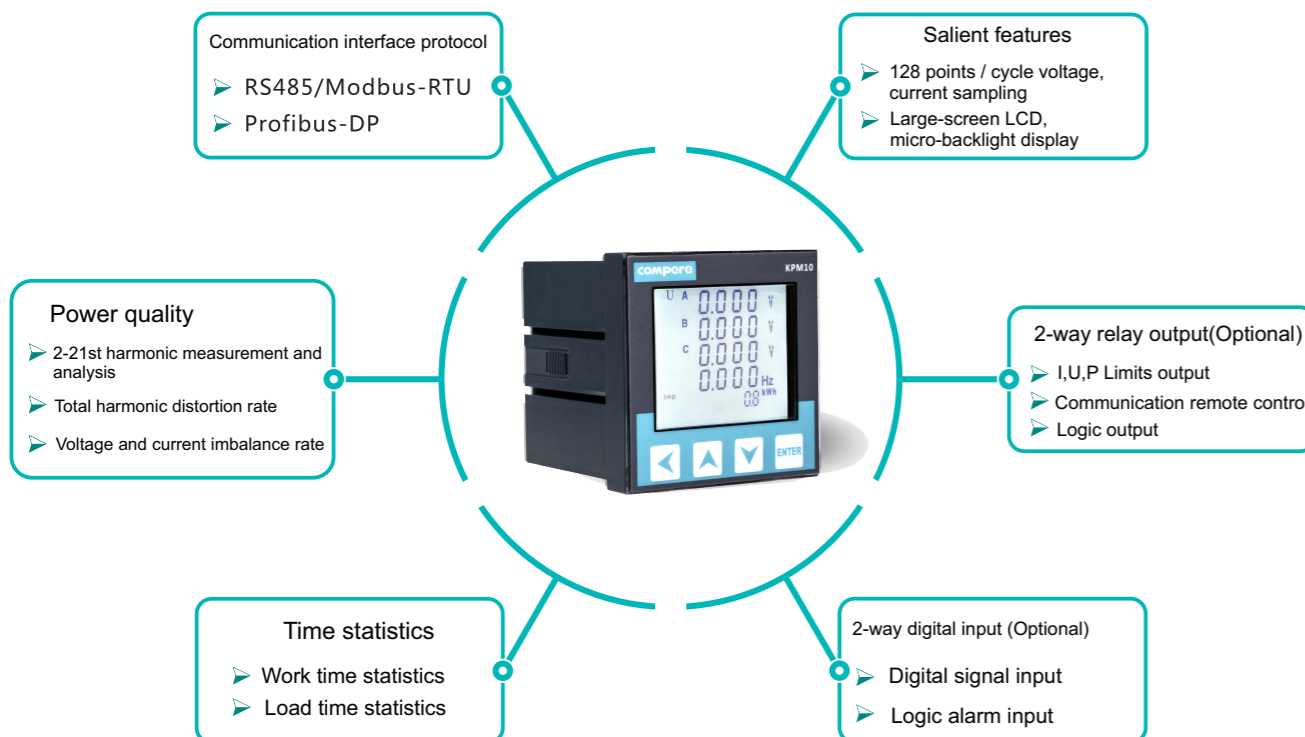


KPM10Three-phase multifunction power meter



KPM10 three-phase multi-function power meter was designed that using advanced 32-bit ARM processor and digital signal processing technology comprehensive set of three-phase electrical parameter measurement / display, power accumulation, fault alarm, harmonic measurement, digital inputs, relays Output and network communications in one. Standard 72 panel, large screen LCD screen, standard 1-way RS485 communication interface. With high precision, strong isolation, stable performance, anti-interference ability etc.

