

Smart Power Meter



Features

- 8 three phase circuits or 24 single phase circuits
- 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
- Split Core CT for Easy Installation
- W Accuracy Better than 0.5% (PF=1)
- Supports RS-485, Ethernet or CAN bus Interface
- Supports Modbus RTU, Modbus TCP or CANopen Protocol
- Supports 2 Power Relay Output (Form A)
- Total Harmonic Distortion (THD)



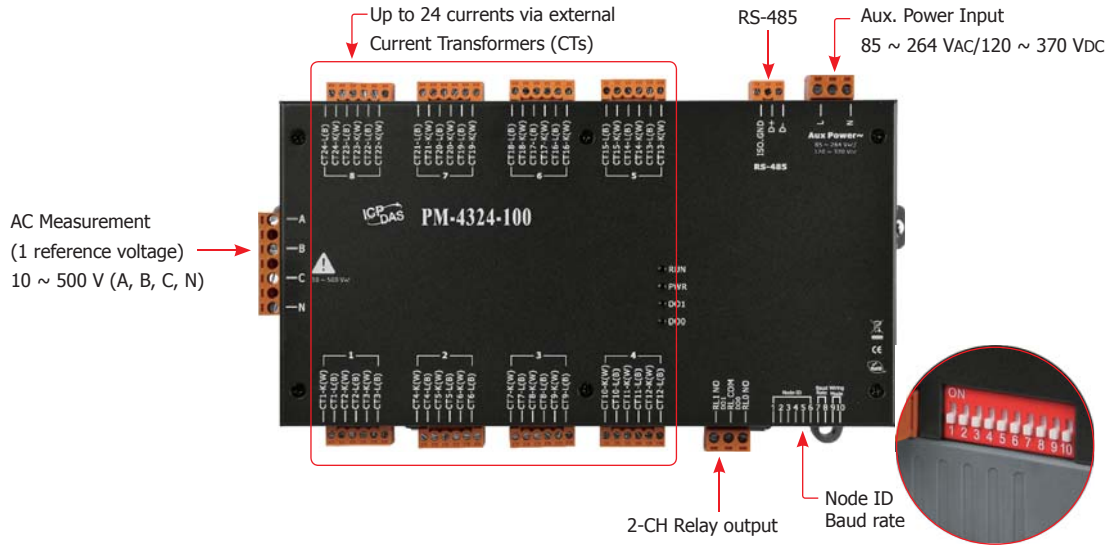
Introduction

The **PM-4324** Multi-Channel Power Meter monitors up to 8 three phase circuits or 24 single phase circuits, or any combination of single or three phase circuits. The PM-4324 can measure up to 24 currents via external Current Transformers (CTs). This flexibility makes the PM-4324 perfect for multitenant facilities such as residential projects, office buildings and shopping malls. This compact instrument is designed to easily fit into existing panel boards or be flush mounted nearby, thus eliminating the need for expensive retrofit projects or for allocating extra space for the device.

