# POWER MEASUREMENT CLAMPMETERS

## 3 PHASE TRMS POWER CLAMPMETER WITH kWHr & TOTAL HARMONICS MEASUREMENT & PC INTERFACE
### Model - 2709

CAT III 600V



6.5KV Transient Protection

- ✶ **Sensing :** TRUE RMS Sensing
- ✶ **Jaw Opening :** 45mm
- ✶ **Display :** Voltage Function : 6000 counts LCD display
  Power, Ohm & Hz Function : 9999 counts LCD
  ACA Clamp-on Function: 4000 counts LCD
- ✶ **Update Rate :** 2/second

✶ **FUNCTIONS :**

- **AC Current (Clamp-on)(50Hz ~ 3.1kHz) :** 1000A.
- **AC Voltage (50Hz ~ 3.1kHz) :** 600.0V
- **DC Voltage :** 600.0V
- **Resistance :** 999.9Ω
- **Frequency :** 5Hz ~ 500Hz
- **Single & 3 Phase Balance Load Power :** 0 ~ 600.0KVA; 0 ~ 600.0kW/kVAR
- **THD%-F :** 0.0% ~ 450%
- **Total Power Factor (PF) :** 0.10 ~ 0.99
- **kWHr recording function.**
- **3-phase unbalanced load power**

✶ **SAFETY :**

- Double insulation per IEC/UL/EN61010-1 Ed. 3.0, IEC/EN61010-2-032 Ed. 3.0, IEC/EN61010-2-033 Ed. 1.0 IEC/UL/EN61010-031 Ed.1.1& CAN/CSA C22.2 No.61010-1-12 ED. 3.0: CAT III 600V AC & DC
- EMC: Meets EN61326-1:2006
- Pollution degree : 2

✶ **ADDITIONAL FUNCTIONS :**

- Selectable Power Parameters of W, VAR & VA with Total Power Factor in dual-display.
- kWHr Recording.
- Total Harmonics distortion THD%-F in dual display.
- Display Hold & PEAK-rms Hold Function.
- Backlight display.
- A-LAGS-V Indication.
- 3 Phase Unbalanced Load Power.
- PC-comm computer interface capabilities (Optional)
- Low Battery Indication(2.4V approx.) & Auto Power Off.
- Continuity Test.

- ✶ **Power supply :** Standared 1.5V AAA battery x 2.
- ✶ **Dimension :** Approx. 224(L) x 78(W) x 40(H) mm
- ✶ **Weight :** Approx. 224 gm. (including battery)
- ✶ **Accessories :** Test leads (pair), Battery, User's manual & Carrying case.
- ✶ **Optional Accessories :** PC interface kit BR157 (Including BA-1xx cable, BUA-2303 USB to serial adaptor, BC-100R USB port cable & software cd.)

## AC & AC+DC TRMS DIGITAL POWER CLAMP-ON MULTIMETER
### Model - KM 099

1ϕ & 3ϕ Balanced Load Power

CAT III 1000V
CAT IV 600V
AC & DC



8KV Transient Protection

- ✶ **Sensing :** AC & AC+DC TRUE RMS Sensing
- ✶ **Jaw Opening :** 51mm
- ✶ **Display :** 9999 counts + 999 counts Dual Backlight LCD Display
- ✶ **Update Rate :** 2/second

✶ **FUNCTIONS :**

- **DC Current & AC+DC Current (Clamp-on) :** 999.9A.
- **AmpTip DC Current (Clamp-on) :** 40.00A.
- **AC Current (Clamp-on) :** 999.9A.
- **AmpTip AC Current & AC+DC Current (Clamp-on) :** 40.00A.
- **AC Voltage (with low-pass filter) :** 999.9V
- **DC Voltage & AC + DC Voltage :** 999.9V
- **Resistance :** 6.000KΩ
- **Capacitance :** 10.0µF ~ 999.9µF
- **Temperature :** -40.0°C ~ 400.0°C(K-thermocouple)
- **Hz Line Level Frequency :** 40.00Hz ~ 70.00Hz
- **Non-Contact EF-Detection**
- **AC + DC power (VA)**

✶ **SAFETY :**

- Double insulation per IEC/UL/EN/BSEN 61010-1Ed. 3.1,IEC/UL/EN/BSEN 61010-2-032 Ed. 4.0,IEC/UL/EN/BSEN 61010-031 Ed. 2.0 & the corresponding CAN/CSA-C22.2 regulations to Measurement Categories III 1000V AC & DC and Category IV 600V AC & DC
- EMC : Meets EN61326-1:2013
- Pollution degree : 2

✶ **ADDITIONAL FUNCTIONS :**

- Power Parameters W, KW, VA, kVA, Var, kVar & P.F.
- Total Harmonics distortion THD%-F 2% ~ 600%
- Total distortion Factor-DF% 2% ~ 100%
- MAX / MIN Record mode
- Relative Zero mode
- Display Hold Function
- Flashlight & Backlight LCD display.
- Single-Phase & 3-Phase Balanced-Load Power.
- Low Battery Indication & Auto Power Off 30 minutes..
- Diode Test & Continuity Test.

- ✶ **Power supply :** Standared 1.5V AA (IEC LR6) battery x 2.
- ✶ **Dimension :** Approx. 258(L) x 94(W) x 44(H) mm
- ✶ **Weight :** Approx. 400 gm. (including battery)
- ✶ **Accessories :** Test leads (pair), Battery, User's manual BKP 60 K-Type Thermocouple & Carrying case.

## 1 PHASE & 3 PHASE TRMS POWER HARMONICS CLAMPMETER WITH PC INTERFACE
### Model - KM 2746

CAT II 1000V
CAT III 600V



- ✶ **Sensing :** TRUE RMS Sensing
- ✶ **Jaw Opening :** Φ 55mm
- ✶ **Display :** 4 digit 6000 counts LCD Backlight display for displaying measurement operation function, test result & unit sign.

✶ **FUNCTIONS :**

- **AC Current :** 0.01A ~ 1000A. (6 ranges)
- **AC Voltage :** 0.1V ~ 600.0V (4 ranges)
- **Single-phase active power :** 0.01kW ~ 600kW(6 ranges)
- **Three phase apparent power :** 0.001kVA ~ 600kVA
- **Frequency :** 30Hz ~ 1KHz.
- **Power Factor :** 0.3 ~ 1 Capacitive; 0.3 ~ 1 Inductive
- **Passive Power :** 0.001kVAr ~ 600kVAr (6 ranges)
- **Harmonics :** 1 ~ 20 the 1 harmonic

✶ **SAFETY :**

- IEC/EN 61010-1, CAT III 600V & CAT II 1000V

✶ **ADDITIONAL FUNCTIONS :**

- Fully automatic range selection
- Data Hold Function
- Over range display "OL"
- Backlight Display
- MAX/MIN Record mode
- Data Storage : 100 groups fo test parameters
- Operating Altitude : upto 2000m
- Store Altitude : 12000m
- Electromagnetic Compatibility : In an RF field of 3V/M,
- PC-comm computer interface capabilities RS-232
- Low Battery Indication
- Auto Power Off : 10 minutes.

- ✶ **Power supply :** 1.5V AA battery x 4.
- ✶ **Dimension :** Approx. 300(L) x 103(W) x 51(H) mm
- ✶ **Weight :** Approx. 500 gm. (including battery)
- ✶ **Accessories :** Test leads, Test Clip, Battery installed, Software CD, User's manual & Carrying case.