

PM-4324/-MTCP/-CPS
PM-4324A/-MTCP/-CPS
 Multi-circuit Smart Power Meter

Features

- Bi-directional Energy
- 8 Three Phase Circuits or 24 Single Phase Circuits
- True RMS Power Measurements
- Energy Analysis for 3P4W, 3P3W, 1P3W, 1P2W
- 2 Independent main circuit inputs for PM-4324A series
- Current Measurements Up to 400 A with Different CT Ratio
- Voltage Measurements Up to 500 V
- Easy install with split core CT
- W Accuracy Better than 0.5% (PF=1)
- Total Harmonic Distortion (THD)
- Support RS-485, Ethernet or CAN bus Interface
- Support 2 Power Relay Output (Form A)



Introduction

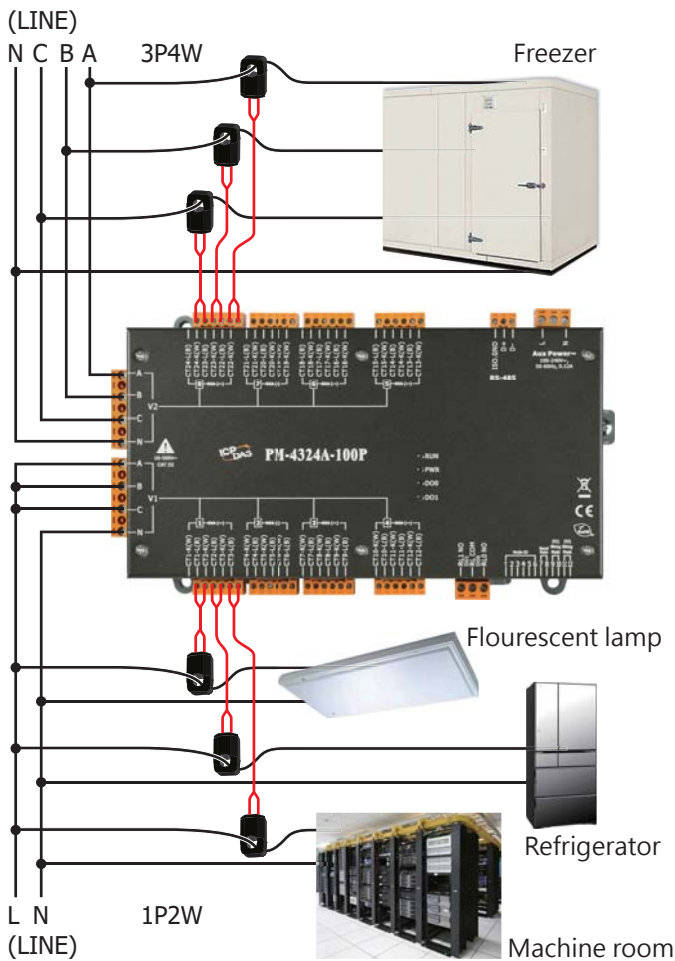
The PM-4324 series multi-circuit power meter monitors up to 8 three-phase circuits or 24 single-phase circuits, or any combination of single or three-phase circuits. The PM-4324 series can measure up to 24 currents via external Current Transformers (CTs). This flexibility makes the PM-4324 series perfect for multi-tenant facilities such as residential projects, office buildings and shopping malls. This compact instrument is designed to easily fit into existing panelboards or be flush mounted nearby, thus eliminating the need for expensive retrofit projects or for allocating extra space for the device. The PM-4324A is the same model as the PM-4324, except for the AC Measurement. The PM-4324A has 2 separate main circuit inputs that can use in the different power system.

Specifications

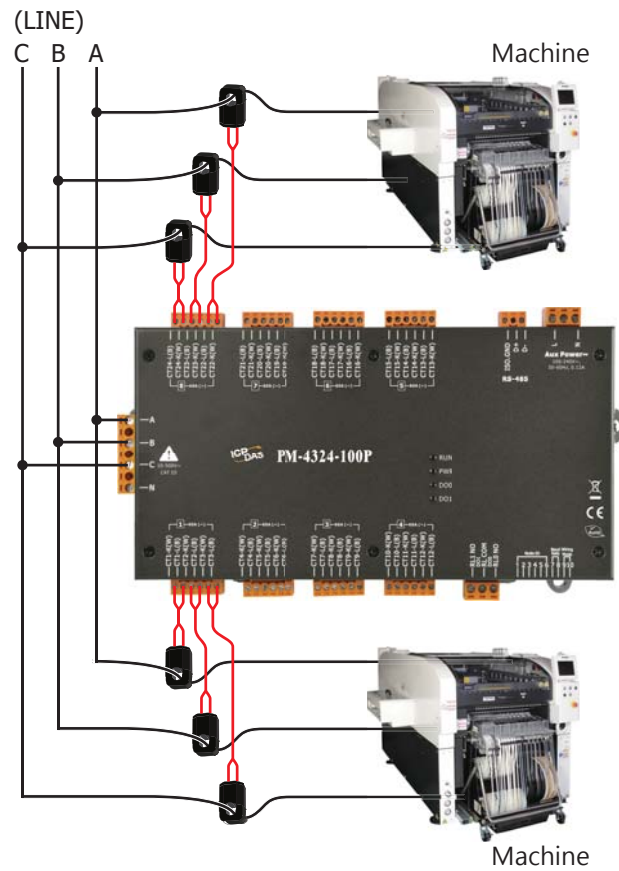
Models	PM-4324/PM-4324A	PM-4324-MTCP/PM-4324A-MTCP	PM-4324-CPS/PM-4324A-CPS
AC Power Measurement			
Wiring	3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT		
Measurement Voltage	10 ~ 500 V		
Measurement Current	CTØ10 mm (60 A); CTØ16 mm (100 A); CTØ24 mm (200 A); CTØ36 mm (300 A); CTØ36 mm (400 A)		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

