



## PM-2133D

3-Phase Smart Power Meter with LED Display

### Features

- Bi-directional Energy
- True RMS Power Measurements
- Energy Analysis for 3P4W, 3P3W, 1P3W, 1P2W
- Current Measurements Up to 400 A with Different CT Ratio
- Voltage Measurements Up to 500 V
- Clip-on CT for Easy Installation
- W Accuracy Better than 0.5% (PF=1)
- Total Harmonic Distortion (THD)
- 8 - Digit LED Display
- Supports Modbus RTU Protocol



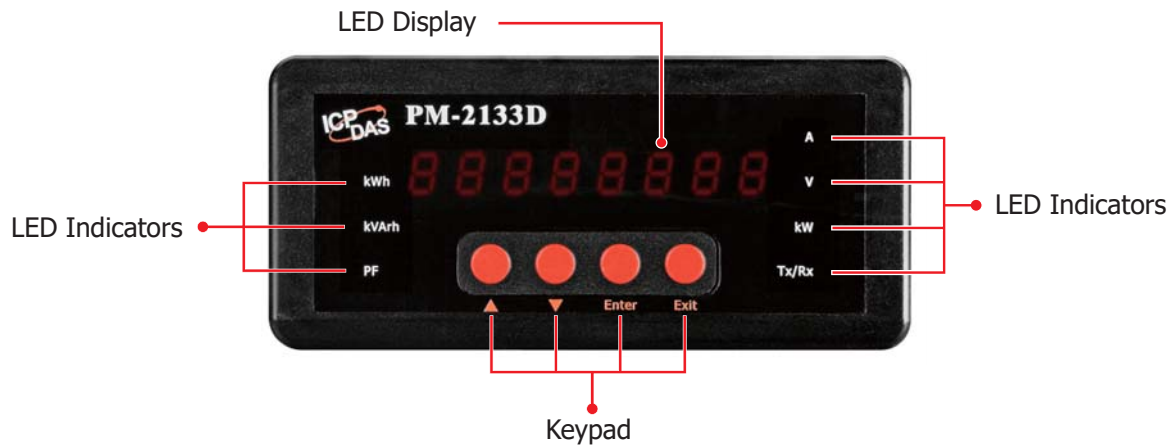
## Introduction

ICP DAS brings the most powerful, cost-effective, advanced Smart Power Meters PM-2133D series that gives you access to real-time electric usage for three-phase power measurement. With its high accuracy (<0.5%, PF=1), the PM-2133D series can be applied to both low voltage primary side and/or medium/high voltage secondary side and enables the users to obtain reliable and accurate energy consumption readings from the monitored equipments in real time under operation. These compact size and cost-effective power meters are equipped with revolutionary wired clip-on CT (various types, support input current up to 400 A). It operates over a wide input voltages range 10 ~ 500 VAC which allows worldwide compatibility. This meter has LED display shows power.

