

PM-2133DP

3-Phase Smart Power Meter with LED Display

Features

- Bi-directional Energy
- True RMS Power Measurements
- Energy Analysis for 3P4W, 3P3W, 1P3W, 1P2W
- Supports CTs with 333 mV voltage output
- Voltage Measurements Up to 500 V
- Total Harmonic Distortion (THD)
- 8 - Digit LED Display

Introduction

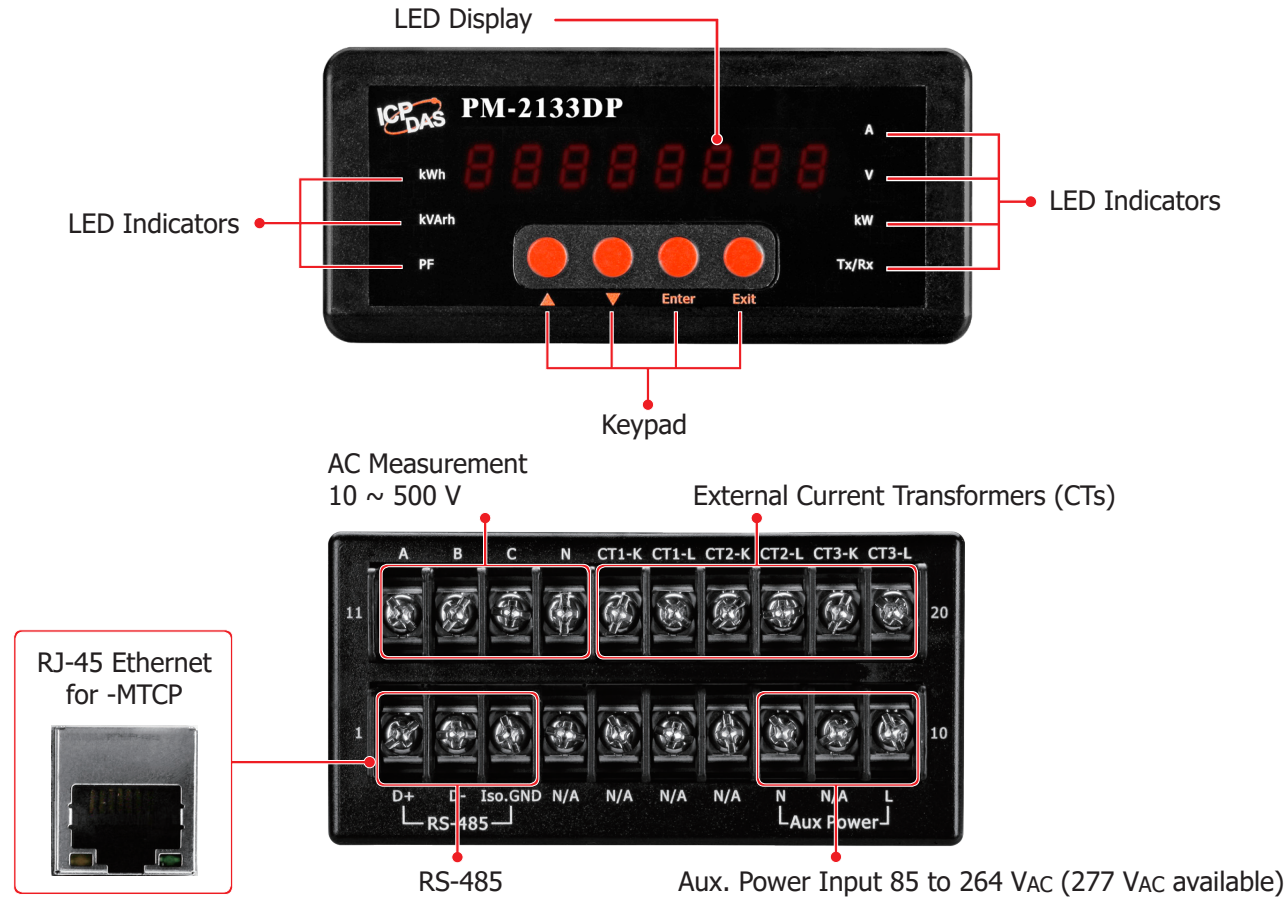
The PM-2133DP series is suitable for low-voltage primary-side and medium/high-voltage secondary-side applications, allowing users to obtain reliable and accurate energy consumption data, as well as perform real-time equipment monitoring and control. It supports an input voltage range of 10 to 500 VAC, making it compatible with international voltage standards. Equipped with an LED display, the PM-2133DP can be installed on the surface of distribution panels, enabling administrators to easily monitor key power parameters such as voltage, current, power, energy, and power factor throughout the power distribution process. The PM-2133DP does not include current transformers (CTs) by default. Users can select CTs with 333 mV output specifications to meet a variety of application requirements. However, Rogowski coils are not supported.

