



PM200

Digital kWh Panel Meter



Smart for Greenlife!

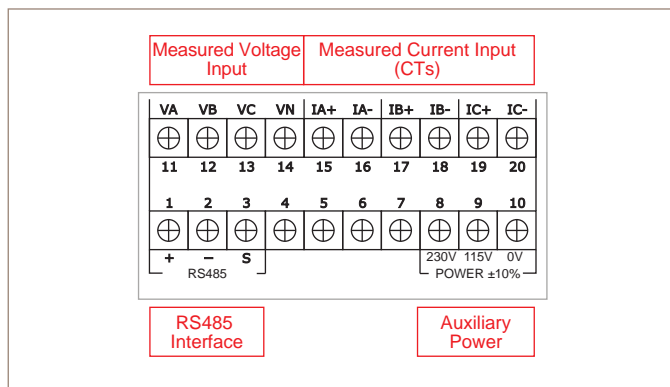
Features

- Panel meter for the measurement of kWh and kW in single phase or 3 phase loads
- Available for regular 5A output CTs or dedicated CTs
- With Modbus over RS485 communication capability
- Communication indicator (Rx, Tx)
- High accuracy full scale measurement
- Useful for a wide range of voltage measurements
- CE and FCC certified

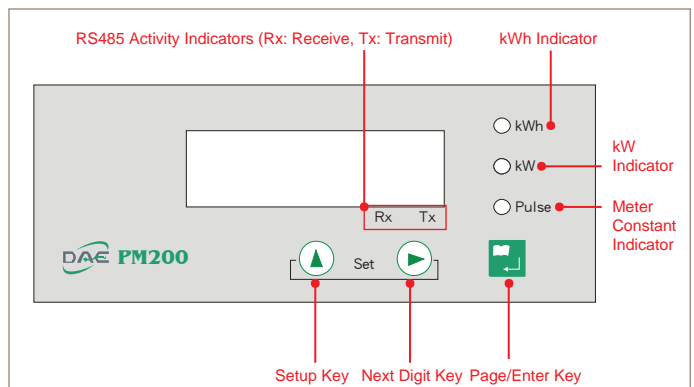
Overview

- The PM200 is a panel mounted electronic kWh meter designed with the latest in digital technology and can measure both the kW and kWh. Unlike more traditional digital panel meters which are based on regular analog to digital converters, the PM200 is fully digital and thus has greater accuracy wherever it may be used and can be relied upon.
- Not only can the PM200 be used with regular 5A output CTs, but it can also connect with dedicated CTs which are far smaller and yet more accurate. Dedicated CTs are quite compact and occupy very little space as compared with regular CTs. Which makes the PM200 is well suited for retrofitting in existing power panels.
- Typical kWh panel meters have a depth of 0.5 to 0.6 inches, which require big panels to accommodate them with its associated increase in installation costs. The PM200 has a depth of only 0.4 inches which require smaller panels and lower installation costs. Choosing the PM200 is thus ideal not only for its superior measurement capabilities but also for the overall reduced costs.
- Its communication interface is optically isolated, which makes it less susceptible to noise and interference from adjacent power sources.
- The auxiliary power supply is equipped with a self restoring fuse and surge protection components which greatly increases the products self protection capability. The PM200 does not have any internal batteries which also helps to reduce maintenance costs. It has also passed stringent CE and FCC testing, making it reliable and worry free.

Terminals



Faceplate



Specifications

Auxiliary Power	115 or 230VAC ($\pm 10\%$) , 48 to 62 Hz
Voltage Input	Measured Voltage: - Phase Voltage (L-N): 80~350VAC - Line Voltage (L-L): 140~600VAC Frequency: 45~65Hz
Current Input (2 Models)	(1) Standard 5A Input Model (PM200-STD) - Rated Current: 5A (2) Dedicated CT Model - Rated Current: Depends on dedicated CT
Display and Function Keys	- 6 digit 7 segment LED display - Communication Indicator (Rx, Tx) - 3 function keys: for setup and display mode changing - Display modes: kW (real power) and kWh (real energy)
Protection	- Dielectric withstand test: 2220V for 1 minute between AC voltage to I/O per CE-EN61010-1
Environment	- Operating Temperature: -5~55°C (23~131°F) - Operating Humidity: 0~90% RH (non-condensing)

Communication Interface	- RS485 interface with optical isolation in both directions - Connect using two wires, up to 1000 meters - Open Modbus/RTU protocol - Data format: 8/n/1 - Address: 1~254 (set from keys or Modbus) - Baud rates: 1200, 2400, 4800, 9600 bauds (set from keys or Modbus) - PT ratio: 1.00 to 400.00 (set from keys or Modbus) - CT ratio: 1 to 1000 (set from keys or Modbus)
Resolution	Display : 0.001kW , 0.1kWh RS485 : 1w , 0.01kWh
Accuracy**	- Energy (kWh): $\leq 1\%$ Reading - Volt: $\leq 0.2\%$ Reading - Amp: $\leq 0.2\%$ Reading
Strating Current	PM200-STD: 5mA PM200-B: according to CT spec.
Enclosure Material	Flame retardant ABS plastic, UL94 V-0 standard
Terminals	Wire size: 16~22AWG, Rating: 10Amp@AC300V
Mounting	Panel Mounted

**PM210-STD type test report at TERTEC Lab (Taiwana Electric Research & Testing center)@PF1.0 & PF0.5 for 5A & 1A respectively.

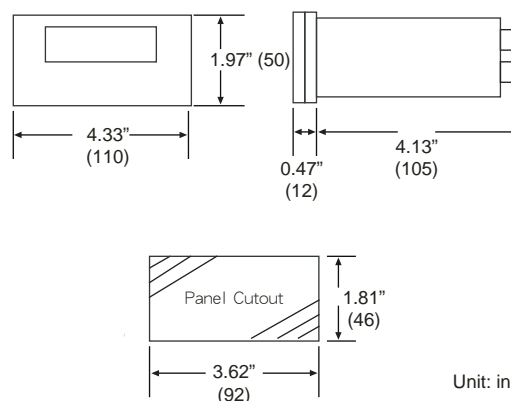
Dedicated CT

Solid-Core



Model #	Current Rating	Window Diameter	Dimensions (W x H x D)
CT-50D3	50A	0.49" (12.5mm)	1.46" x 1.50" x 0.51" (37 x 38 x 13mm)
CT-200D3	200A	1.02" (26mm)	2.13" x 2.13" x 0.71" (54 x 54 x 18mm)

Dimensions



Split-Core



Model #	Current Rating	Window Diameter	Dimensions (W x H x D)
CT-50S	50A	0.39" (10mm)	1.02" x 1.89" x 0.91" (26 x 48 x 23mm)
CT-100S	100A	0.63" (16mm)	1.22" x 2.13" x 1.18" (31 x 54 x 30mm)
CT-200S	200A	0.94" (24mm)	1.42" x 2.99" x 1.77" (36 x 76 x 45mm)
CT-400S	400A	1.38" (35mm)	2.36" x 3.15" x 1.57" (60 x 80 x 40mm)
CT-600S	600A	1.38" (35mm)	2.36" x 3.15" x 1.57" (60 x 80 x 40mm)

Ordering

PM200

Ordering Code	Description
PM200-STD	Compatible with regular 5A output CT (third party product)
PM200-B	Compatible with DAE dedicated (50A~600A, order seperated)

* Due to continuous product improvements, this datasheet is subject to change without notice.