KVA, VAR, KVAR ● PF, Phase Angle ( $\Phi$ ) ● Energy (WH, KWH)
- Balanced 3 $\Phi$  Power Quality ● Balanced 3 $\Phi$  Sequence ● Programmable CT Ratio (1 to 250) ● Dual Displays (W+PF, VA+KVAR...)
- Active Power in HP ● Resistance and Continuity with Beeper

### Harmonic Analysis

- True RMS value (V and A) at 0.5% basic accuracy ● 1500A AC ● Harmonic Analysis (V and A) to the 99th Order in % and in magnitude ● Better Understanding of High Frequency Harmonic Analysis (up to 5/6 KHz) ● Non-interrupted Harmonic Analysis ● Analysis of Total Harmonic Distortion (%THD-F) ● Analysis of Crest Factor (C.F.) ● Fast Peak Function (33 $\mu$ s for 60Hz and 39 $\mu$ s for 50Hz)
- Maximum and Data Hold Function

### General Specifications

<b>Conductor Size</b>	: 55mm (approx.), 64 X 24mm (Bus Bar)
<b>Battery Type</b>	: 1.5V SUM-3
<b>Display</b>	: 4+4 digits LCD
<b>Auto-Power-Off</b>	: 30 minutes
<b>LCD update rate</b>	: 2 times / sec.
<b>Operating Temperature</b>	: -10°C to 50°C
<b>Storage Temperature</b>	: -20°C to 60°C
<b>Option</b>	: alligator clips
<b>Power Consumption</b>	: 10mA (approx.)
<b>No. of Samples/Period</b>	: 512 (V & A), 256 (W)
<b>Operating Humidity</b>	: < 85% relative
<b>Storage Humidity</b>	: < 75% relative
<b>Weight</b>	: 640gm (battery included)
<b>Dimension</b>	: 210(L) x 62(W) x 35.6mm(H)
<b>Accessories</b>	: Test Leads, Carry Bag, Users Manual, Batteries 1.5V x 2 (installed)

### Specifications (23°C $\pm$ 5°C)

#### Harmonics of AC Current in % & Magnitude (1 - 99th order)

Range	Resolution in %	Accuracy in %	Accuracy in Magnitude
1 - 20th	0.1%	$\pm 2\%$	$\pm 2\%$ of reading $\pm 0.4A$
21 - 49th		4% of reading $\pm 2.0\%$	$\pm 4\%$ of reading $\pm 0.4A$
50 - 99th		6% of reading $\pm 2.0\%$	$\pm 6\%$ of reading $\pm 0.4A$

#### Harmonics of AC Voltage in % & Magnitude (1 - 99th order)

Range	Resolution in %	Accuracy in %	Accuracy in Magnitude
1 - 20th	0.1%	$\pm 2\%$	$\pm 2\%$ of reading $\pm 0.5V$
21 - 49th		4% of reading $\pm 2.0\%$	$\pm 4\%$ of reading $\pm 0.5V$
50 - 99th		6% of reading $\pm 2.0\%$	$\pm 6\%$ of reading $\pm 0.5V$

#### Crest Factor (C.F., Accuracy of Readings)

Range	Resolution	Accuracy
1.00 - 99.99	0.01	$\pm 5\% \pm 30$ dgt

#### AC Watt (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
10.0 - 999.9W	0.1W	$\pm 1\% \pm 20$ dgt ( $> 20V$ & $> 20A$ )
1.000 - 9.999KW	0.001KW	
10.00 - 99.99KW	0.01KW	$\pm 2\% \pm 40$ dgt ( $< 20V$ & $< 20A$ )
100.0 - 999.9KW	0.1KW	
1000 - 9999KW	1KW	

#### Power Factor & Phase Angle

Range	Resolution	Accuracy
0.000 - 1.000	0.001	$\pm 0.1$
-180 - 180° & 0 - 360°	0.1°	$\pm 1$

#### Total Harmonic Distortion (THD-F, 1 to 50th order)

Range	Resolution	Accuracy
0.0 - 20%	0.1%	$\pm 2\%$
20 - 100%	1%	$\pm 6\%$ of reading $\pm 1\%$
100 - 999.9%	0.1%	$\pm 10\%$ of reading $\pm 1\%$

#### AC Current (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
4.0 - 1500.0A	0.01A	$\pm 1.0\% \pm 5$ dgts

#### AC Voltage (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
4.0 - 600.0V	0.1V	$\pm 0.5\% \pm 5$ dgts

#### AC Voltage (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
4.0 - 600.0V	0.1V	$\pm 0.5\% \pm 5$ dgts

#### Resistance ( $\Omega$ ) and Continuity (Beep if less than 50 $\Omega$ )

Range	Resolution	Accuracy
* 7.0 - 999.9 $\Omega$	0.1 $\Omega$	$\pm 5\Omega$
1000 - 1200 $\Omega$	1 $\Omega$	

\* If reading is less than 7 $\Omega$ , it is displayed as 0 $\Omega$