Introduction

The PME-1210 and PME-1230 are multi-function power meter for sub-metering applications, ranging from power distribution, small motor control to lighting load circuit. It measures individual current & voltage, KW, kwh, kvarh, PF and kVAR values. The measurement data can be viewed directly from local display, and also can be transmitted through a RS-485 using the Modbus protocol.

Specifications

Voltage Measurement
- Phase/Wire: 1P3W or 3P3W-2CT or 3P3W-3CT or 3P4W (PME-1230 only)
- Phase Voltage: 80 to 350 V AC
- Line Voltage: 130 to 600 V AC
- Resolution/Accuracy: 0.1 V/0.5% full scale
- Permanent Overload: 450 V AC
- Transient Voltage: 2 x Vin (1sec)

Current Measurement (Std. 5A CT)
- Range: 5 mA – 5 A
- Resolution: 1 mA
- Starting Current: 5 mA
- Permanent Overload: 10 A
- Transient current: 20 x Iin (1sec)
- Accuracy: 0.5% full scale

Power Measurement (total)
- Resolution: 1W (per phase)
- Accuracy: 1% full scale

Energy Measurement (total)
- Display Resolution: 0.1 kWh (Range from 0 to 9,999,999.9kWh)
- Record Resolution: 0.01 kWh (Range from 0 to 9,999,999.99kWh)
- kWh Accuracy: 1% with PF 0.5 ~ 1.0

Frequency Measurement
- Range: 45.0 to 65.0 Hz
- Resolution/Accuracy: 0.1 Hz

PF Measurement
- Range: 0.000 to 1.000
- Resolution: 0.001 (polarized)
- Accuracy: 1% (PF 0.5 – 1.0)

Front Panel Interface
- Display: 6 digit 7 segment LED
- Indicators: 8 LED
- Mode: Display and Setting
- Setting: 3 Function Key, ID address, Baud Rate, PT Ratio, CT Ratio, Phase/Wire.

Communication Interface
- Bus: RS-485, Photo Isolated
- Protocol: Modbus/RTU (format: 8/N/1)
- Baud Rate: 1200/2400/4800/9600
- Meter ID: 0 – 254

Reliability
- Communication: IEC61000-4-4 1kV
- Surge Test: IEC61000-4-5 4kV
- EFT Test: IEC61000-4-4 1kV

AC Insulation
- Aux. Power: 4.0kV
- Current Input: 4.0kV

Power Supply
- AC 110V: 93 – 126 V AC
- AC 220V: 187 – 253 V AC

Physical
- Operating Temperature: -10 ~ 70°C
- Operating Humidity: 0 ~ 90% RH (Non-condensing)
- Storage Humidity: 0 ~ 95% (Non-condensing)
- Weight: 425g (Std. 5A CT)
- Panel Cut: 92 x 46 mm
- Dimensions (W x H x D): 110 x 50 x 115 mm

Ordering Information
- PME-1210-AE: 1-phase Multifunction Power Meter
- PME-1230-AE: 3-phase Multifunction Power Meter

All product specifications are subject to change without notice

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