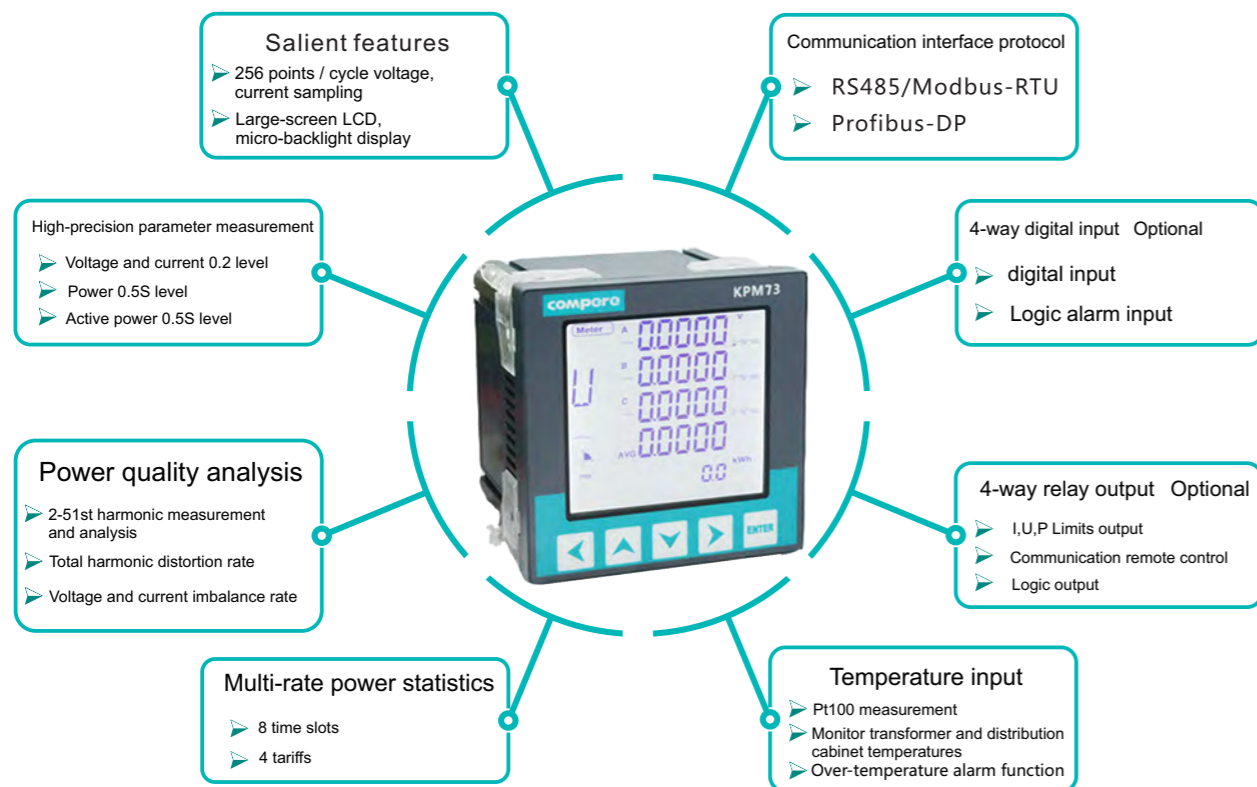


KPM73 Multifunction instruments



KPM73 series multifunction meter with accurate measurement of power parameters, bi-directional 4 quadrant energy measurement, statistics, recording functions, using advanced ARM processor and digital signal processing technology. Set a comprehensive three-phase electrical parameters measurement / display, energy accumulation, power quality analysis, multi rates statistics, digital input / output and communications networks in one. Has a fine manufacturing process, good electrical insulation and electromagnetic compatibility, large-screen LCD liquid crystal display, etc.

