PME-1230

3-phase Multifunction Power Meter



Features

- Small size with 100mm depth
- Panel cut 96 x 48 mm
- Multi-function power measurement
- Modbus RTU protocol over RS485



Introduction

The PME-1230 is a 3-phase 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

Phase Voltage (3P4W)

or Line Voltage (3P3W) 80 to 350 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 8 mA to 10 A Resolution 1 mA **Starting Current** 5 mA 10 A Permanent Overload 20 x lin (1sec) Transient current

Accuracy 0.5% full scale

Power Measurement (total)

Resolution 1W (per phase) Accuracy 1% full scale

Energy Measurement (total)

0 to 99999.9 kWh Range Resolution 0.01 kWh (record)

1% from 2%~120% with PF 0.5~1.0 kWh Accuracy

Frequency Measurement

Range 45 to 65 Hz Resolution/Accuracy 0.1 Hz

PF Measurement

Range 0.00 to 1.00 Resolution 0.01 (polarized) Accuracy 1% (PF 0.5 ~ 1.0)

Front Panel Interface

Display 6 digit 7 segment LED **Indicators**

Mode Display and Setting

3 Function Key, ID address, Baud Rate, PT Ratio, Settina

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 to 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 to 126 V_{AC} AC 220V 187 to 253 V_{AC}

Physical

Operating Temperature $-10 \sim 70^{\circ} \text{ C}$

Operating Humidity 0 ~ 95% RH (Non-condensing) 0 ~ 95% (Non-condensing) Storage Humidity Weight 420g (Std. 5A CT) Panel Cut 92 x 46 mm

Dimensions (W x H x D) 110 x 50 x 115 mm

Ordering Information

 PME-1230 3-phase Multifunction Power Meter

Standard Data Output	R	s	т	Total	FRONT VIEW 50
Current	٧	٧	٧		110
Voltage	٧	٧	٧		F 110
KW Real Power	anti-	100	13	V	F
KWHRealPower		10	5005	V	PANEL CUT 46
KVAR Reactive Power				V	17.1122.001
KVARH Reactive Power				V	92
KVA Apparent Power				V	,
Power Factor Total	ÌΠ		3.7	V	

Wiring Diagrams