## Specifications

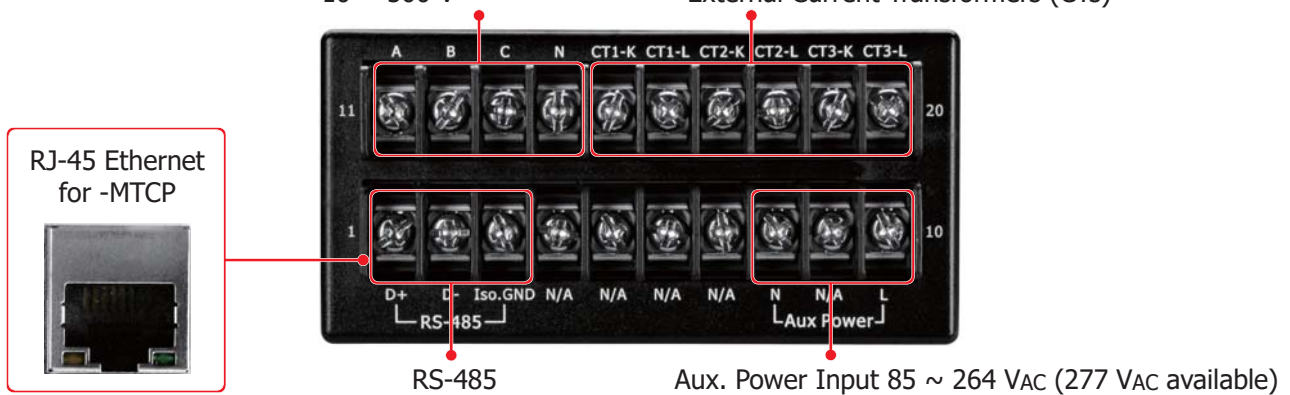
Models		PM-2133D	PM-2133D-MTCP
AC Power Measurement			
Wiring		3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT	
Input Voltage		10 ~ 500 V	
Input Current		CTØ10 mm (0.05 A~60 A); CTØ16 mm (0.1 A~100 A); CTØ24 mm (0.15 A~200 A); CTØ36 mm (0.3 A~300 A); CTØ36 mm (0.3 A~400 A).	
Input Frequency		50 Hz (Range 45 ~ 55 Hz)/60 Hz (Range 55 ~ 65 Hz)	
W Accuracy		Better than 0.5% (PF=1)	
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 ~ 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 <sub>DC</sub>	-
Ethernet	Protocol	-	Modbus TCP
Power			
Input Range		+85 ~ +264 V <sub>AC</sub> (277 V <sub>AC</sub> available)	
Power Consumption		6 W	
Environment			
Operating Temperature		-20 ~ +70 °C	
Storage Temperature		-25 ~ +80 °C	
Ambient Relative Humidity		10% ~ 90% RH, Non-condensing	

## Installation and Wiring



AC Measurement  
10 ~ 500 V

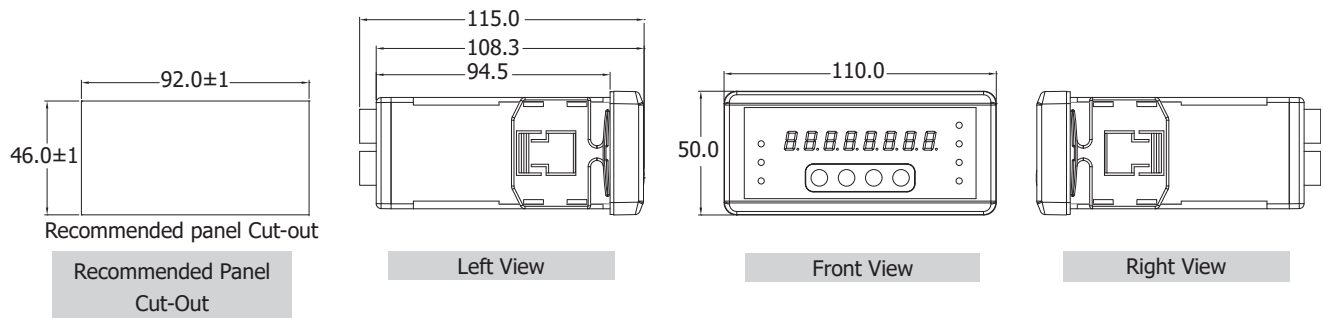
External Current Transformers (CTs)



RS-485

Aux. Power Input 85 ~ 264 VAC (277 VAC available)

## Dimensions (Units: mm)



Recommended panel Cut-out

Recommended Panel  
Cut-Out

Left View

Front View

Right View

## Ordering Information

RS-485 Interface	
PM-2133D-100P CR	Modbus RTU, 3-phase power meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-160P CR	Modbus RTU, 3-phase power meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-240P CR	Modbus RTU, 3-phase power meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-360P CR	Modbus RTU, 3-phase power meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-400P CR	Modbus RTU, 3-phase power meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 3 (RoHS)

Ethernet Interface (Available soon)	
PM-2133D-100P-MTCP CR	Modbus TCP, 3-phase power meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-160P-MTCP CR	Modbus TCP, 3-phase power meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-240P-MTCP CR	Modbus TCP, 3-phase power meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-360P-MTCP CR	Modbus TCP, 3-phase power meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 3 (RoHS)
PM-2133D-400P-MTCP CR	Modbus TCP, 3-phase power meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 3 (RoHS)