Product Features

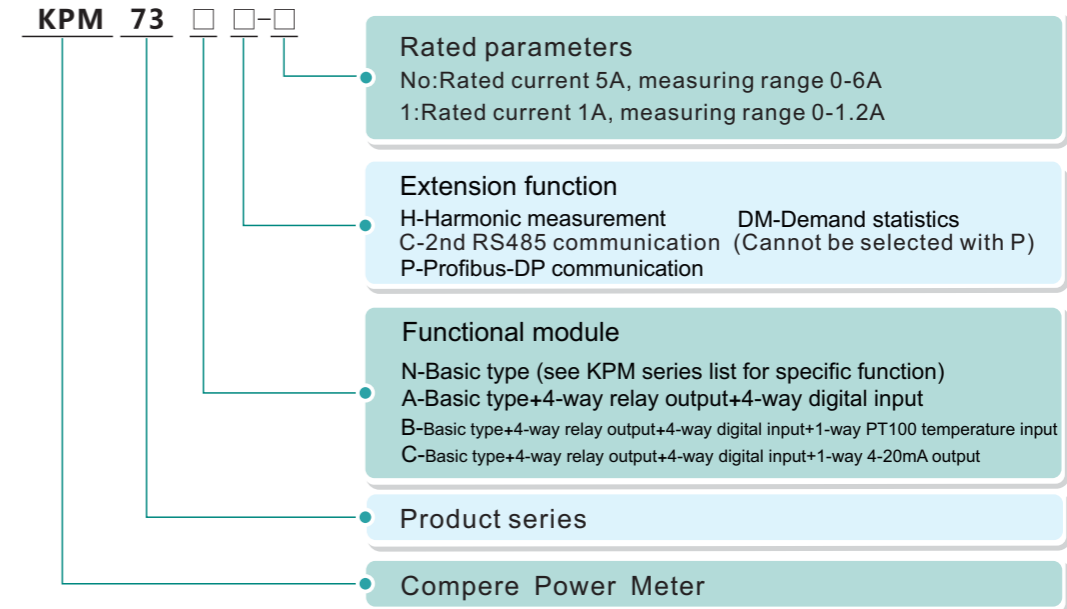


Function features



- Measure over 30 kinds of basic electricity such as phase / line voltage, three-phase current, zero sequence voltage, zero sequence current, active power, reactive power, apparent power, active energy, reactive energy, power factor, frequency
- Measure and display the average power factor of the last three months and accurately grasp the amount of monthly reactive energy consumption
- Class 0.5S 4 quadrant power statistics and multi-rate statistics
- Demand statistics and record the maximum value, minimum value
- Working hours, load time statistics
- Time recording function, can record 100 events
- Support up to 51st harmonic calculation, total harmonic distortion rate calculation, unbalance rate, current K factor calculation
- Out of setting alarm function
- Standard 1-way RS485 communication interface, Modbus-RTU protocol, Optional Profibus-DP Communication module.
- Optional 4-way passive digital input
- Optional 4-way relay output
- Optional 1-way 4-20mA analog output
- 1 road passive optical coupler collector active pulse output
- Optional 1-way PT100 temperature input
- 256 points / cycle voltage, current sampling, to ensure measurement accuracy
- FSTN large screen LCD, bright LED back light uniform display, in the bright light and large viewing angle environment to obtain a good visual effect

Products list

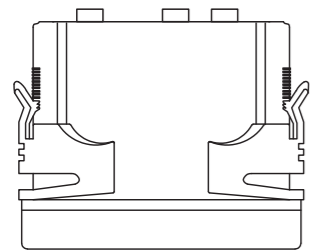
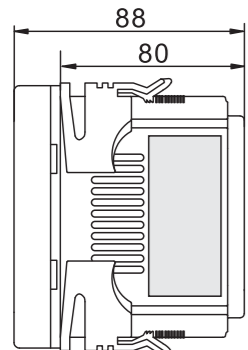
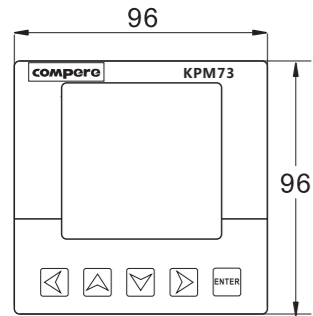


◆ Example : KPM73BH-1 : Rated current1A,4-way digital input, 4-way relay output, 1-way temperature input, 51st harmonic measurement

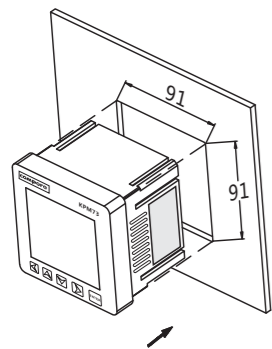
Application occasion

- Measure, monitoring power distribution system parameters
- Collect energy consumption data that cost center analysis needs
- Limit monitor alarm such as over voltage, power consumption
- Power quality analysis
- DC/Green building or DC

Product size Technical Parameters



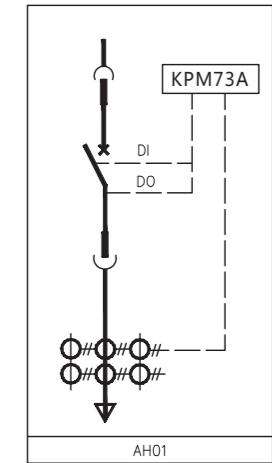
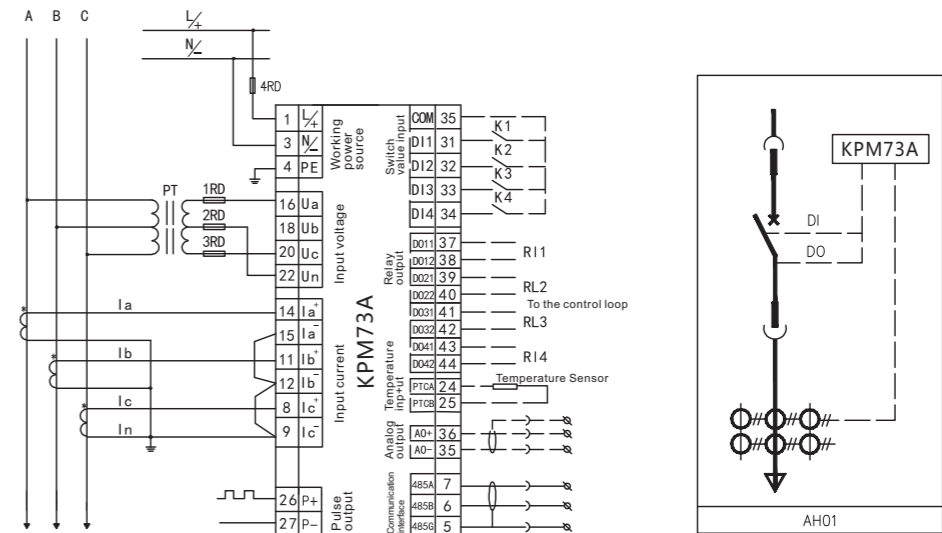
Installation instructions



