2025/12/05 03:08 1/4 Three phase power sensor

Three phase power sensor

3-phase power-sensor



Model number:		PM3-E-D		
Connect to:		MC-230		
		RS485 power sensor bus A - B		
Mounting:		DIN rail, 1M, 18 mm		
Dimensions:		66 × 72 × 100 mm		
Used for measuring power and energy of				
1	single/three-phase energy sources			
✓	single/three-phase energy consumers			

Applications

• Digital multi-function power sensor for single/three phase networks

Features

- DIN rail mounting
- Three Phase 100A Direct Fed
- Accuracy Class 0.5 (Active Energy)
- Bi-directional Measurement for kW and kWh
- Configurable Pulsed output (Import/ Export/Nett kWh)
- Line Frequency
- Power, maximum power demand and power factor
- Active energy imported and exported
- · Reactive energy imported and exported
- Supported Modbus (SDM630Modbus)

General description

SDM630 series measures and displays the characteristics of 1p2w, 3p3w and 3p4w supplies, including voltage, frequency, current, power, active and reactive energy, imported or exported, harmonic etc. Bi-directional measurement makes it an ideal choice for Solar PV measurement. The units support

Max. 100A direct connection, saving the cost and avoiding the trouble to connect external CTs. Two pulse outputs and 1 communication port (Mbus/Modbus) are provided for remote monitoring. The unit has been approved to meet the requirements of EU Directive 2014/32/EU.

