DIGITAL HARMONICS TESTER

Model HWT-301

Harmonics measurements on current and voltage for the electric line

- The best monitor for determining harmonic distortion levels in the field use.
- Measures harmonics voltage and harmonics current flow up to the 25th harmonic.
- Measures leakage current, load current, voltage with true rms reading.
- Small size, light weight, low cost.
- Easy to use with clamp-on operation.

DIGITAL HARMONICS TESTER

Model HWT-301

SPECIFICATIONS

General Specification

Measuring method	: Dual integration mode with true rms reading
Measuring function	: Load current, leakage current, harmonics current, voltage, harmonics voltage, resistance
Safety standard	: Meets the requirements for double insulation to IEC 1010-2-032, IEC 1010-1 (1995), EN61010-1(1995) installation CategoryII 600V phase to earth, CategoryIII 300V phase to earth.
E.M.C. standard	: The instrument meets EN 50081-1 and EN 50082-1 (1992).
Affection of magnetic fields	: Less than 3mA (100A nearby conductor)
Display	: 3 3/4 digit LCD, max. reading of 4000
Input frequency	: 45Hz~65Hz
Sampling time	: 2 times/s
Over range indication	: "OL" mark on LCD readout
Low battery indication	: "⊟" mark on LCD readout
Data hold indication	: "DH" mark on LCD readout
Jaw opening capability	: 40mm ϕ
Withstanding voltage	: AC 3700V/1 minute max. (Between the core of CT and outer case)
Operating temperature	: 0℃±40℃, <80%RH (Non-condensing)
Storage temperature	: -10℃~60℃, <70%RH (Non-condensing)
Power supply	: 1.5V ("AAA" size, R03)×3
Power consumption	: Approx. 13mA
Auto power off	: The meter is set to power off mode at approx. 20 minutes after the power switch on.
Battery life	: Approx. 50 hours continuous (By manganese battery)
Size	: 70(W)×223(H)×34(D)mm
Weight	: Approx. 440g
Accessories	: Batteries ·····3 Carrying case·····1 Instruction manual·····1

Measuring Ranges

Note : Electrical characteristic (18℃ ~ 28℃, 80%RH max)

All pass mode

AC Current (True rms)

Range	Resolution	Accuracy
400mA	0.1mA	±1.0% rdg ±8dgt
4A	1mA	
40A	10mA	
300A	100mA	±1.0% rdg ±1% of full scale

AC Voltage (True rms)

Range	Resolution	Accuracy	Input impedance	Max. input voltage
400mV	0.1mV	±1.0% rdg ±8dgt	>10MΩ	AC 250V rms
400V	100mV			AC 450V rms

Resistance

Range	Resolution	Accuracy	Max. test current	Open circuit voltage
4000Ω	1Ω	±1.0% rdg ±8dgt	70μA	1.5V

※Input protection : 400V rms

Harmonics Mode

Measuring method : Synchronous filter
Measurable harmonics : Fundamental frequency to 25th harmonics.
Minimum fundamental input : More than 5% of full scale in each range.

Harmonics	Accuracy (In case of more than 4% harmonics are included against fundamental input)
1~9th	(±1% rdg ±5dgt)±(Basic accuracy of ACA or ACV)−(Error by neighboring harmonics)
10~19th	(±2% rdg ±5dgt)±(Basic accuracy of ACA or ACV)−(Error by neighboring harmonics)
20~25th	(±5% rdg ±5dgt)±(Basic accuracy of ACA or ACV)−(Error by neighboring harmonics)