

Smart multi-function 3-phase Power Meter

PM-300 Series smart multi-function three-phase network power meter is a suitable low-voltage system for intelligent devices, collecting data and control functions in one device, with the measurement of electrical parameters and energy measurement, to provide communication interface and computer monitoring system Connection, support RS485 interface with MODBUS-RTU protocol.

PM-300 provides full benefits, such as dedicated display module, display a number of data information, intuitive user interface, easy to understand operation.

Functions

- ◆ Multi-function three-phase meter measurement capabilities
- ◆ Full-featured : Monitors a single / regional / overall power circuit with a single instrument.
- ◆ High reliability : Professional design, in line with international and IEC standards for anti-jamming performance, ISO9000 quality assurance.
- ◆ Small size : It can be installed in a small switch box.
- ◆ Easy to install : Self-locking mounting mechanism, installation or removal are very convenient and quick.
- ◆ Flexible wiring : Suitable for a variety of high and low voltage wiring system.
- ◆ Convenient configuration : Adopt RS-485 communication interface, support ModBUS-RTU, connect with all kinds of PLC in the industry, communication with multiple software.

Capabilities

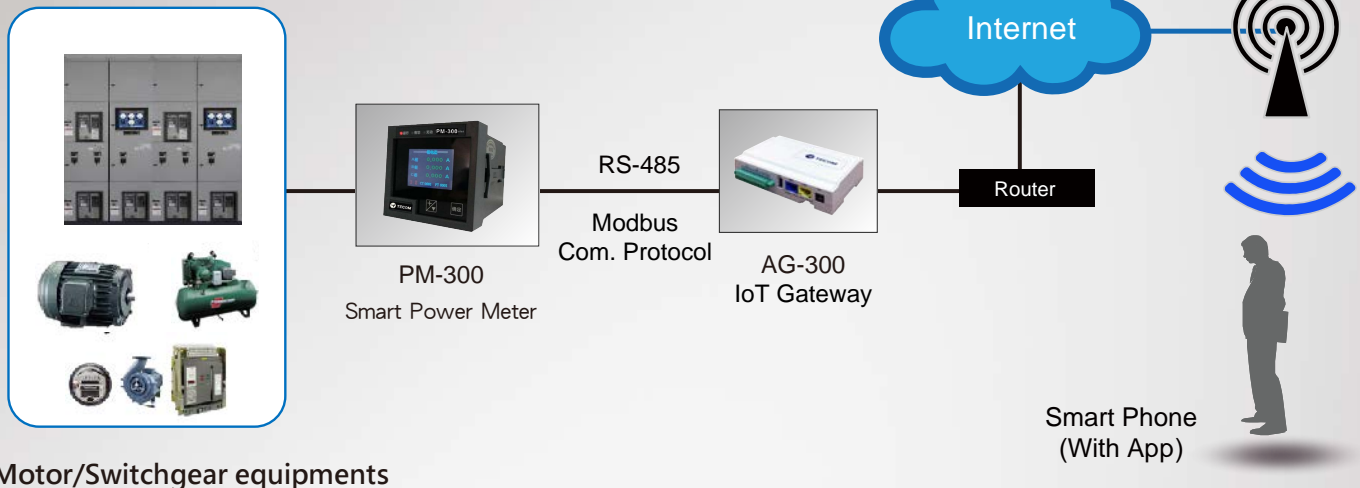
1. Line voltage: V_{rs} , V_{st} , V_{tr}
2. Three-phase voltage: V_r , V_s , V_t
3. Three-phase current: I_r , I_s , I_t
4. Power: active power, reactive power, apparent power
5. Power Factor
6. Frequency
7. Electricity measurement: active energy, reactive energy

Product Images



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Application Structure Diagram



Specifications

Relay output

- Output format: mechanical contact
- Max. voltage: 250VAC, 30VDC
- Max. current: 5A

Equipment withstand voltage, dielectric strength

- Power, voltage loop > 2KV
- Current loop > 2.5KV

Switch input

- Photo coupler isolation
- Isolation voltage: 2500Vrms
- Passive empty contact input
- Working power: 85 ~ 265V AC / DC
- Power consumption: <4W

Communication: RS-485 interface

- Baud Rate: 2400 ~ 57600bps Optional
- Modbus-RTU, DL / T645 protocol

Voltage input

- Rated voltage: 100VAC or 400VAC, allowing 20% of the overrun
- Overload: 2 times the rated value (continuous); 2500VAC / 1 second (no cycle)
- Measurement form: True RMS
- Frequency range: 45 ~ 65Hz
- PT loop power consumption: <0.2VA

Current input

- Rated current: 5A or 1A, allowing 20% of the overrun
- Overload: 2 times the rated value (continuous); 100A / 1 second (no cycle)
- Measurement form: True RMS
- Frequency range: 45 ~ 65Hz
- CT loop power consumption: <0.2VA

Accuracy specifications

Measurement parameters	Measurement accuracy	Resolution	Range
Voltage U(Volts)	0.20%	0.10%	0 ~ 999,999V
Current I(Amps)	0.20%	0.10%	0 ~ 30,000A
Active Power P(KW)	0.50%	0.10%	0 ~ 999,999KW
Reactive Power Q(KVAR)	2.00%	0.10%	0 ~ 999,999KVAR
Apparent Power S(KVA)	0.50%	0.10%	0 ~ 999,999KVA
Power Factor (COSΦ)	0.50%	1.00%	-0.6 ~ 1.0
Frequency F(Hz)	0.02Hz	0.1Hz	45 ~ 65Hz
Active Energy (KWH/KVARH)	0.50%	1KWH, KVARH	0 ~ 999,999,999(KWH/KVARH)
Reactive Energy (KWH/KVARH)	2.00%	1KWH, KVARH	0 ~ 999,999,999(KWH/KVARH)

Operating temperature: -20 °C ~ +55 °C; Storage temperature: -40 °C ~ +85 °C; Humidity range: 0 ~ 95% No condensation