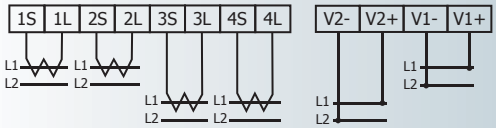
## Features

- True RMS energy and power parameters measurement in compact size
- Easy wiring for on-line installation
- RS-485 communication supported Modbus protocol
- Compatible with CAN specification 2.0B
- Support CAN baud-rate: 125 k, 250 k, 500 k, 1 M bps
- Wh accuracy better than 1% (PF=1)
- With wired clip-on CT (various types support input current up to 200A)
- LED pulse output

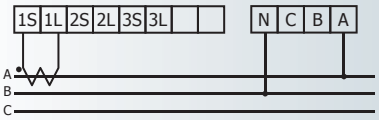
## Installs Simple Clip-on CT

## Wiring Diagram

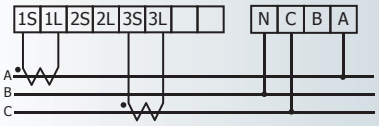
**1P4W (PM-2134)**



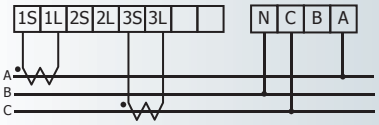

**1P2W-1CT (PM-2133)**



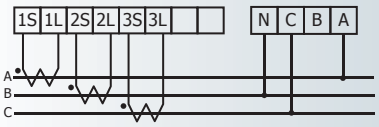

**1P3W-2CT (PM-2133)**



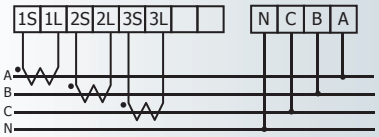

**3P3W-2CT (PM-2133)**




**3P3W-3CT (PM-2133)**




**3P4W-3CT (PM-2133)**





# PM-213x 3 Phase/4 Loops 1 Phase Compact Smart Meter

## Introduction

It's always difficult but crucial to the supervisors to figure out how much energy is consuming. ICP DAS brings the most powerful, cost effective, advanced Compact Power Meters, PM213X series, to the markets.

With its high accuracy (1%, PF=1), the PM213x series products can be applied both on low voltage primary side and/or medium/high voltage secondary side and enable the users to obtain in real time the reliable and accurate energy consumption readings from the monitored equipments while in operation. These compact size and cost effective Power Meters are equipped with revolutionary wired clip-on CT (various types support input current up to 200A) and standard Modbus communication RS-485 protocol for easy deployment. It works with input voltages ranging 10V ~ 500V, supporting a wide range of applications

ICP DAS offers PM-213X family in a full range of Single-phase and Three-phase compact power meters for power monitoring. The products offer a rich feature set combined with easy-to-integrate communications.

## Specifications

| Model | | PM-2134 | PM-2133 |
|---|---|---|---|
| Input Voltage | | 10 - 300 V | 10 - 500 V |
| Input Current | | CT Φ10 mm (60 A), CT Φ16 mm (100 A), CT Φ24 mm (200 A) | |
| Aux Power | | DC 10 - 30 V | |
| Frequency | | 60/50 Hz | |
| Starting I | | <0.025A | |
| Wiring Diagram | | 1-phase 4-channel | Auto or manual setting 1P2W-1CT, 1P3W-2CT, 3P3W-2CT, 3P3W-3CT, 3P4W |
| Power Parameters Measures | | V1, V1, V2, V2<br>I 1, I 2, I 3, I 4<br>kW1, kW2, kW3, kW4<br>kVA1, kVA2, kVA3, kVA4<br>kvar1, kvar2, kvar3, kvar4<br>PF1, PF2, PF3, PF4<br>kWh1, kWh2, kWh3, kWh4<br>kVAh1, kVAh2, kVAh3, kVAh4<br>kvarh1, kvarh2, kvarh3, kvarh4 | VA, VB, VC, Vave<br>I A, I B, I C, I ave<br>kWA, kWB, kWC, kWtot<br>kVAA, kVAB, kVAC, kVAtot<br>kvarA, kvarB, kvarC, kvartot<br>PFA, PFB, PFC, PFtot<br>kWhA, kWhB, kWhC, kWhtot<br>kVAhA, kVAhB, kVAhC, kVAhtot<br>kvarhA, kvarhB, kvarhC, kvarhtot |
| Communi-cation | Modbus-RTU | RS485, half duplex isolated<br>Baud Rate: 9600, 19200 (default), 38400 | |
| | CAN bus | Baud Rate: 125 k (default) , 250 k , 500 k , 1000 k | |
| kWh Accuracy | | PF=1, <1% | |
| Dimensions | | 78 (L) × 35 (W) × 99 (H) mm | |
| Operating Temperature | | -10 °C ~ +70 °C | |
| Installation | | Rail-mounted | |

## Ordering Information

**PM-213□-□□□-□□□□**

**Model**
4: 4 Loops 1 Phase Compact Smart Meter x 4CT's
3: 3 Phase Compact Smart Meter x 3CT's

**CT size (measurement)**
100: CTΦ10 mm (0 ~ 60A)
160: CTΦ16 mm (0 ~ 100A)
240: CTΦ24 mm (0 ~ 200A)

**Communication**
□: Modbus RTU
CAN: CAN bus
CPS: CANopen
DNS: DeviceNet
DNP3: DNP3.0
EIP: Ethernet/IP

ICP DAS Co., Ltd.
http://www.icpdas.com