



PA310 Clip-on CT Smart Power Meter

Low cost, easily installation, large recording capacity



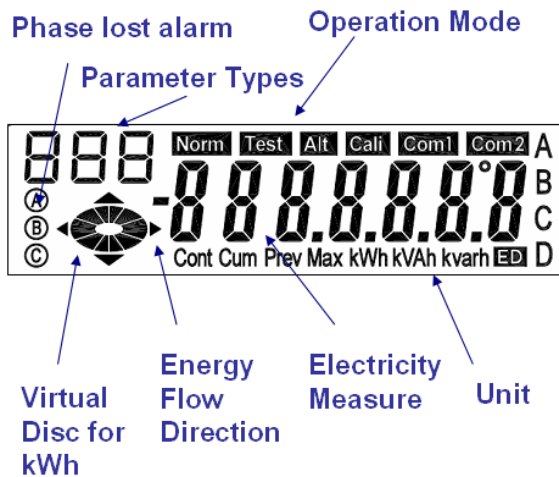
PA310 is designed for electric power monitoring and load recording for single or three phase systems. It can be directly used in low voltage systems due to its wide range current measurement (up to 1000A). PA310 can also maintain better than 1% (IEC62053-21) accuracy even under low current condition (< 5A), thus it still can be used in middle to high voltage system. The unique features of PA310 including : internal 5A CT or Clip-on CT, bi-directional measurement, long time load recording, and standard communication. Its compact size, easy installation, and low cost make PA310 suitable for modern electricity monitoring and load investigation.

◆ Features

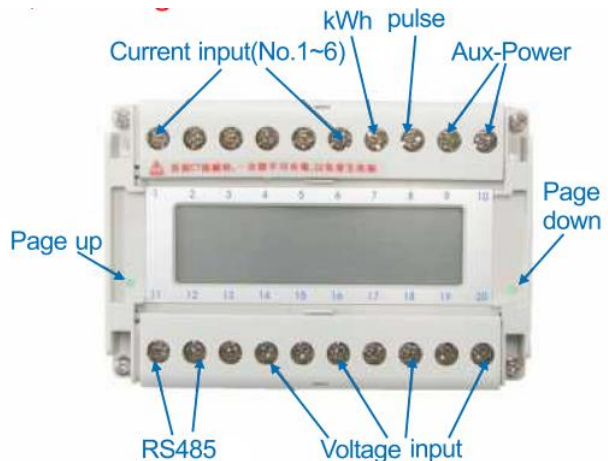
- Clip-on CT, easily wiring especially for on-line installation
- Optional in 5A CT(internal), without Clip-on CT
- Meter ID can be set up through the panel buttons
- Wide measurement range, suitable for low voltage system
- Wh accuracy is better than 0.5%(pf=1)
- Up to 10000 load profile records with configurable recording interval
- RS485 communication support Modbus protocol

◆ Wiring & Display

LCD Display



Wiring



◆ Certificate

1. LVD: EN61010-1
2. CE :

EN61326 Conducted Emission
 EN61000-3-2 Harmonic Current Emission
 EN61000-4-2 Electrostatic Discharge
 EN61000-4-4 Electrical Fast Transient/Burst
 EN61000-4-6 Conducted Susceptibility
 EN61000-4-8 Power Frequency magnetic Field

EN61326 Radiated Emission
 EN61000-3-3 Voltage Fluctuation and Flicker
 EN61000-4-3 Radiated Susceptibility
 EN61000-4-5 Surge
 EN61000-4-11 Voltage Dips and Interruption

3. FCC : ClassA and CISPR 22



◆ Specification

	PA310 Clip-on CT	PA310 Built-in CT
Aux. power	100-240 VAC	
Target Measuring System	3P4W, 3P3W-2CT, 3P3W-3CT, 1P3W, 1P2W, Auto-detection of wiring	
V input	AC 10-480 V	AC10-600 V
A input	CTΦ10mm, 1mA~10A CTΦ10mm, 30mA~60A CTΦ16mm, 50mA~100A CTΦ24mm, 80mA~200A CTΦ36mm, 100mA~300A CTΦ31.6mm, 1A~600A CTΦ50.8mm, 1A~1000A over 1000A : optional in flexible Rogowski Coil CT	Built-in 5A CT
Power consumption	2.7W/7VA	
Primary Comm.	RS485 Modbus protocol, 2-wire, 9600~38400bps	
Measure parameter	Current (Average, phase) Voltage (V _{LL} , V _{LN} , average) Power Factor (Average, Phase) kW, kvar, KVA (Average, Phase) Wh+, Wh-, VARh+, VARh-, Vah Phase Angle (V _a , V _b , V _c , I _a , I _b , I _c) Hz	
Accuracy	V/I:0.3%, kW:0.5%(PF=1)	
Demand measure	kW demand(Real time, Last)/Block, Rolling mode	N/A
Harmonics Analysis	THD- V,I	N/A
Report / Record	2 groups, group 1 max. 12 channels, group 2 max. 8 channels Max storage : 104 days (interval = 15 mins) /channel(in group1 12 channels or group2 8 channels)	N/A
I/O	kWh Pulse output	
Mount	DIN-rail	
Size(mm)	110(W)*75(H)*120(L)	
Display	Mono STN-LCD	
Temperature	Operation T. : - 20 ~ 70 °C Storage T. : - 25 ~ 80 °C	
Humidity(RH, %)	95%	
Index of Protection	IP20	

◆ Ordering Code

PA310-①②

① CT Options

- | | |
|------------------------------|--|
| 0 : 5A, Built-in 5A CT | 5 : 600A, CTΦ31.6mm, 1A~600A |
| 1 : 10A, CTΦ10mm, 10mA~10A | 6 : 1000A, CTΦ50.8mm, 1A~1000A |
| 2 : 60A, CTΦ10mm, 30mA~60A | 7 : 1000A, flexible Rogowski Coil CT. Window size: 19cm, Transf. length: 2M |
| 3 : 100A, CTΦ16mm, 50mA~100A | 8 : 2000A, flexible Rogowski Coil CT Window size: 19cm, Transf. length: 1.5M |
| 4 : 200A, TΦ24mm, 80mA~200A | 9 : 300A, CTΦ36mm, 100mA~300A |

② Frequency

- 0 : 60Hz
- 1 : 50Hz