Product Features

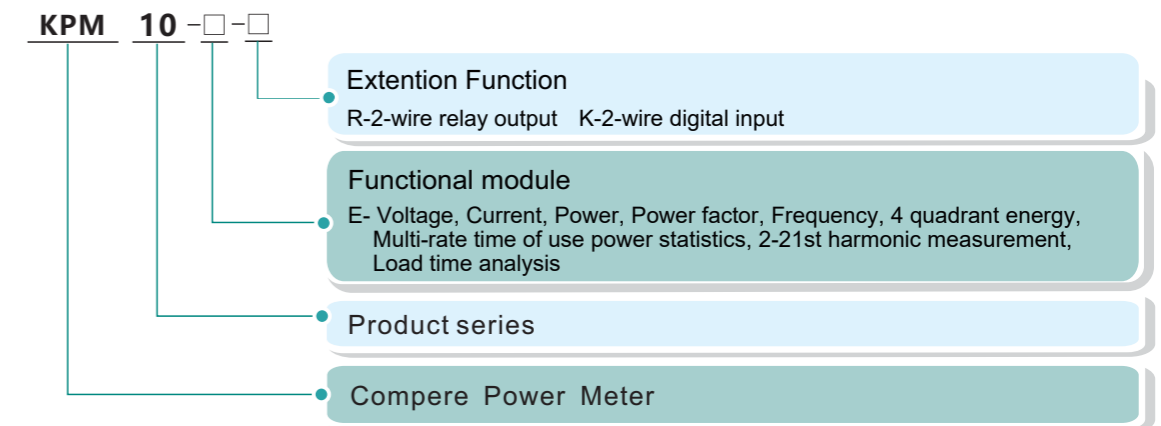


Function features



Measuring three-phase AC voltage, current, active / reactive power, active / reactive energy, power factor and other 30 kinds of basic parameters.
 Class 0.5S four-quadrant power statistics
 Working hours, load time statistics
 Support up to 21st harmonic distortion rate calculation, total harmonic distortion rate calculation, voltage and current imbalance rate, the current K-factor calculation Standard 1-way RS485 communication interface, Modbus protocol
 Can be extended 2-way passive digital input
 Can be extended 2-way relay output
 128 points / cycle voltage, current sampling, high measurement accuracy
 LCD large-screen, micro-backlight display, in the light and wide viewing angle to obtain good visual effects

Products list



Application occasion

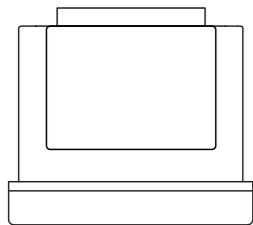
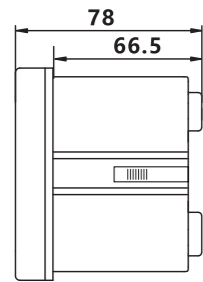
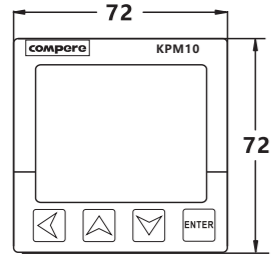
Energy and energy efficiency management system

Internal energy consumption statistical analysis and charging statistics basis

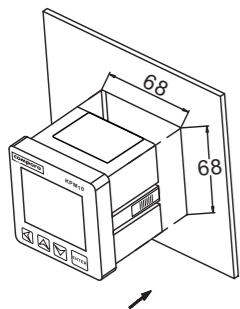
Energy metering, automatic meter reading system

