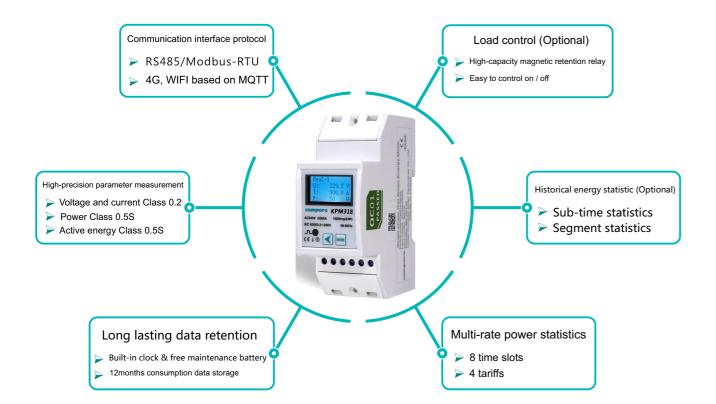
#### KPM31A&B Single-phase DIN rail smart energy meter



KPM31A&B Single-phase DIN rail smart energy meter is designed with advanced microprocessor and digital signal processing technology. It integrates comprehensive single-phase power measurement, display, energy accumulation, and network communication.

It has strong anti-interference ability and can still work stably in situations with severe electromagnetic interference.

### Product Features

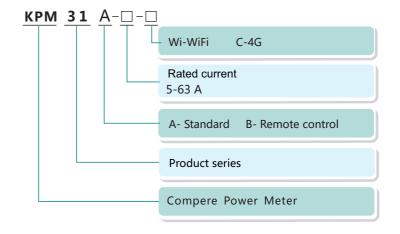


## Function features



- Measurement of voltage, bidirectional current, active power, reactive power, apparent power, power factor, frequency, active energy, reactive energy.
- Multi-rate energy statistics, up to 8 time slots per day, 4 tariffs.
- 12 month historical power statistics function.
- · Rated current 5-63A.
- 1 passive optical coupler collector active pulse outputs.
- Default Modbus communication through RS485 interface. Optional WiFi communication
- LCD display a variety of power parameters and information.
- · Built-in clock and maintenance-free battery, permanently data saving after power off.
- Large-capacity magnetic retention relay, load on-off control.

## Products list



◆ E.g.: KPM31B-5(60)-Wi: Rated AC220V/5(60)A (Max 60A), WiFi wireless communication, remote control, multi rate power consumption statistics, single phase DIN rail smart energy meter

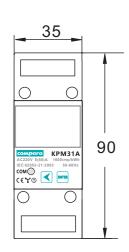
### Application occasion

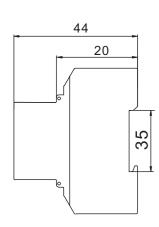
Energy and efficiency management system

Power consumption statistical analysis and charging statistics basis

Energy metering, AMI system Smart distribution management system

# **Product size** Technical Parameters

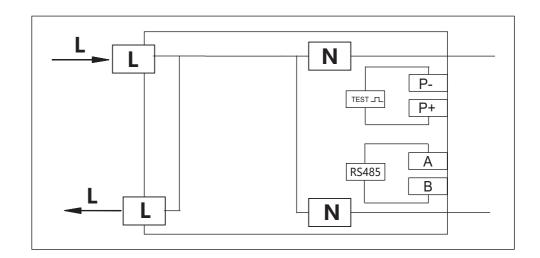




Input voltage	Rated voltage	AC 110V/220V
	Overall power consumption	<0.5VA
	Frequency range	45~65Hz
Input current	Rated current	5-63A
	Frequency range	45~65Hz
Measure- ment accuracy	Voltage	±0.2%(0.01V)
	Current	±0.2%(0.01A)
	Active power	±0.5%(0.1W)
	Reactive power	±2.0%(0.1var)
	Active energy	±0.5%(0.1kWh)
	Reactive energy	±2.0%(0.1kvarh)
	Power factor	±0.5%(0.001)
	Frequency	±0.02Hz(0.01Hz)
Clock	Clock accuracy	<0.5S/D
Comm unication	Communication interface	RS485 / WIFI
	Communication protocol	Modbus-RTU,1200~9600bps
Electrical insulation	Power frequency withstand voltage	AC2kV/min~1mA Input-output-power source
	Insulation resistance	>50MΩ
	Impact voltage	5kV ( Peak ),1.2/50us
Working environ- ment	Operating temperature	-10°C ~ +55°C
	Relative humidity	5%~95% No condensation
	Storage temperature	-20°C ~ +75°C
	Altitude	No more than 3000m
Electrom- agnetic Compati- bility	Surge (impact) immunity	IEC61000-4-5,Level4
	Electrical fast burst immunity	IEC61000-4-4,Level4
	Electrostatic discharge immunity	IEC61000-4-2,Level4
	Power frequency magnetic field immunity	IEC61000-4-8,Level4

## Typical wiring

KPM31A Low voltage single phase direct access tipycal wiring diagram.



KPM31B Low voltage single phase direct access tipycal wiring diagram.