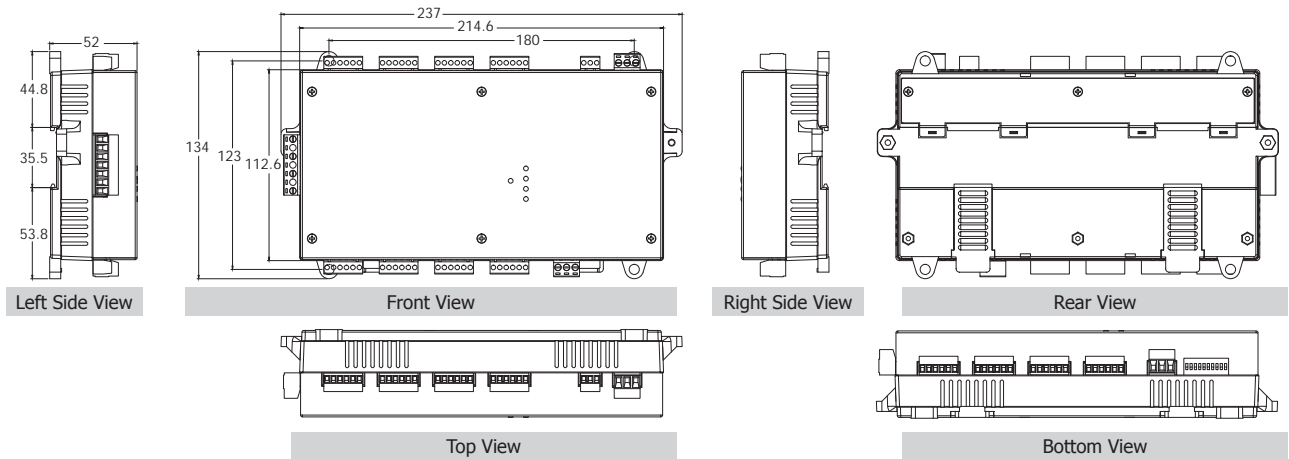
Specifications

Models	PM-4324	PM-4324-MTCP	PM-4324-CPS
AC Power Measurement			
Wiring	3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT		
Measurement Voltage	10 ~ 500 V		
Measurement Current	CTØ10 mm (60 A); CTØ16 mm (100 A); CTØ24 mm (200 A); CTØ36 mm (300 A); CTØ36 mm (400 A)		
Measurement Frequency	50/60 Hz		
W Accuracy	Better than 0.5% (PF=1)		
Power Parameter Measurement	True RMS voltage (Vrms), True RMS current (Irms), Active Power (kW), Active Energy (kWh), Apparent Power (kVA), Apparent Energy (kVAh), Reactive Power (kVAR), Reactive Energy (kVARh), Power Factor (PF), Frequency		
Data Update Rate	1 Second		
Communication			
RS-485	Protocol	Modbus-RTU	-
	Baud rate	9600,19200 (default), 38400, 115200; DIP Switch Selectable	-
	Data format	N,8,1; N,8,2; E,8,1; E,8,2; O,8,1; O,8,2	-
	Isolation	3000 Vdc	-
Ethernet	Protocol	-	Modbus TCP
CAN Bus	Protocol	-	CANopen
	Baud rate	-	125 k (default), 250 k, 500 k, 1 M; DIP Switch Selectable
	Isolation	-	3000 Vdc
Alarm Output			
Power Relay	Form A (Normal Open) x 2; Relay Contact Voltage Range: 5 A @ 250 VAC (47 ~ 63 Hz), 5 A @ 30 Vdc		
Power			
Input Range	+85 ~ +264 Vac		
Power Consumption	6 W		
Mechanical			
Casing	Plastic		
Dimensions (W x L x H)	237 mm x 52 mm x 134 mm		
Module Installation	DIN-Rail Mounting		
Environment			
Operating Temperature	-20 ~ +70°C		
Storage Temperature	-25 ~ +80°C		
Ambient Relative Humidity	10% ~ 90% RH, Non-condensing		

Appearance



Dimensions (Units: mm)



Selection Guide

PM-4324- X X X P - X X X

CT size (measurement)
 100P: CTΦ10 mm, 60 A Max.
 160P: CTΦ16 mm, 100 A Max.
 240P: CTΦ24 mm, 200 A Max.
 360P: CTΦ36 mm, 300 A Max.
 400P: CTΦ36 mm, 400 A Max.

Current Transformers (Secondary voltage 333mV)

Communication
 □ RS-485
 CPS: CANopen
 MTCP: Modbus TCP

Ordering Information

RS-485 Interface	
PM-4324P	Modbus RTU, Multi-Channel Power Meter (Can be directly input from the secondary side of 333mV CT)
PM-4324-100P	Modbus RTU, Multi-Channel Power Meter (60 A)
PM-4324-160P	Modbus RTU, Multi-Channel Power Meter (100 A)
PM-4324-240P	Modbus RTU, Multi-Channel Power Meter (200 A)
PM-4324-360P	Modbus RTU, Multi-Channel Power Meter (300 A)
PM-4324-400P	Modbus RTU, Multi-Channel Power Meter (400 A)

Ethernet Interface	
PM-4324-100P-MTCP	Modbus TCP, Multi-Channel Power Meter (60 A)
PM-4324-160P-MTCP	Modbus TCP, Multi-Channel Power Meter (100 A)
PM-4324-240P-MTCP	Modbus TCP, Multi-Channel Power Meter (200 A)
PM-4324-360P-MTCP	Modbus TCP, Multi-Channel Power Meter (300 A)
PM-4324-400P-MTCP	Modbus TCP, Multi-Channel Power Meter (400 A)
CANopen Interface	
PM-4324-100P-CPS	CANOpen, Multi-Channel Power Meter (60 A)
PM-4324-160P-CPS	CANOpen, Multi-Channel Power Meter (100 A)
PM-4324-240P-CPS	CANOpen, Multi-Channel Power Meter (200 A)
PM-4324-360P-CPS	CANOpen, Multi-Channel Power Meter (300 A)
PM-4324-400P-CPS	CANOpen, Multi-Channel Power Meter (400 A)