



## PM-3133-RCT

Three-phase Smart Power Meter

### Features

- Bi-directional Energy
- True RMS Power Measurements
- Energy Analysis for 3P4W, 3P3W, 1P3W, 1P2W
- Current Measurements Up to 4000 A
- Voltage Measurements Up to 500 V
- Rogowski Coil Soft CT for Easy Installation
- W Accuracy Better than 2% (PF=1; Input Current >50A)
- Total Harmonic Distortion (THD)
- Supports RS-485, Ethernet (PoE) or CANopen Interface
- Supports Modbus RTU, Modbus TCP or CANopen Protocol
- Supports 2 Power Relay Output (Form A)
- IEC 61010-1 and EN 61010-1
- Multiple Data Format



ICP DAS brings the most powerful, cost-effective, advanced Smart Power Meters PM-3133-RCT that gives you access to real-time electric usage for three-phase power measurement. With its high accuracy (<2%, PF=1; Input Current >50 A), this series can be used to both low voltage primary side and 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 monitoring equipment with Rogowski Coil CT is "rope-style" Current Transformer which delivers "Easy Installation" features for large window size (55 ~ 185 mm) and mechanical flexibility for tight space.

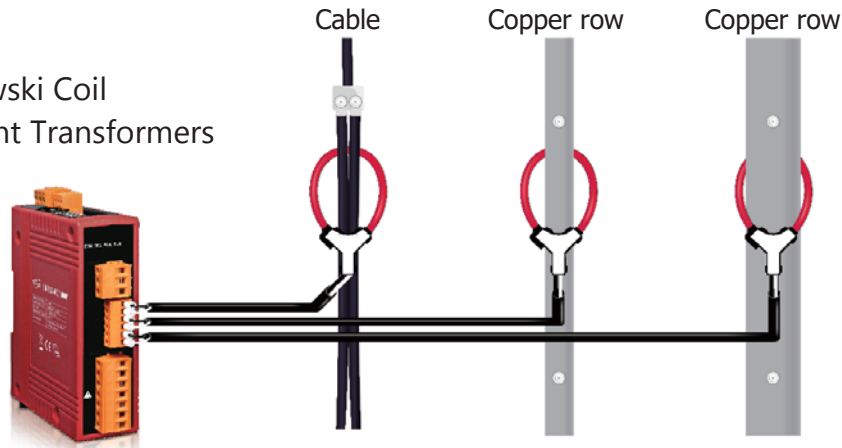
It operates over a wide range of input voltages 10 ~ 500 V<sub>AC</sub> which allows universal compatibility. Also, with 2 channels relay outputs, it can be linked with sirens or lightings for alarm messages. It also supports Modbus RTU, Modbus TCP or CANopen protocols for easy integration.

## Specifications

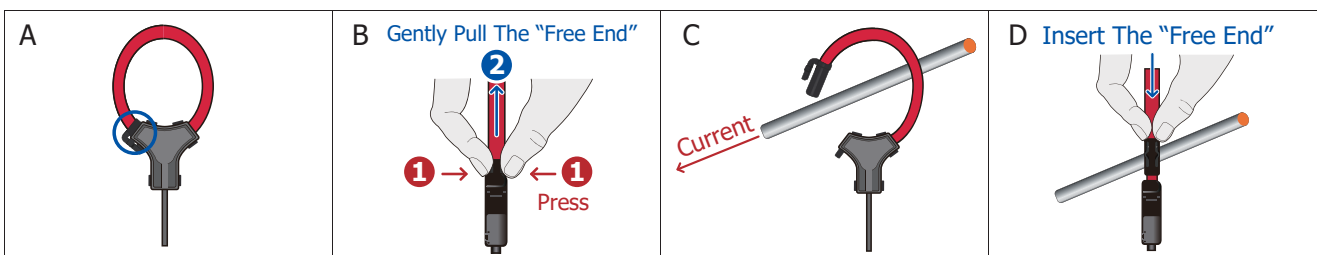
Models	PM-3133-RCT	PM-3133-RCT-MTCP	PM-3133-RCT-CPS
<b>AC Power Measurement</b>			
Wiring	3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT		
Measurement Voltage	10 ~ 500 V		
Measurement Current	CTØ55 mm (5 A ~ 500 A), CTØ80 mm (5 A ~ 1000 A), CTØ105 mm (5 A ~ 2000 A), CTØ185 mm (5 A ~ 4000 A)		
Measurement Frequency	50/60 Hz		
W Accuracy	Better than 2% (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)		
Data Update Rate	1 Second		
<b>Communication</b>			
Interface	RS-485	Ethernet (PoE)	CANopen
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 (default); N,8,2; E,8,1; E,8,2; O,8,1; O,8,2	-	-
Isolation	3000 V <sub>DC</sub>	-	3000 V <sub>DC</sub>
<b>Alarm Output</b>			
Power Relay	Form A (Normal Open) × 2; Relay Contact Voltage Range: 5 A @ 250 V <sub>AC</sub> (47 ~ 63Hz), 5 A @ 30 V <sub>DC</sub>		
<b>Power</b>			
Power Input	+12 ~ 48 V <sub>DC</sub>	+12 ~ 48 V <sub>DC</sub> or PoE	+12 ~ 48 V <sub>DC</sub>
Power Consumption	2 W		
<b>Environment</b>			
Temperature	Operating Temperature: -20 ~ +70 °C / Storage Temperature: -25 ~ +80 °C		
Ambient Relative Humidity	10% ~ 90% RH, Non-condensing		