Specifications

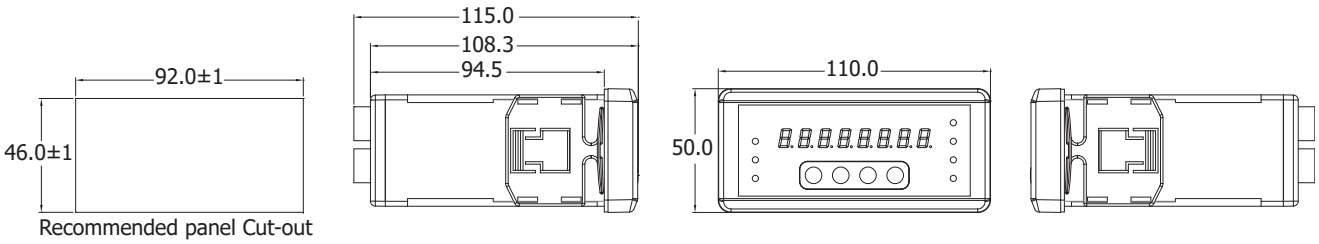
Models		PM-2133DP	PM-2133DP-MTCP
AC Power Measurement			
Wiring		3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT	
Loops		3-phase: 1; 1-phase: 3 @ 1P2W-1CT, 1 @ 1P3W-2CT	
Input Voltage		10 to 500 V	
Input Current		Supports 333 mV output CTs; actual current range depends on CT's primary rating	
Input Frequency		50 Hz (Range 45 to 55 Hz)/60 Hz (Range 55 to 65 Hz)	
W Accuracy		Accuracy is approximately 2–5% (PF = 1), depending on the CT used. The CT ratio must be set correctly.	
Power Parameter Measurement		True RMS voltage (V_{rms}), True RMS current (I_{rms}), Active Power (kW), Active Energy (kWh), Apparent Power (kVA), Apparent Energy (kVAh), Reactive Power (kVAR), Reactive Energy (kVARh), Power Factor (PF), Frequency (45 to 65 Hz)	
Data Update Rate		1 Second	
Display Type		LED display	
Communication			
RS-485	Protocol	Modbus RTU	-
	Baud Rate	9600,19200 (default), 38400, 115200	-
	Data Format	N,8,1; N,8,2; E,8,1; E,8,2; O,8,1; O,8,2	-
	Isolation	3000 V_{DC}	-
Ethernet	Protocol	-	Modbus TCP
Power			
Input Range		+85 to +264 V_{AC} (277 V_{AC} available)	
Power Consumption		6 W	
Environment			
Operating Temperature		-20 to +70 °C	
Storage Temperature		-25 to +80 °C	
Ambient Relative Humidity		10% to 90% RH, Non-condensing	

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Installation and Wiring



Dimensions (Units: mm)



Recommended Panel Cut-Out | Left View | Front View | Right View

Ordering Information

RS-485 Interface	
PM-2133DP CR	Modbus RTU, 3-phase power meter with LED display; supports 333 mV CTs, not for Rogowski coils (RoHS)

Ethernet Interface (Available soon)	
PM-2133DP-MTCP CR	Modbus TCP, 3-phase power meter with LED display; supports 333 mV CTs, not for Rogowski coils (RoHS)

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