AC Clamp-On Power & Harmonics Tester

PHT 4545

Power Analysis

● W, KW, HP, VA, KVA, VAR, KVAR ● PF, Phase Angle (Φ) ● Energy (WH, KWH) ● Balanced 3Phase Power Quality ● Balanced 3Phase 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 (33µs for 60Hz and 39µs for 50Hz) ● Max, Min and Data Hold Function

General Specifications

Jaw Opening	: Cable Dia 55mm (approx.), 64 x 24mm (Bus Bar)
Battery Type	: 1.5V SUM-3 x 2
Display	: 4 + 4 digits LCD
Auto-Power-Off	: 30 minutes
LCD update rate	: 2 times / sec.
Operating Temperature	: -10°C to 50°C
Storage Temperature	: -20°C to 60°C
Option	: alligator clips
Power Consumption	: 10mA (approx.)
No. of Samples/Period	: 512 (V & A), 256 (W)
Operating Humidity	: < 85% relative
Storage Humidity	: < 75% relative
Weight	: 650gms Including Battery (approx.)
Dimension	: 271 x 112 x 46 mm
Accessories	: Test Leads, Carry Bag, Users Manual, Batteries (installed)

Specifications (23°C ± 5°C)

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

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

Harmonics of AC Voltage in % & Magnitude

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

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

Range	Resolution	Accuracy
1.00 - 99.99	0.01	± 5% ± 30 dgt

AC Watt (50 or 60Hz)

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

AC Current (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
10.0 to 1500.0A	0.1A	±2% ±5 dgts

AC Voltage (50 or 60Hz, True RMS)

Range	Resolution	Accuracy
10.0 to 600.0V	0.1V	±0.5% ±5 dgts

Power Factor & Phase Angle

Range	Resolution	Accuracy
0.000 - 1.000	0.001	±0.04
-180°to180° & 0°to360°	0.1°	± 2°

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

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

Resistance (Ω) and Continuity (Beep if less than 50Ω)

Range	Resolution	Accuracy
* 7.0 - 999.9Ω	0.1Ω	± 5Ω
1000 - 1200Ω	1Ω	

* If reading is less than 7Ω, it is displayed as 0Ω