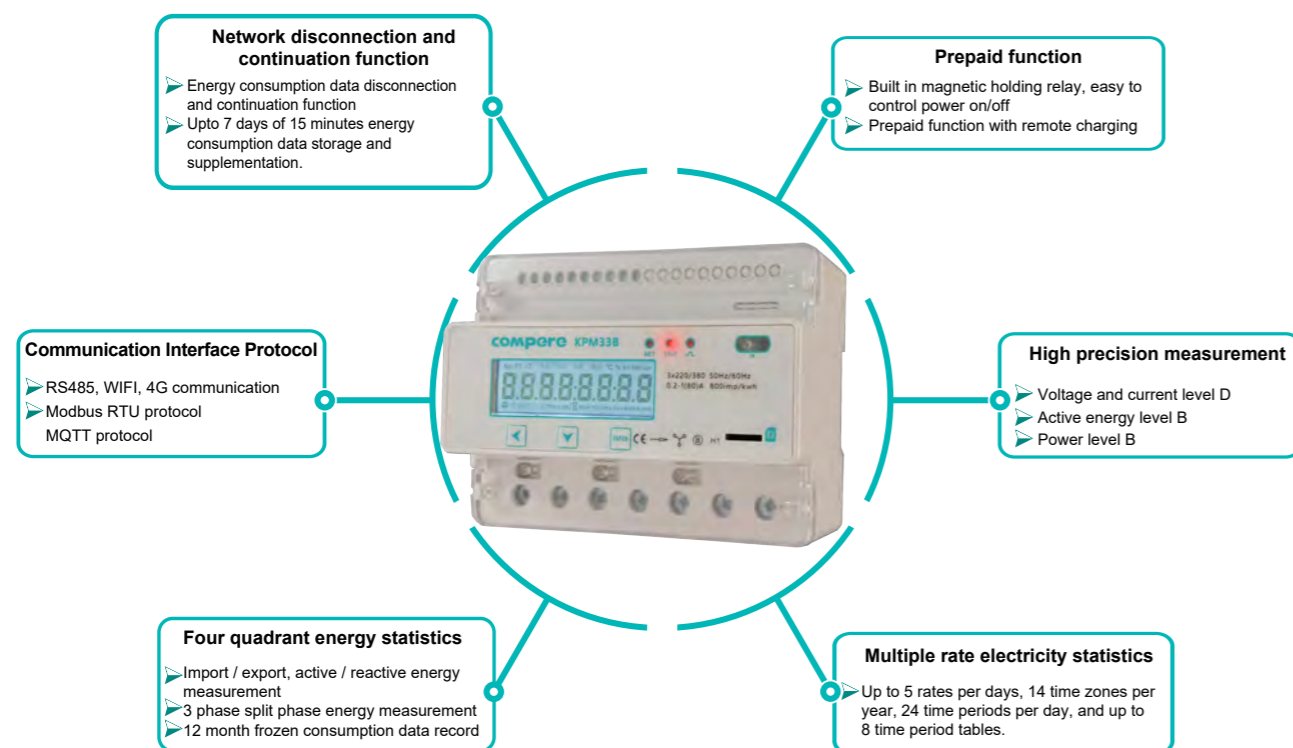


## KPM33 Three-phase DIN rail smart energy meter



KPM33B integrates a DSP measurement chip with high measurement accuracy, built-in magnetic holding relay, prepaid function. It supports energy consumption data network disconnection and continuation function, four quadrant energy statistics, 4G/WIFI wireless communication, which can automatically and accurately collect electricity data, greatly reducing the workload and errors of manual meter reading and improving the accuracy of electricity billing.

## Product Features

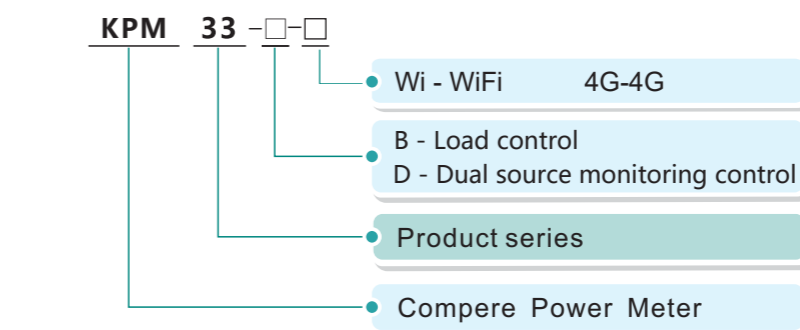


## Function features



- Measuring three-phase voltage, current, active power, reactive power, apparent power, active energy, reactive energy, apparent energy, power factor, frequency, and other parameters.
- Supports multi-rate energy statistics with 14 time zones, 24 time periods, and 5 rate types.
- Supports 12 months frozen energy consumption data record.
- Standard RS485 communication interface supporting the Modbus-RTU protocol.
- Expandable with WiFi/4G CAT1 communication modules, offering optional standard MQTT protocol (supporting last 7 days' 15-minute energy consumption data record and continuation after disconnection) or Modbus-RTU transparent transmission protocol.
- Direct current input with a rated current range of 0.2-1 (80) A.
- LED indicator for pulse output.
- 1 channel of passive optocoupler collector active pulse output.
- Integrated DSP metering chip for Level B (Class 1.0) high measurement accuracy.
- Built-in clock and maintenance-free battery, ensuring permanent data storage after power loss.
- Integrated magnetic latching relay for prepaid functionality.
- Supports infrared communication for Wi-Fi or 4G network configuration and APN settings.
- 35mm standard rail mounting, aesthetically pleasing and easy to install.