Wire Connections

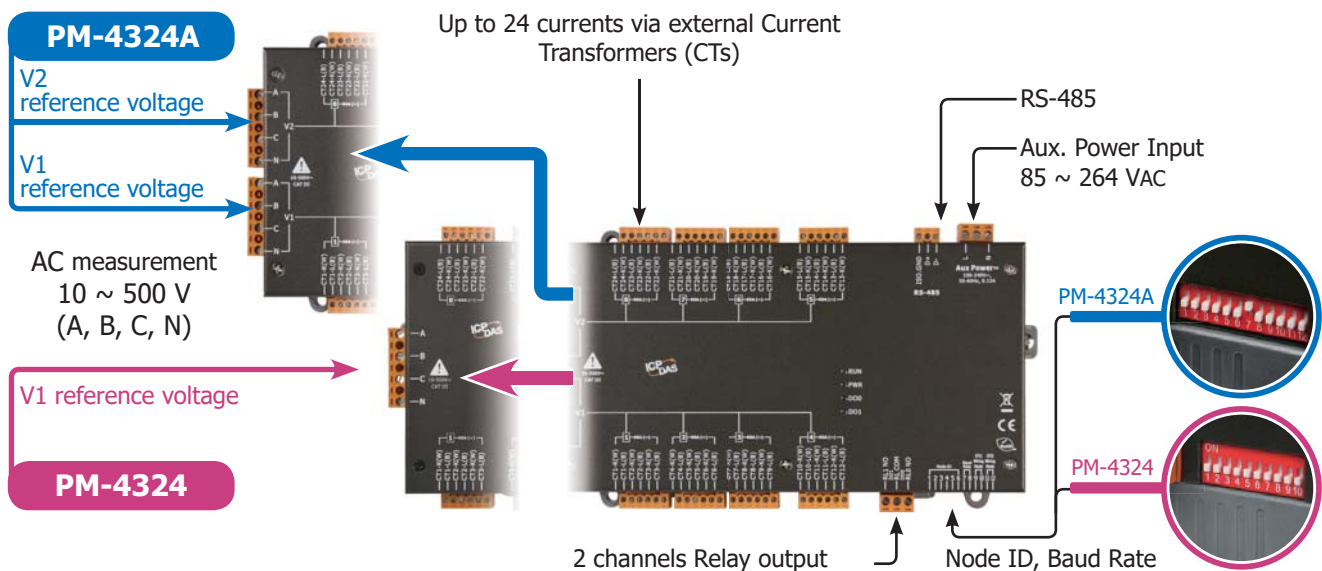
Dual Main Circuit 3P4W + 1P2W



Single Main Circuit 3P3W



Appearance



Selection Guide



Ordering Information

RS-485 Interface	
PM-4324P CR	Modbus RTU, Multi-Circuit Power Meter (Can be directly input from the secondary side of 333mV CT) (RoHS)
PM-4324-100P CR	Modbus RTU, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-160P CR	Modbus RTU, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-240P CR	Modbus RTU, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-360P CR	Modbus RTU, Multi-Circuit Power Meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-400P CR	Modbus RTU, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-100P CR	Modbus RTU, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-160P CR	Modbus RTU, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-240P CR	Modbus RTU, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-360P CR	Modbus RTU, Multi-Circuit Power Meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-400P CR	Modbus RTU, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)

Ethernet Interface	
PM-4324P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter (Can be directly input from the secondary side of 333mV CT) (RoHS)
PM-4324-100P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-160P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-240P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-360P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-400P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-100P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-160P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-240P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-360P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-400P-MTCP CR	Modbus TCP, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)

CAN bus Interface	
PM-4324-100P-CPS CR	CANopen, Multi-Circuit Power Meter (Can be directly input from the secondary side of 333mV CT) (RoHS)
PM-4324-160P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-240P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-360P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324-400P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-100P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 60A CT (Inside diameter 10 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-160P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 100A CT (Inside diameter 16 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-240P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 200A CT (Inside diameter 24 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-360P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 300A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)
PM-4324A-400P-CPS CR	CANopen, Multi-Circuit Power Meter; includes 400A CT (Inside diameter 36 mm; wire lead 4 m) x 24 (RoHS)