DIGITAL MICROPROCESSOR TRMS POWER METER + HARMONICS ANALYSER

Model - KM 8100 C

**SPECIFICATIONS:**

**INPUT:**
- **Input Voltage Range:**
  - Voltage: 55 ~ 300V AC, or 300 ~ 600V AC, 45 ~ 65Hz.
  - P.T. Ratio Programmable upto 9999 / KV.
- **Input Voltage Over Range:**
  - Voltage: 200 % Continuous, 300 % of rating for 10 sec.
- **Input Current Range:**
  - Current: 110 % of rating. 0-1A or 0 - 5A
  - C.T. Ratio Programmable upto 9999 / 5A.
- **Input Current Over Range:**
  - Current: 400 % Continuous, 2000 % of rating for 10 Sec.
- **Input Frequency:** 45 Hz ~ 70 Hz.
- **Input Burden:**
  - Voltage 0.25 VA / Unit, Current 0.25VA / Unit, at 50 / 60Hz.

**OUTPUT**
- **DC Current:** 0 - 20 mA DC
- **Load resistance drive:** output drive 10 V DC maximum.
- **DC Voltage:** 0 - 10 V DC
- **Load resistance drive:** output drive 5mA maximum
- **Output Protection:** No damage even if output is Open or Short Circuit.
- **Output Response Time:** ≤ 1 Sec.
- **Digital Output:** RS485 Output, Isolate Type with MODBUS RTU mode, 4800, 9600, 19200 Baud Rate, User Selectable.

**PERFORMANCE:**
- **Accuracy:**
  - V, A, W, = ± 0.2 % Fs + 2C at 23°C ± 3°C.
  - Var, WH, VarH, PF, Hz = ± 0.4 % rdg + 2 Count,
    - THD = ± 2% at 23°C ± 3°C.
- **Display Range:**
  - 0.56” Super RED LED 4 Digits = 0 ~ 9999 Counts, PT, CT User Selectable
  - 0.36” Super Red LED, 7 Digits = 0 ~ 9999999 Counts.
- **Response Time:** ≤ 1 Sec.
- **Memory Capacity:** 10 Years Power Off Memory for set data.
- **Dielectric Strength:** AC 2.8KV / Min, Input / Power / Case, as per DIN IEC 688.
- **Impulse:** 6KV 1.2 x 50 µS, ANSI C37.90a/1983 ; DIN IEC 1000.4 - 5, 4 - 4.
- **Stability:** ≤ 0.2 % / Year
- **Operation Condition:** -10°C ~ + 55°C; 20 ~ 95 % RH Non-Condensed.
- **Storage Condition:** - 40°C ~ + 75°C; 20 ~ 95 % RH Non-Condensed.
- **Power Supply:** AC 85 ~ 265V and DC 100 ~ 300V ; 24V DC (optional)
- **Mounting:** Panel Flush Mounting.

**UNIQUE FEATURES:**
- Displays 12 parameters simultaneously:
  - 3V, 3A, W,Var, WH, VarH, PF, Hz
- **Applicable Standard:** DIN IEC 688
- **Suitable for:**
  - 1 φ 2 W; 1 φ 3 W; 3 φ 3 W;
  - 3 φ 4 W systems
- **10 Years Power - Off Memory for set data**
- **With RS-485 Modbus Output**
- **Software for Load & Harmonics Analysis** (optional)
- **Harmonics:**
  - Analyses Voltage & Current Harmonics upto 31st Harmonics.
  - Displays Voltage & Current Harmonics Upto 15th Harmonics.
- **User friendly programming**

**DIMENSION:**

**FRONT VIEW (mm):**
- 280
- 183

**SIDE VIEW:**
- 11
- 103

**CUT OUT:**
- 183
- 171
- 171

In this meter, the 1st page of the instrument displays the 12 Power Parameters (3V, 3A, W, Var, WH, VarH, PF, Hz (12 parameters)).

The 2nd page shows Voltage Harmonics i.e The 1st, 3rd, 5th, 7th, 9th, 11th, 13th & 15th order of harmonics & the % Total Voltage Harmonics.

The 3rd page displays the current Harmonics i.e 1st, 3rd, 5th, 7th, 9th, 11th, 13th, 15th order of harmonics & the percentage of Total Current Harmonics.

All specifications are subject to change without prior notice.