

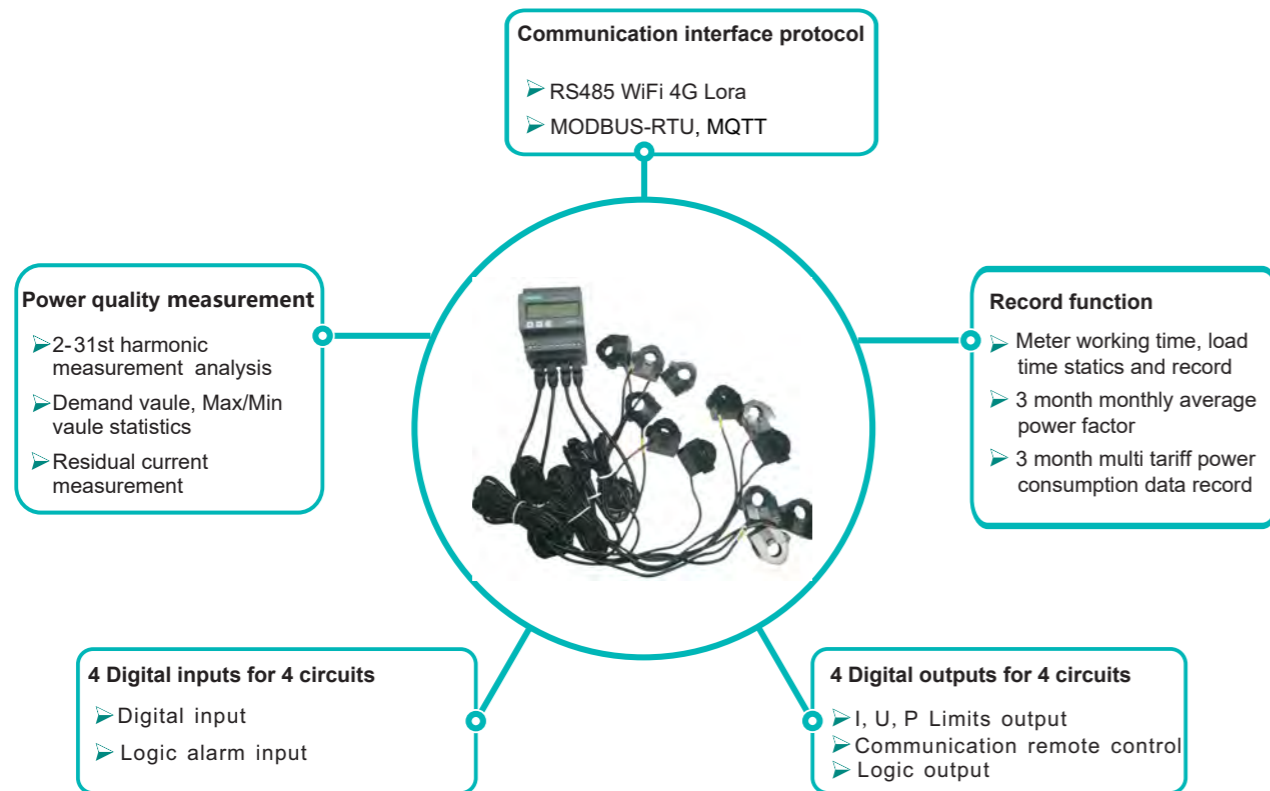
KPM312 Three Phase Multi Channel Power Meter



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

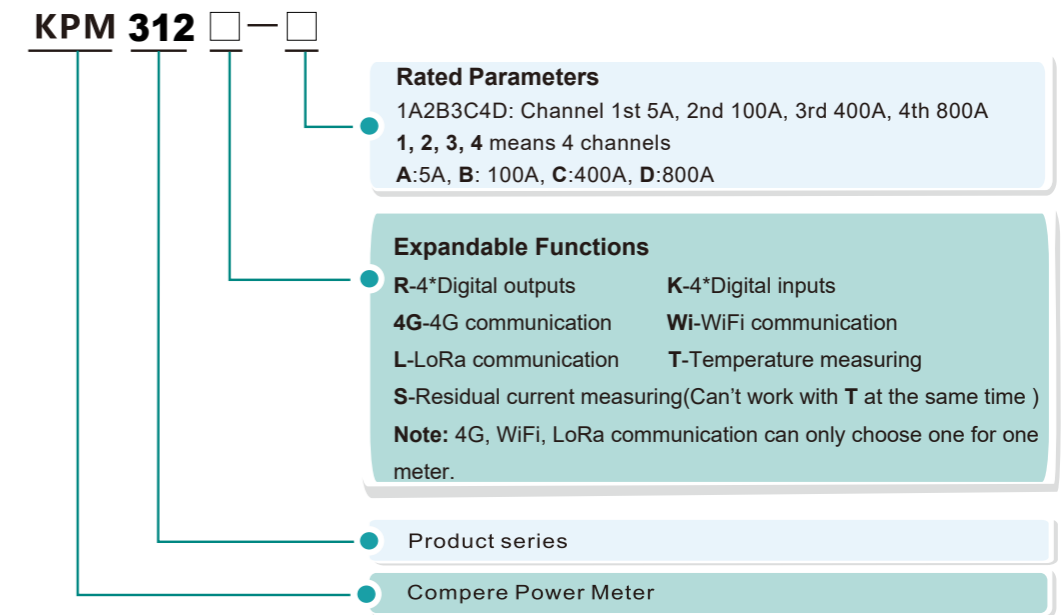


Function features



- 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

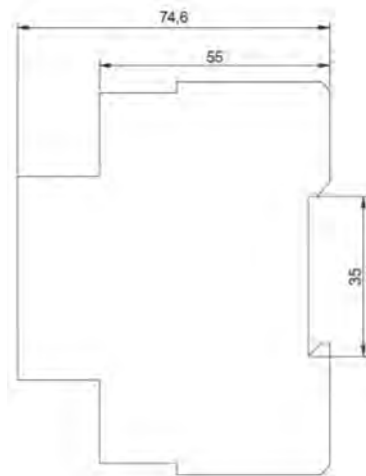
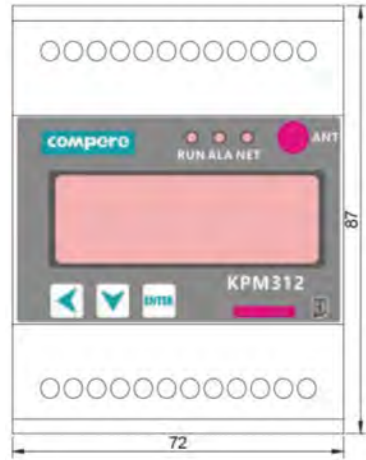


Note: The rated current is divided into four levels: A, B, C, D.

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	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)
	Frequency range	45~65Hz
Input/Output	Digital input	4-way passive main line contact DI input, internal supply DC24V power source
	Digital output	4-way DO output, Contact capacity 250VAC/5A, 30VDC/5A
Power quality monitor	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
Measurement 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)
Communication interface	Communication interface	RS485 / WIFI / 4G/ Lora (410-525Mhz)
	Communication protocol	Modbus-RTU, DL/T645-2007, MQTT
Communication interface	Power frequency withstand voltage	2KV Insulation resistance, 1 minute
	Insulation resistance	>50MΩ
	Impact voltage	5kV(Peak), 1. 2/50us
Working environment	Operating temperature	-25°C~+70°C
	Relative humidity	5%~95% No condensation
	Storage temperature	-30°C~+75°C
Electromagnetic Compatibility	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