## Products list



◆ Example: KPM33B: Rated AC380V/0.2-80A four quadrant energy statistics, historical power statistics, load control, three-phase rail smart meter.

## Application occasion

Energy Billing

Automatic Reading

Remote Control

Microgrid Power  
Measurement

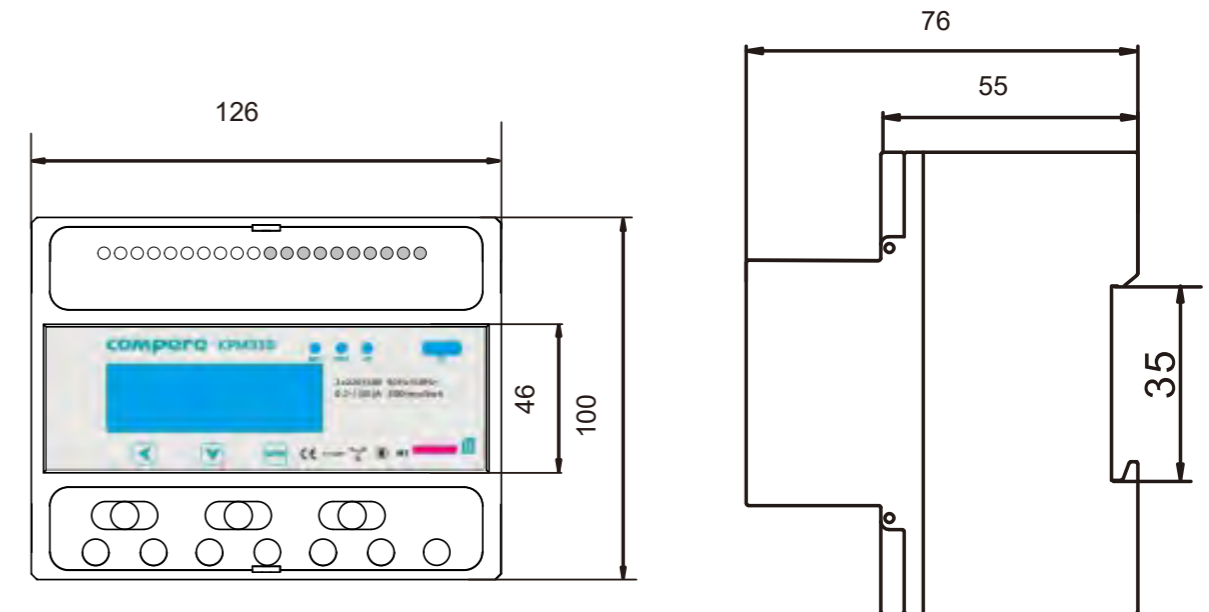


## Technical Parameters

Input voltage	Rated voltage	$3 \times 220\text{V}/380\text{V}$
	Overall power consumption	$<2\text{VA}$
	Frequency range	45~65Hz
Input current	Rated current	0.2-1 (80) A
	Frequency range	45~65Hz
Measurement accuracy	Voltage	$\pm 0.2\% (0.01\text{V})$
	Current	$\pm 0.2\% (0.01\text{A})$
	Active power	$\pm 0.5\% (0.1\text{W})$
	Reactive power	$\pm 2.0\% (0.1\text{var})$
	Active energy	$\pm 0.5\% (0.1\text{kWh})$
	Reactive energy	$\pm 2.0\% (0.1\text{kvarh})$
	Power factor	$\pm 0.5\% (0.001)$
	Frequency	$\pm 0.02\text{Hz} (0.01\text{Hz})$
Clock	Clock accuracy	$<0.5\text{S/D}$
Communication	Communication interface	RS485/WIFI/4G
	Communication protocol	Modbus-RTU, 1200~19200bps; Optional WiFi, 4G
Electrical insulation	Power frequency withstand voltage	AC2kV/min~1mA Input-output-power source
	Insulation resistance	$>50\text{M}\Omega$
	Impact voltage	5kV (Peak), 1.2/50us
Working environment	Operating temperature	$-25^{\circ}\text{C} \sim +70^{\circ}\text{C}$
	Relative humidity	5%~95% No condensation
	Storage temperature	$-30^{\circ}\text{C} \sim +75^{\circ}\text{C}$
	Altitude	No more than 4000m
Electromagnetic Compatibility	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



## Product size



## Typical wiring

