

3 PHASE TRMS POWER CLAMP METER WITH HARMONICS & INRUSH CURRENT MEASUREMENT

11 FUNCTIONS 10 RANGES
Model 2745



FEATURES :

- Power measurement of Active power (KW), Reactive power (KVAR), Apparent Power (KVA), Power Factor (PF) for 3 4W, 3 3W, 1 2W, 1 3W
- Useful for Energy Audit & Harmonics Analysis.
- Harmonic measurement (level, percentage & THD%)
- Triple display : KW, V, A easy to read
- PF(Cos ϕ) for 3 4W, 3 3W, 1 2W, 1 3W
- Records each phase parameters of V, A, KW, KVA KVAR, PF, HZ, total 25 parameters
- AC current up to 1000 A, AC voltage up to 600V
- INRUSH (100mS), HOLD and Peak functions
- MAX and MIN recorded functions
- Balanced load system function
- Auto power off(10 mins)

SAFETY :

- According to EN 61010-1 Protection class II • Over voltage Category : CAT III 600V • Pollution Degree : 2

GENERAL SPECIFICATIONS

- * Sensing : True RMS Sensing
- * Jaw Opening Size : 46.5 mm
- * Display : 4 digit L.C.D with a maximum reading 9999
- * Over range indication : (OL) or (- OL) is displayed
- * Low Battery Indication : The " ⊕ " sign is displayed when the battery voltage drops below the operating level.
- * Power : Single 9 V Battery.
- * Battery Life : approx. 50 hours typical
- * Dimension : 250 (H) x 100 (W) x 46 (D)mm
- * Measurement rate: 1 times per second nominal.
- * Operating Temperature : 0°C to 40°C, < 70 % R.H.
- * Storage Temperature : - 20° C to 60° C, 0 to 80 % RH with battery removed from meter.
- * Temperature Coefficient : 10 % of applicable accuracy per°C (5 % per ° F) outside the range of 18 - 28° C (65° F - 82° F).
- * Altitude : Upto 2000m.
- * Weight : Approx (350 grams)Including battery.

ACCESSORIES :

Test leads (pair), Battery installed, User's Manual & Carrying case.

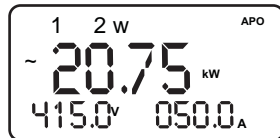
SAFETY :

EMC : EN61000-6-3 : 2001+A11 : 2004 CISPR 22 : 1997+A1 : 2000+A2 : 2002 Class B,
EN61000-6-1 : 2001, IEC61000-4-2 : 1995+A1 : 1998+A2 : 2000,
IEC61000-4-3 : 2002, IEC61000-4-8 : 1993+A1 : 2000
EMCDirective 89/336/EEC as amended by Directives 92/31/EEC and 93/68/EEC within CE marking requirement.

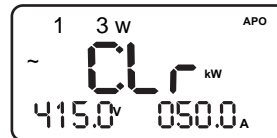
DISPLAYS OF MEASUREMENTS



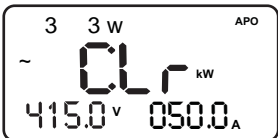
V_L



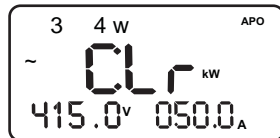
1 2W



1 3W



3 3W



3 4W



PF



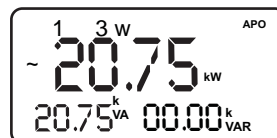
A_L



H-A



H-V



VM

Accuracy is \pm (% reading digits + number of digits) or otherwise specified at $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$ & less than 75% R.H.

Power Measurement Accuracy

Based on sine wave input, power factor=1, 50 Hz/60Hz
Effective Range : 4A to 1000A; 80V to 600V.

Active Power(KW)

Range : 0.00 to 600.0 KW
Resolution : 0.01 KW
Accuracy : \pm (2.0% rdg + 5 dgts)

Apparent Power(KVA)

Range: 0.00 to 600.0 KVA
Resolution: 0.01 KVA
Accuracy: \pm (2.0% rdg + 5dgts)
Reactive power and power factor values obtained by calculation from active power, current and voltage measurements.

Reactive Power (KVAR)

Range: 0.00 to 600.0 KVAR
Resolution: 0.01 KVAR
Accuracy: \pm (2.0% rdg + 5 dgts)

Power Factor(PF)

Range : -1.000 to 0.000 ; 0.000 to 1.000
Resolution: 0.001
Accuracy : \pm (10% rdg + 0.05) on \pm (0.000+0.200)
 \pm (5.0% rdg + 0.05) on \pm (0.201 to 0.500)
 \pm (3.0% rdg + 0.05) on \pm (0.501 to 1.000)

Frequency

Range : 20.0 to 400.0Hz
Resolution : 0.1Hz
Accuracy : \pm (0.5% rdg + 5dgts)
Sensitivity : Voltage > 5 V rms
Current > 5 A rms on 20 Hz to 100Hz
Current > 10A rms on 100Hz to 400Hz
Overload protection : 600V AC / DC rms

Peak Function (for ACV, ACA)

Range : 5A to 1000A; 5V to 600V
Accuracy : \pm (5% rdg + 10 dgts) @ 45 to 65 Hz

Harmonic Measurement

(Effective in the voltage and current)

Measurement items : Level of each order, percentage of each order and total harmonic distortion (THD-F and THD-R)
Measurement Range : Fundamental frequency 45Hz to 65Hz
Window width : 1 cycle (45 Hz to 65 Hz).

Data Points : 128 points for calculating to obtain the value of harmonics.

Window type : Rectangular

Orders analyzed : up to 25th.

Order	Accuracy
1	\pm (3.0% rdg + 10 dgts)
2 to 6	\pm (3.5% rdg + 10 dgts)
7 to 8	\pm (4.5% rdg + 10 dgts)
9 to 10	\pm (5.0% rdg + 10 dgts)
11 to 15	\pm (7.0% rdg + 10 dgts)
16 to 20	\pm (10% rdg + 10 dgts)
21 to 25	no. Spec.

Harmonic percentage : \pm 2dgts. With respect to calculation from each measured value.

Total harmonic distortion ratio : \pm 2dgts. With respect to calculation from each measured value.

AC Current (True RMS)

Range: 0.0 to 1000 A
Resolution: 0.1 A
Accuracy : \pm (1.5% rdg + 10 dgts) on 50 Hz to 60 Hz
 \pm (6% rdg + 10 dgts) on 45 Hz to 400 Hz
Effective measurement : 2A to 1000A

Crest Factor : <2.5 @ 0 to 100A; < 1.5 @ 100 to 1000 A

Overload Protection : 1000AAC max. For 1 minute.
Accuracy at the center of CT.

AC Voltage(True RMS)

Range : 0.0 to 600.0V
Resolution : 0.1V
Accuracy: \pm (1% rdg + 5 dgts) on 20 Hz to 100Hz
 \pm (6% rdg + 5 dgts) on 100 Hz to 400Hz

Input impedance : 1M

Effective measurement : 2V to 600 V

Crest Factor : <2.3 @ 0 to 50V; < 1.8 @ 50 to 600 V

Overload Protection : 650 V AC / DC rms

All Specifications are subject to change without prior notice