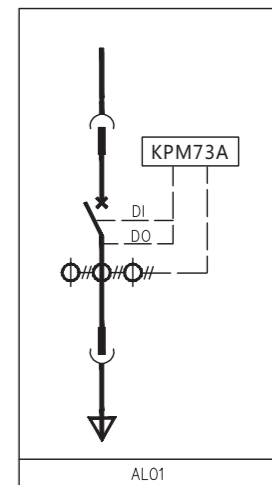
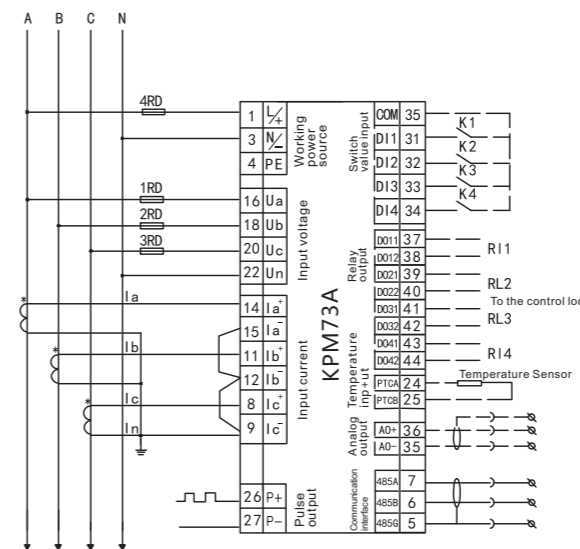
Working power source	Operating Voltage	AC 85-270V/DC 80-300V
	Rated power consumption	< 3VA
Input voltage	Rated voltage	57.7/100V,220/380V,380V/660V Need to customize
	Sill value	5V
	Overload capacity	1.2 times rated voltage allowed, continuous work; 2 times the rated voltage allowed 1second
	Power consumption	<0.5VA/phase(rated)
Input current	Measurement range	Phase voltage(LN):50~270VAC, line voltage(LL):90~470VAC
	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
Input output	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)
	Switch value input	4-way passive main line contact DI input, internal supply DC24V power source
	Relay output	4-way DO output,Contact capacity 250VAC/5A,30VDC/5A
Power quality monitor	Analog output	Output range 4~20mA,overload allows 1.2times
	Temperature input	Measure range 0°C~100°C
	Harmonic measurement	Voltage/current 2~51st harmonic distortion ratetotal 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%(0.1W)
Comm unication	Reactive power	±2.0%(0.1kvar)
	Active energy	±0.5%(0.1kWh)
	Reactive energy	±2.0%(0.1kvarh)
	Power factor	±0.5%(0.001)
Electrical insulation	Frequency	±0.02Hz(0.01Hz)
	Temperature	±1°C(1°C)
Working environment	Communication interface	RS485,Profibus-V1,Photoelectric isolation interface
	Communication protocol	Modbus-RTU,1200~38400bps; Probibus-DP,9600~12Mbps
Electrom-agnetic Compatibility	Power frequency withstand voltage	AC2kV/min~1mA Input-output-power source
	Insulation resistance	>50MΩ
Electrom-agnetic Compatibility	Impact voltage	5kV Peak ,1.2/50us
	Operating temperature	-25°C ~ +70°C
Electrom-agnetic Compatibility	Relative humidity	5%~95% No condensation
	Storage temperature	-30°C ~ +75°C
Electrom-agnetic Compatibility	Altitude	No more than 4000m
	Surge (impact) immunity	IEC61000-4-5,Level4
Electrom-agnetic Compatibility	Electrical fast burst immunity	IEC61000-4-4,Level4
	Electrostatic discharge immunity	IEC61000-4-2,Level4
Electrom-agnetic Compatibility	Power frequency magnetic field immunity	IEC61000-4-8,Level4

Typical wiring

KPM73A High-voltage three-phase three-wire typical wiring



KPM73A Low-voltage three-phase four-wire typical wiring



Explanation:

1. The wiring diagram is suitable for high voltage three-phase three-wire system, low voltage three-phase four-wire system, regard to other system wiring please refer to KPM73 instruction manual.
2. Analog output AO- and switch input common COM share one terminal.
3. Terminal that without function description is invalid.
4. The function of dotted lines is optional.
5. The final interpretation belongs to Compere.