

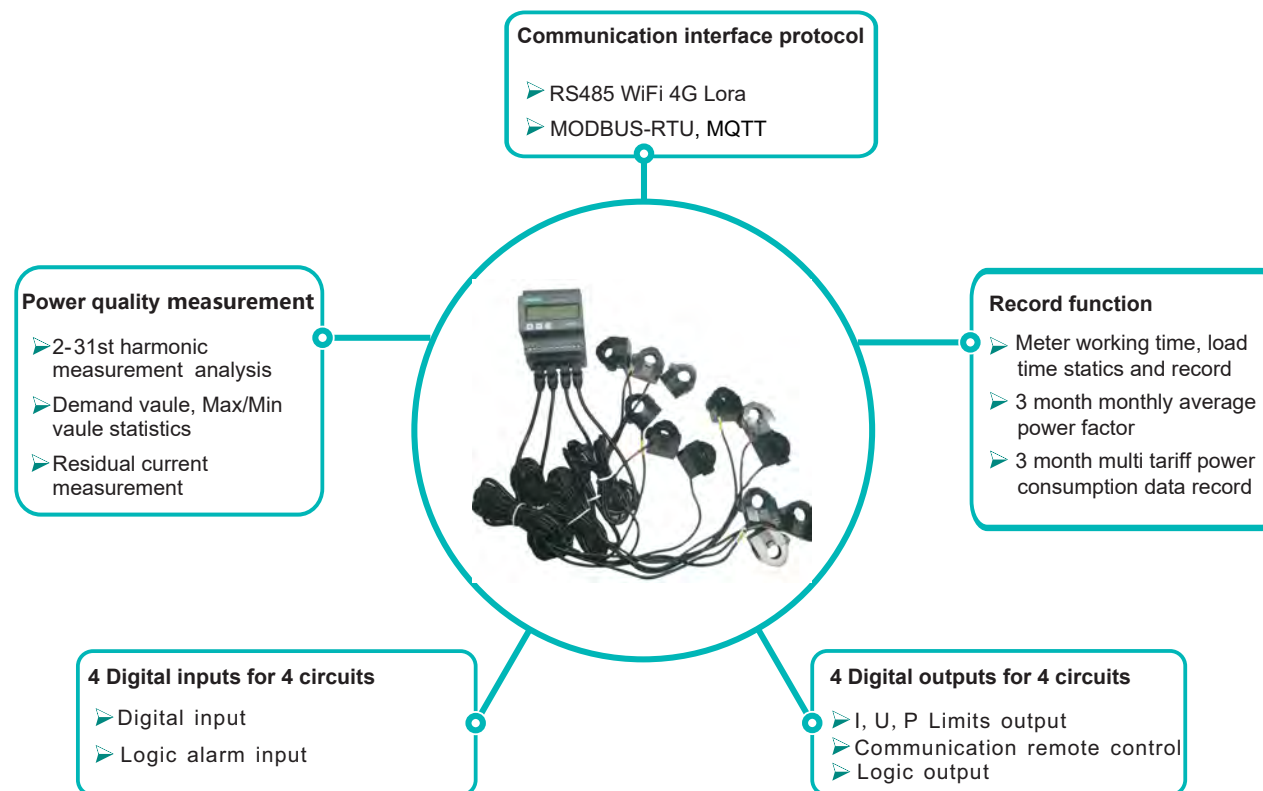
KPM312 Three Phase Multi Channel Power Meter



KPM312 Three Phase Multi Channel Power Meter is used for max 4 branch circuit power monitoring and data transmission. It adopts DIN 35mm rail type installation and LCD display and integrates three-phase electrical parameters measurement, 2~31st harmonic analysis and time statistics.

KPM312 default communication is Modbus-RTU by RS485. WiFi, 4G, Lora communication are optional. It can also expand 4-way digital input and 4-way relay output, 4-way temperature measurement for each circuit.

