# **PM210** Multi-Function Energy Meter



art for Greenlife!

### Features

- Multi-function
- Available for regular 5A output CTs or dedicated CTs
- Low depth, can fit in most power panels
- Ideal for M&V, and energy management for green buildings

kWh 🜑

kVArh 🔘

PF

DAE PM210

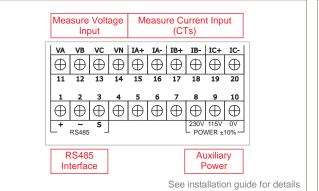
- With Modbus over RS485 communications and activity indicators
- High accuracy full scale measurement
- CE and FCC certified

Measured Parameters				
	А	В	С	Σ
V	0	0	0	
А	0	0	0	
Hz				0
kW	Δ	Δ	Δ	0
kVAr	Δ	Δ	$\Delta$	$\Delta$
PF	Δ	Δ	Δ	0
kWh	Δ	$\Delta$	$\Delta$	0
kVArh	Δ	Δ	Δ	0
VA	Δ	Δ	Δ	Δ

• Available in both the display and through Modbus

▲: Available through Modbus only

#### Terminals



#### **Overview**

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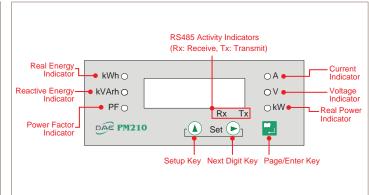
O A

OV

● kW

- The PM210 is a panel mounted electronic kWh meter designed with the latest in digital technology and can measure multiple parameters. When used together with our highly accurate dedicated CTs, the PM210 is the ideal measurement tool for any application, with readings that can be relied upon when needed.
- The PM210 is one of the world's multi-function meter with the lowest depth profile, and can be installed in most power panels for accurate reading of multiple electrical parameters. It is an indispensable and effective energy management tool for the facility manager committed to green buildings and factories.
- The communication interface of the PM210 is optically isolated in both directions, making 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 PM210 does not have any internal batteries which also helps to reduce maintenance costs.
- Not only can the PM210 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 PM210 well suited for retrofitting in existing power panels.

#### Faceplate



Smart for Greenlife!

# **Specifications**

Auxiliary Power	115 or 230 VAC ( $\pm$ 10%), 50 or 60Hz, with corresponding input	
Voltage Input	<ul> <li>Measured Voltage:</li> <li>Phase Voltage (L-N): 80~350VAC</li> <li>Line Voltage (L-L): 140~600VAC</li> <li>Frequency: 45~65Hz</li> </ul>	
Current Input (2 Models)	(1) Standard 5A Input Model (PM200-STD) - Rated Current: 5A	
	(2) Dedicated CT Model - Rated Current: Depends on dedicated CT	
Communication Interface	<ul> <li>RS485 interface with optical isolation in both directions</li> <li>Connect using two wires, up to1000 meters</li> <li>Open Modbus/RTU protocol</li> <li>Data format: 8/n/1</li> <li>Address: 1~254 (set from keys or Modbus)</li> <li>Baud rates: 1200, 2400, 4800, 9600 bps (set from keys or Modbus)</li> <li>PT ratio: 1.00 to 400.00 (set from keys or Modbus)</li> <li>CT ratio: 1 to 1000 (set from keys or Modbus)</li> </ul>	
Safety	CE, FCC	

Reset to Zero	Cumulative kWh can be reset to zero from the front panel	
Display and Function Keys	<ul> <li>6 digit 7 segment LED display</li> <li>Communication Indicator (Rx, Tx)</li> <li>3 function keys: for setup and display mode changing</li> <li>Displayable Parameters: Voltage (V), Current (A), Power (kW), Real Energy (kWh), Reactive Energy (kVARh), Power Factor (PF), Frequency (Hz)</li> </ul>	
Accuracy	<ul> <li>Voltage: 0.5% of reading*</li> <li>Current: 0.5% of reading*</li> <li>Power: 1% of full scale*</li> <li>Real Energy (kWh): 1% of full scale*</li> <li>Power Factor (PF): 1% of full scale*</li> <li>(* not including external CT)</li> </ul>	
Enclosure Material	Flame retardant ABS plastic, UL94 V-0 standard	
Operating Temperature	0~70°C (32~158°F)	
Operating Humidity	0~90% RH (non-condensing)	
Mounting	Panel Mounted	
Terminals	Wire size: 16~22AWG, Rating: 10Amp@AC300V	

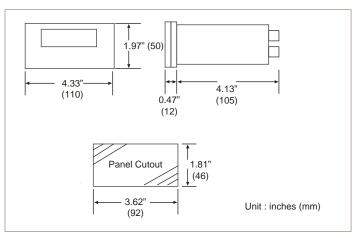
## **Dedicated CT**

Solid-Core	;		00
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 )
t	*Please s	ee the dedicated	CT datasheet for more information.

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)

\*Please see the dedicated CT datasheet for more information.

#### **Dimensions**



# Ordering

Order Code	Description	
PM210-STD	Compatible with regular 5A output CT (third party product)	
PM210-B	For DAE dedicated CT 50A~600A (sold separately)	

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