# **Three-phase Smart Power Meter**











PM-3133-RCT/-MTCP/-CPS

#### Features:

- True RMS Power Measurements
- Energy Analysis for 3P4W, 3P3W, 1P3W, 1P2W
- Current Measurements Up to 2000 A
- Voltage Measurements Up to 500 V
- Rogowski Coil Soft CT for Easy Installation
- W Accuracy Better than 1% (PF=1; Input Current >50A)
- Supports RS-485, Ethernet (PoE) or CANopen Interface
- Supports Modbus RTU, Modbus TCP or CANopen Protocol
- Supports 2 Power Relay Output (Form A)
- Total Harmonic Distortion (THD)

#### **Introduction:**

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 (<1%, PF=1; Input Current >50A), 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  $\sim$  105mm) and mechanical fl exibility for tight space.

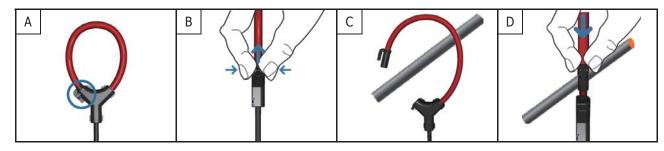
It operates over a wide range of input voltages 10 ~ 500 VAC which allows universal compatibility. Also, with 2 channels relay outputs, it can be linked with sirens or lightings for alarm messages. It also supports Modbus RTU, Modbus TCP or CANopen protocols for easy integration.

#### **Specifications:**

Models	PM-3133-RCT	PM-3133-RCT-MTCP	PM-3133-RCT-CPS	
AC Power Measurement				
Wiring	3P4W-3CT, 3P3W-2CT, 3P3W-3CT, 1P2W-1CT, 1P3W-2CT			
Measurement Voltage	10 ~ 500 V			
Measurement Current	CTØ55 mm (500 A), CTØ80 mm (1000 A), CTØ105 mm (2000 A)			
Measurement Frequency	50/60 Hz			
W Accuracy	Better than 1% (PF=1; Input Current >50 A)			
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, THD			
Data Update Rate	1 Second			
Communication				
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 VDC	-	3000 VDC	
Alarm Output				
Power Relay	Form A (Normal Open) x 2; Relay Contact Voltage Range: 5 A @ 250 VAC (47 ~ 63Hz), 5 A @ 30 VDC			
Power				
Power Input	+12 ~ 48 VDC	+12 ~ 48 VDC or PoE	+12 ~ 48 VDC	
Power Consumption	2 W			
Environment				
Temperature	Operating Temperature: -20 ~ +70°C / Storage Temperature: -25 ~ +80°C			
Ambient Relative Humidity	10% ~ 90% RH, Non-condensing			



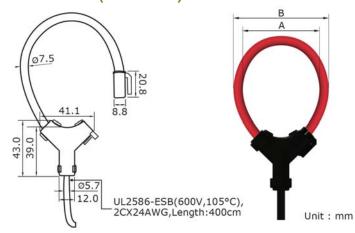
### Installation



Rogowski Coil Soft CT Installation



## **Dimensions (Units: mm):**



Models	А	В
PM-3133-RCT500P	55.0	68.5
PM-3133-RCT1000P	80.0	93.5
PM-3133-RCT2000P	105.0	118.5

## **Ordering Information:**

RS-485 Interface	
PM-3133-RCT500P	Modbus RTU, 3-phase power meter, 500A Rogowski Coil CT
PM-3133-RCT1000P	Modbus RTU, 3-phase power meter, 1000A Rogowski Coil CT
PM-3133-RCT2000P	Modbus RTU, 3-phase power meter, 2000A Rogowski Coil CT

Ethernet Interface Available soon				
PM-3133-RCT500P-MTCP	Modbus TCP, 3-phase power meter, 500A Rogowski Coil CT			
PM-3133-RCT1000P-MTCP	Modbus TCP, 3-phase power meter, 1000A Rogowski Coil CT			
PM-3133-RCT2000P-MTCP	Modbus TCP, 3-phase power meter, 2000A Rogowski Coil CT			

CANopen Interface Available soon			
PM-3133-RCT500P-CPS	CANopen, 3-phase power meter, 500A Rogowski Coil CT		
PM-3133-RCT1000P-CPS	CANopen, 3-phase power meter, 1000A Rogowski Coil CT		
PM-3133-RCT2000P-CPS	CANopen, 3-phase power meter, 2000A Rogowski Coil CT		