DIGITAL MULTIFUNCTION TRMS POWER METER
MODEL- KM-PM-337C

NEW

Multifunction Power meters is a smart Panel meter suitable for Monitoring Power for use in control panels & control functions in single phase 3wire & single phase systems, 3ϕ 3wire & 3ϕ 4wire systems. It can measure multiple Electrical parameters such as Voltage, Current, Power factor, Harmonics, Power & Energy in R-Y-B phases. It is equipped with Rs485 communication interface through MODBUS-RTU protocol to transfer the electrical parameters real-time transmission to the system data center.



Preliminary Data

✷ GENERAL SPECIFICATIONS :

- **System :** 3P4W 4CT, 3P4W 3CT, 3P3W 3CT, 3P3W 2CT, 1P3W, 1P2W.
- **Application :** Power Analysis, Energy Management.
- **Display :** 4 Digit LCD Display
- **Size :** 96 x 96 mm
- **FUNCTIONS :**
  - **Current Input :** 0 ~ 5A AC (max. 7A)
  - **Measuring Range :** Varies with instrument transformer parameters
  - **Voltage measurement :** 0 - 600V AC phase voltage
  - **Max measurement :** 720V AC phase voltage
- **OUTPUT SIGNAL :**
  - **Relay output :** One electromagnetic relay output, contact capacity: 3A 30V DC, 3A 250V AC
  - **Digital input :** 2 dry contact inputs, optocoupler isolated (5KVrms)
- **COMMUNICATION :**
  - **RS485 :** One RS485 communication interface, Interface Type: two-wire half-duplex Communication rate: 2400bps~115200bps Specification: Modbus-RTU
- **DATA DISPLAY**
  - **Instantaneous Value :**
    - **Phase voltage :** U1,U2,U3,AVG
    - **Line voltage :** U12,U23,U31,AVG
    - **Current :** I1,I2,I3,AVG,In
    - **Grid frequency :** F1,F2,F3,Σ (Total)
    - **Power factor PF :** PF1,PF2,PF3,Σ(Total)
    - **Displacement Power factor DPF :** DPF1, DPF2, DPF3, Σ(Total)
    - **Active power :** P1,P2,P3,Σ(Total)
    - **Reactive power :** Q1,Q2,Q3,Σ(Total)
    - **Apparent power :** S1,S2,S3,Σ(Total)
- **ENERGY :**
  - **Active Energy Import :** EP1, EP2, EP3, Σ(Total) When the total Energy reaches 1.0 x 10^9 kWh, the energy of each phase will automatically clear to zero.
  - **Active Energy Export :** EP1, EP2, EP3, Σ(Total) When the total Energy reaches 1.0 x 10^9 kWh, the energy of each phase will automatically clear to zero.
  - **Reactive Energy Import :** EQ1, EQ2, EQ3, Σ(Total) When the total Energy reaches 1.0 x 10^9 kVARh, the energy of each phase will automatically clear to zero.
  - **Reactive Energy Export :** EQ1, EQ2, EQ3, Σ(Total) When the total Energy reaches 1.0 x 10^9 kVARh, the energy of each phase will automatically clear to zero.
  - **Apparent Energy :** ES1, ES2, ES3, Σ(Total) When the total Energy reaches 1.0 x 10^9 kVAh, the energy of each phase will automatically clear to zero.
  - **Tariff Energy :** ET1, ET2, ET3, ET4, ET5, ET6 When Energy reaches 1.0 x 10^9 kWh, Energy automatically clears to zero.
- **HARMONICS :**
  - **Voltage Harmonic %:** Total harmonics (U1, U2, U3), odd total harmonics (U1, U2, U3), even total harmonics (U1, U2, U3) Fractional harmonics of order 1-50 (U1, U2, U3)
  - **Current Harmonic % :** Total harmonics (I1, I2, I3), odd total harmonics (I1, I2, I3), even total harmonics (I1, I2, I3), K factor (I1, I2, I3) Fractional harmonics of order 1-50 (I1, I2, I3)
  - **Voltage harmonic value :** Total harmonics (U1, U2, U3) Fractional harmonics of order 1-50 (U1, U2, U3)
  - **Current harmonic value :** Total harmonics (U1, U2, U3) Fractional harmonics of order 1-50 (U1, U2, U3)
- **PHASE DIAGRAM**
  - **Phase Sequence:** Voltage, current
  - **Voltage Angle :** U1,U2,U3
  - **Current Angle :** I1, I2, I3
  - **Voltage & Current Angle:** UI1,UI2,UI3
- **DEMAND**
  - **Demand:** Total Active power, Total Reactive power, Total Apparent power
  - **Total Active Power demand max :** Maximum demand and time
  - **Total Reactive Power demand max:** Maximum demand and time
  - **Total Apparent Power demand max:** Maximum demand and time
- **UNBALANCE**
  - **Voltage unbalance:** Negative order, zero order
  - **Current unbalance:** Negative order, zero order
- **MAX.&MIN.**
  - **Phase voltage :** Phases and averages
  - **Line voltage:** Phases and averages
  - **Current :** Phases and averages
  - **Active power :** Phases and averages
  - **Reactive power :** Phases and averages
  - **Apparent power :** Phases and averages
- **ACCURACY**
  - **Current Measurement Accuracy:** 0.1%+Accuracy of current sensor
  - **Voltage measurement accuracy:** ±0.2%(60V~600V AC)
  - **Grid frequency :** ±0.01%(45~65Hz)
  - **Power factor :** ±0.005
  - **Active and apparent power :** IEC62053-22 level 0.5S
  - **Reactive power :** IEC62053-21 level 1S
  - **Active energy :** IEC62053-22 level 0.5S
  - **Reactive energy :** IEC62053-21 level 1S
- **POWER :** 95~265VAC/110~370VDC,45~60Hz ; 3.5VA.