## Installation

### Rogowski Coil Flexible Current Transformers

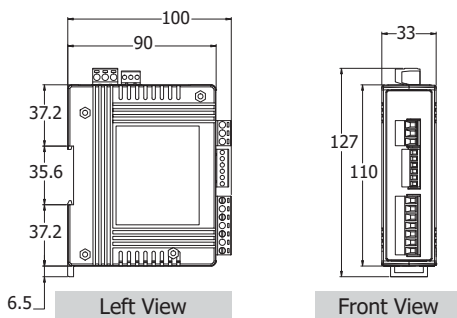


Rogowski Coil CT is "ropestyle" which delivers "Easy Installation" features for large window size and mechanical flexibility for tight space.



Rogowski Coil Soft CT Installation

## Dimensions (Units: mm)



## CT Dimensions (Units: mm)

Models	A (Inside diameter)	B (Outer diameter)
PM-3133-RCT500P	55 mm	68 mm
PM-3133-RCT1000P	80 mm	93 mm
PM-3133-RCT2000P	105 mm	118 mm
PM-3133-RCT4000P	185 mm	199 mm



## Ordering Information

RS-485 Interface (Modbus RTU)	
PM-3133-RCT500P CR	Modbus RTU, 3-phase power meter, 500A Rogowski Coil CT (Inside diameter 55 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT1000P CR	Modbus RTU, 3-phase power meter, 1000A Rogowski Coil CT (Inside diameter 80 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT2000P CR	Modbus RTU, 3-phase power meter, 2000A Rogowski Coil CT (Inside diameter 105 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT4000P CR	Modbus RTU, 3-phase power meter, 4000A Rogowski Coil CT (Inside diameter 185 mm; wire lead 4 m) x 3 (RoHS)

Ethernet Interface (Modbus TCP)	
PM-3133-RCT500P-MTCP CR	Modbus TCP, 3-phase power meter, 500A Rogowski Coil CT (Inside diameter 55 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT1000P-MTCP CR	Modbus TCP, 3-phase power meter, 1000A Rogowski Coil CT (Inside diameter 80 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT2000P-MTCP CR	Modbus TCP, 3-phase power meter, 2000A Rogowski Coil CT (Inside diameter 105 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT4000P-MTCP CR	Modbus TCP, 3-phase power meter, 4000A Rogowski Coil CT (Inside diameter 185 mm; wire lead 4 m) x 3 (RoHS)

CAN bus Interface (CANopen)	
PM-3133-RCT500P-CPS CR	CANopen, 3-phase power meter, 500A Rogowski Coil CT (Inside diameter 55 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT1000P-CPS CR	CANopen, 3-phase power meter, 1000A Rogowski Coil CT (Inside diameter 80 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT2000P-CPS CR	CANopen, 3-phase power meter, 2000A Rogowski Coil CT (Inside diameter 105 mm; wire lead 4 m) x 3 (RoHS)
PM-3133-RCT4000P-CPS CR	CANopen, 3-phase power meter, 4000A Rogowski Coil CT (Inside diameter 185 mm; wire lead 4 m) x 3 (RoHS)