Intelligent distribution management system

Product size **Technical Parameters**



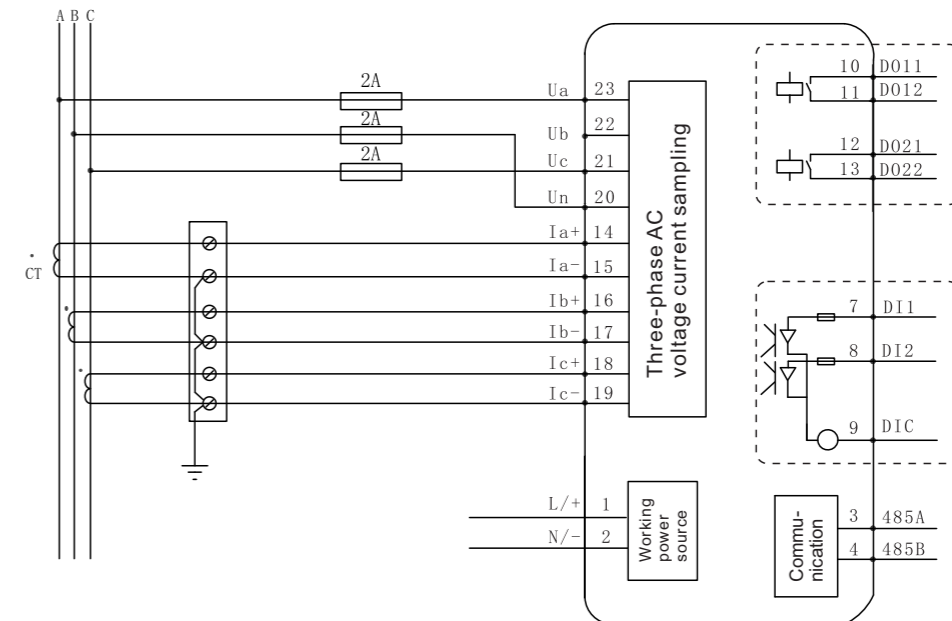
Installation instructions



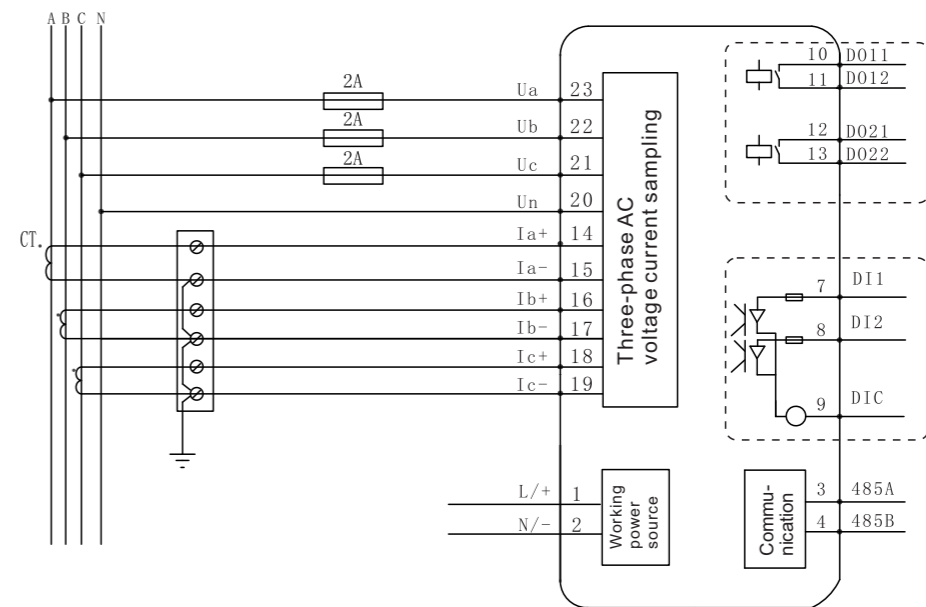
Working power source	Operating Voltage	AC 85-265V/DC 80-300V
	Rated power	<3VA
Input voltage	Rated voltage	57.7/100V,220/380V
	Sill value	5V
	Overtoltage capability	1.2 times rated voltage allowed, continuous work; 2 times the rated voltage allowed 1 second
	Power consumption	<0.5VA(per phase)
	Measurement range	5~260VAC
Input current	Frequency range	45~65Hz
	Rated current	Default 5A, input range 1-6A; optional 1A, input range 1-1.2A
	Sill value	5A Configuration,5mA;1A Configuration,0.8mA
	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);<0.25VA/phase(Rated current 1A)
Input/ Output	Frequency range	45~65Hz
	Switch value input	2-way passive main line contact DI input, internal supply DC24V power source
Power quality monitor	Relay output	2-way DO output,Contact capacity 250VAC/5A,30VDC/5A
	Harmonic measurement	Voltage/current2~21th harmonic distortion rate,total harmonic distortion rate.
	Harmonic distortion rate	Phase voltage, line voltage
Measurement accuracy	Imbalance rate	Voltage, current
	Voltage	±0.2%(0.01V)
	Current	±0.2%(0.01A)
	Active power	±0.5%(0.01W)
	Reactive power	±2.0%(0.01var)
	Active energy	±0.5%(0.1kwh)
	Reactive energy	±2.0%(0.1kvarh)
	Power factor	±0.5%(0.001)
	Frequency	±0.02Hz(0.01HZ)
	Temperature	±1°C(1°C)
Comm-unication	Communication interface	RS485,Photoelectric isolation interface
	Communication protocol	Modbus-RTU, 1200-38400BPS
Electrical insulation	Power frequency withstand voltage	AC2kV/min~1mA input-output-source (GB/T13729)
	Insulation resistance	>50MΩ (GB/T13729)
	Impact voltage	5kV (Peak),1.2/50us (GB/T13729)
Working environment	Operating temperature	-25°C ~ +70°C
	Relative humidity	5% ~ 95% No condensation
	Storage temperature	-30°C ~ +75°C
Electro-magnetic Compatibility (EMC)	Altitude	Not more than 4000m
	Electrical fast transient/burst immunity test	IEC61000-4-4,Level4
	Surge immunity test	IEC61000-4-5,Level4
	Electrostatic discharge immunity	IEC61000-4-3,Level4
	Power frequency magnetic field immunity	IEC61000-4-8,Level4

Typical wiring

KPM10ERK Low-voltage three-phase three-wire typical wiring diagram



KPM10ERK Low-voltage three-phase four-wire typical wiring diagram



Explanation:

- 1.The wiring diagram is suitable for low voltage three-phase three-wire system, low voltage three-phase four-wire system
- 2.The function of dotted lines is optional
- 3.The final interpretation belongs to us.