

KINGSINE PMC180N Three Phase Network Power Meter



- Complete power parameter measurement, energy measurement, 31 order voltage / current harmonic analysis.
- Threshold Crossing Alert for power parameter, online monitoring.
- Multifunctional meter without LCD operation panel, optional transducer function output.
- Support MODBUS-RTU standard protocol, RS485 communication.

Overview

PMC180N three phase network power meter is a multifunctional meter without LCD operation panel. It adopts low power dissipation microprocessor, can measuring complete power parameter, energy measurement, and 31 order voltage / current harmonic analysis. It has the optional Analog output port, can match the demand of transducer function. It has RS-485 communication port and could be easily integrated to any intelligent power distribution system. PMC180N has the practical function, easy use, easy maintenance. It can use to monitor and control of the on-site equipment, supply the measuring & testing support to the power application specialist, supply the data base to the SCADA and Smart Grid, provide scientific basis for intelligent energy management.

Function Features

Function Features	PMC180Z	PMC180C	PMC180P	PMC180U	PMC180 I	PMC180N
Instantaneous real virtual value						
current single phase & neutral line	◆		◆		◆	◆
voltage Line/line & Phase/Line	◆		◆	◆		◆

frequency	◆					◆
active power	◆		◆			◆
Three phase & single phase						
reactive power	◆					◆
Three phase & single phase						
power factor	◆	◆				◆
Three phase & single phase						
Energy						
active energy	◆					◆
reactive energy	◆					◆
Power Quality						
Harmonic distortion	◆					◆
current & voltage						
31 order harmonic analysis	◆					◆
voltage & current						
Communication						
RS485 /MODBUS protocol	◆	◆	◆	◆	◆	◆
Display						
LED display	◆	◆	◆	◆	◆	
other						
2 channel DI	◆	◆	◆	◆	◆	
2 channel DO	◆	◆	◆	◆	◆	
1 channel AO:4-20Ma	◆	◆	◆	◆	◆	◆
2 channel limits alarm	◆	◆	◆	◆	◆	◆
support program online upgrade	◆	◆	◆	◆	◆	◆

Technical parameter

Electrical Characteristics		
Measurement Type		Three-phase three-wire AC system Three-phase four-wire AC system
		Sampling rate: 64 times per cycle
Data refresh rate		1S
Measurement Accuracy	Current	0.2%
	Voltage	0.2%
	Power	0.5%
	Frequency	0.05Hz
	Active Energy	1.0%

	Reactive Energy	2.0%
	AO	1%
Input voltage characteristics	Measuring voltage	3 X 220/380V(connected directly)
	Allowed overload	3 X 57.7/100V(connected by CT)
	Input impedance	1.2 times / continuous
	Measuring voltage	1.8MΩ
Input current characteristic	Measuring current	5A or 1A (connected by CT)
	Allowed overload	1.2 times / continuous
	Input impedance	<0.1Ω
4-20mA DC output	Open circuit voltage	5VDC
	Load capacity	≤200Ω
	Isolated voltage	2KV
Working power supply	AC	85~265 VAC/45-65Hz
	DC	100~300 VDC
	Power dissipation	< 3W
Mechanical properties		
Weight		0.5kg
IP protection grade		IP52
Size		110 X 75 X 120 mm
Operating temperature		-25~70°C
Storage Temperature		-40~85°C
Relative Humidity		5% - 90%RH, No condensation
EMC		
Electrostatic discharge interference		IEC 61000-4-2, Level 4
Group of anti-fast transient pulse		IEC 61000-4-4, Level 4
Anti-impact		IEC 61000-4-5, Level 3
Anti-frequency magnetic field		IEC 61000-4-8, Level 3
Electrical insulation performance		
Insulation resistance		GB/T13729, >50MΩ
Frequency withstand voltage		GB/T13729, AC 2KV 50Hz /1min
Impulse voltage		GB/T13729, 5KV, 1.2/50us