Product Features

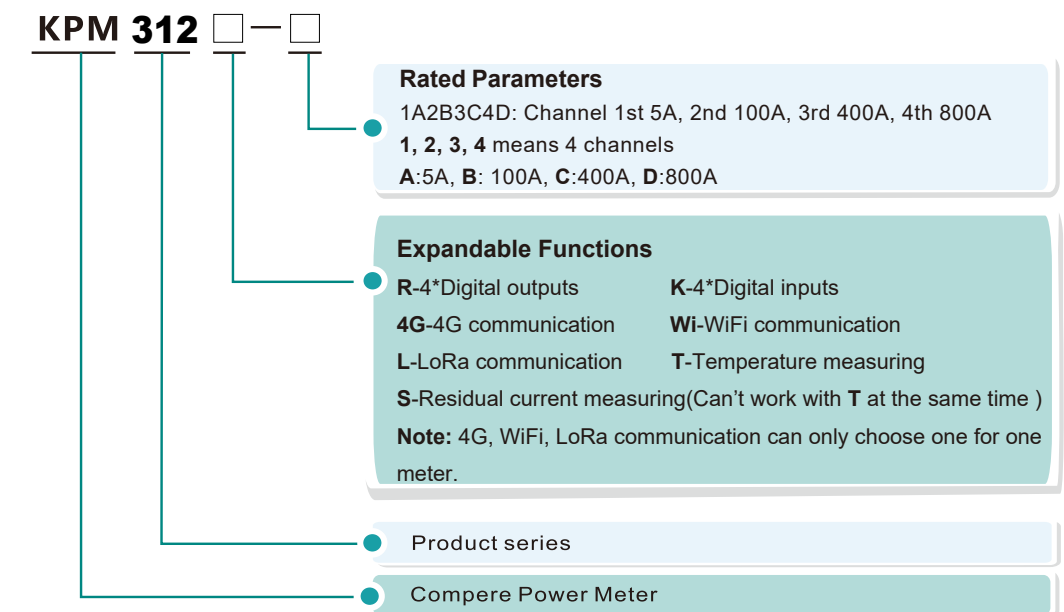


Function features



- Measuring 3 phase 4 circuit phase voltage, line voltage, current, active and reactive power, power factor, frequency, demand, max & min value etc.
- Programmable voltage current transformation ratio
- Running time, loading time statistics
- 2-31st harmonic calculation & analysis
- Default Modbus-RTU RS485 communication
- Optional WIFI 4G communication by MQTT, optional LoRa Modbus-RTU communication
- Optional 4 × DI and 4 × DO
- Optional temperature measurement for 4 circuits
- Optional residual current measurement for 4 circuits (Can't work with temperature measurement at the same time)
- 7+1digits LCD screen display
- Rated current 5A-800A optional

Standard of optional type



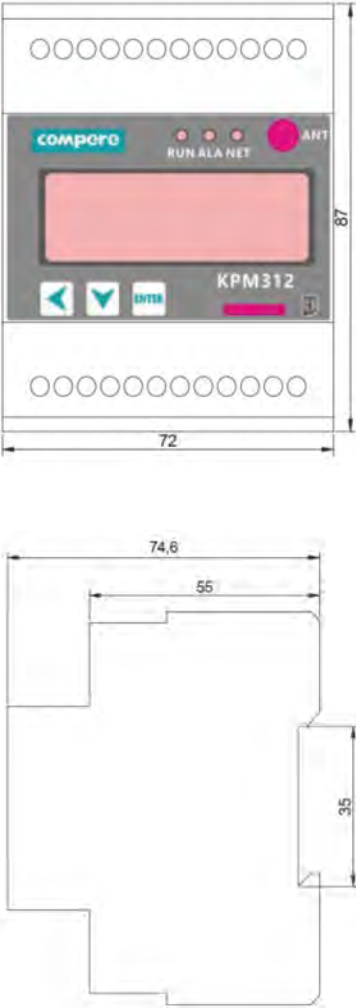
Note: The rated current is divided into four levels: A, B, C, D.

A for primary 5A, B for primary 100A, C for primary 400A, and D for primary 800A.

Each channel can be worked with different current level. Users can choose 1-4 channels as their needs. For example, 1A2A means channel 1 and 2 rated current is 5A respectively, channel 3 and 4 are not chosen, the default is 5A.



Product size Technical Parameters



Power supply	Operating Voltage	AC85~265V/DC80~300V
	Rated power	< 3VA
Input voltage	Rated voltage	3*220VAC
	Overload capacity	1.2 times rated voltage allowed, continuous work. 2 times the rated voltage allowed 10 second
	Power consumption	<0.5VA/phase(Rated)
	Measurement range	LN:50~260VAC, LL:90~450VAC
Input current	Frequency range	45~65Hz
	Rated current	4 channels optional : 5A, 100A, 400A, 800A with split core current transformers
	Overload capacity	1.2 times rated current allowed, continuous work. 20 times the rated current allowed 1 second.
	Power consumption	<0.75VA/phase (Rated current 5A)
Input/ Output	Frequency range	45~65Hz
	Digital input	4-way passive main line contact DI input, internal supply DC24V power source
Power quality monitor	Digital output	4-way DO output, Contact capacity 250VAC/5A, 30VDC/5A
	Harmonic measurement	Voltage/current 2~31st harmonic distortion rate,total harmonic distortion rate
	programmable voltage current transformation ratio	Phase voltage,phase current
	Harmonic distortion rate (THD)	Voltage, current
Measure ment accuracy	Voltage	±0.2%(0.01V)
	Current	±0.2%(0.01A)
	Active power	±0.5%(0.1W)
	Reactive power	±2.0%(0.1var)
	Apparent power	±0.5%(0.1VA)
	Active energy	0.5S(0.1kWh)
	Reactive energy	±2.0%(0.1kvarh)
	Power factor	±0.5%(0.001)
Communi cation interface	Frequency	±0.02Hz(0.01Hz)
	Communication interface	RS485 / WIFI / 4G/ Lora (410-525Mhz)
	Communication protocol	Modbus-RTU, DL/T645-2007, MQTT
	Power frequency withstand voltage	2KV Insulation resistance, 1 minute
Communi cation interface	Insulation resistance	>50MΩ
	Impact voltag	5kV(Peak),1. 2/50us
Working environm ent	Operating temperature	-25℃~+70℃
	Relative humidity	5%~95% No condensation
	Storage temperature	-30℃~+75℃
Electrom agnetic Compati bility	Altitude	No more than 3000m
	Surge (impact) immunity	GB/T 17626.5-2008,Level4,IEC61000-4-5, level 4
	Fast pulse group immunity	GB/T 17626.4-2008,Level4,IEC61000-4-4, level 4
	Electrostatic discharge immunity	GB/T 17626.2-2006,Level4,IEC61000-4-2, level 4
	Power frequency magnetic field immunity	GB/T 17626.8-2006,Level4,IEC61000-4-8, level 4

Application occasion

- Energymangement system integration
- Old project or wire line modification
- Projects with limited space or inconvenient installation
- Measured circuit are near or in one cabinet

Typical wiring

Star system wiring