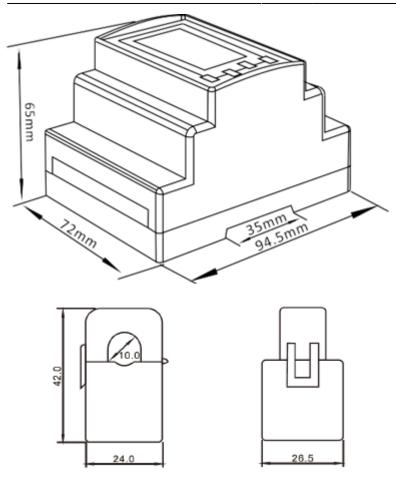
Technical specifications

Operating Humidity Storage Humidity Storage Humidity Operating Temperature -25°C - +50°C Storage Temperature -40°C - +70°C Mounting DIN rail (DIN 43880) Sealing Frequency Frequency Power Consumption Accuracy Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Modbus Transmission Mode RS485 Half-Duplex Protocol Baud Rate Address Range 1-247 Parity EVEN/ODD/NONE Bata Bit 8					
Storage Humidity ≤ 95% Operating Temperature -25°C - +50°C Storage Temperature -40°C - +70°C Mounting DIN rail (DIN 43880) Sealing IP51 Indoor Frequency 50Hz or 60Hz Power Consumption ≤ 10W Accuracy Voltage, Current 0.2% of Mid-Frequency Power Factor 1% of Unity (0.01) Active Power, Apparent Power ± 1% of Range Maximum Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Technical Data				
Operating Temperature Storage Temperature Storage Temperature -40°C - +70°C Mounting DIN rail (DIN 43880) Sealing Frequency Frequency Power Consumption Accuracy Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Modbus Transmission Mode Protocol Baud Rate Address Range Address Range Parity DIN rail (DIN 43880) DIN rail (DIN 43880) IP51 Indoor F0Hz F0Hz F0Hz F1 Mid-Frequency 0.2% of Mid-Frequency 1% of Unity (0.01) 4 Fange Maximum Class 1 IEC 62053-21 Current transformer Frequency Frequency F1 Modbus Transmission Mode RS485 Half-Duplex Modbus Transmission Mode RS485 Half-Duplex F1 Modbus Transmission Mode RS485 Half-Duplex Transmission Mode RS485 Half-Duplex	Operating Humidity	≤ 90%			
Storage Temperature Mounting Sealing Frequency Power Consumption Accuracy Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Max current Modbus Transmission Mode Protocol Baud Rate Address Range 1-247 Parity Data Bit SOHZ or 60HZ PONE 50HZ or 60HZ D.2% of Mid-Frequency 0.2% of Mid-Frequency 1% of Range Maximum Class 1 Frequency 1% of Range Maximum Class 1 IEC 62053-21 Modbus RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 EVEN/ODD/NONE	Storage Humidity	≤ 95%			
Mounting DIN rail (DIN 43880) Sealing IP51 Indoor Frequency 50Hz or 60Hz Power Consumption ≤ 10W Accuracy Voltage, Current 0.2% of Mid-Frequency Power Factor 1% of Unity (0.01) Active Power, Apparent Power ± 1% of Range Maximum Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Operating Temperature	-25°C - +50°C			
Sealing IP51 Indoor Frequency 50Hz or 60Hz Power Consumption ≤ 10W Accuracy Voltage, Current 0.5% Frequency 0.2% of Mid-Frequency Power Factor 1% of Unity (0.01) Active Power, Apparent Power ± 1% of Range Maximum Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Range Maximum Active Reactive Energy Solution Active Energy Solution Energy Solution Active Energy Solution Energy	Storage Temperature	-40°C - +70°C			
Frequency Power Consumption Accuracy Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Max current Modbus Transmission Mode Protocol Baud Rate Address Range 1-247 Parity Soll Zor 60Hz 0.2% of Mid-Frequency 0.2% of Mid-Frequency 1% of Range Maximum 2 1% of Range Maximum Class 1 IEC 62053-21 Current transformer Frequency Solf Data Bit Solf Zor 60Hz Assign	Mounting	DIN rail (DIN 43880)			
Power Consumption≤ 10WAccuracy0.2% of Mid-FrequencyFrequency0.2% of Mid-FrequencyPower Factor1% of Unity (0.01)Active Power, Apparent Power± 1% of Range MaximumReactive Power± 1% of Range MaximumReactive Energy (Varh)± 1% of Range MaximumActive Energy (Wh)Class 1 IEC 62053-21Current transformerFrequency50-60 HzMax current100 AModbusTransmission ModeRS485 Half-DuplexProtocolModbus RTUBaud Rate2400bps - 38400bpsAddress Range1-247ParityEVEN/ODD/NONEData Bit8	Sealing	IP51 Indoor			
Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Frequenc	Frequency	50Hz or 60Hz			
Voltage, Current Frequency Power Factor Active Power, Apparent Power Reactive Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Max current Transmission Mode Protocol Baud Rate Address Range Address Range Data Bit O.2% of Mid-Frequency 1% of Range Maximum E 1% of Range Maximum Class 1 IEC 62053-21 Class 1 IEC 62053-21 Current transformer Frequency Frequency Address Range 1-247 EVEN/ODD/NONE	Power Consumption	≤ 10W			
Frequency Power Factor 1% of Unity (0.01) Active Power, Apparent Power Reactive Power Reactive Energy (Varh) Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Frequen	Accuracy				
Power Factor 1% of Unity (0.01) Active Power, Apparent Power ± 1% of Range Maximum Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Voltage, Current	0.5%			
Active Power, Apparent Power ± 1% of Range Maximum Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Frequency	0.2% of Mid-Frequency			
Reactive Power ± 1% of Range Maximum Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Power Factor	1% of Unity (0.01)			
Reactive Energy (Varh) ± 1% of Range Maximum Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Active Power, Apparent Power	± 1% of Range Maximum			
Active Energy (Wh) Class 1 IEC 62053-21 Current transformer Frequency Max current Transmission Mode Protocol Baud Rate Address Range Parity Data Bit Class 1 IEC 62053-21 Class 1 IEC 62053-21 EVEN/ODD/NONE Suda 100 A EVEN/ODD/NONE RS485 Half-Duplex Modbus RTU 2400bps - 38400bps EVEN/ODD/NONE	Reactive Power	± 1% of Range Maximum			
Current transformer Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Reactive Energy (Varh)	± 1% of Range Maximum			
Frequency 50-60 Hz Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Active Energy (Wh)	Class 1 IEC 62053-21			
Max current 100 A Modbus Transmission Mode RS485 Half-Duplex Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Current transformer				
ModbusTransmission ModeRS485 Half-DuplexProtocolModbus RTUBaud Rate2400bps - 38400bpsAddress Range1-247ParityEVEN/ODD/NONEData Bit8	Frequency	50-60 Hz			
Transmission Mode Protocol Baud Rate Address Range Parity Data Bit RS485 Half-Duplex Modbus RTU 2400bps - 38400bps 2400bps - 38400bps EVEN/ODD/NONE	Max current	100 A			
Protocol Modbus RTU Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Modbus				
Baud Rate 2400bps - 38400bps Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Transmission Mode	RS485 Half-Duplex			
Address Range 1-247 Parity EVEN/ODD/NONE Data Bit 8	Protocol	Modbus RTU			
Parity EVEN/ODD/NONE Data Bit 8	Baud Rate	2400bps - 38400bps			
Data Bit 8	Address Range	1-247			
	Parity	EVEN/ODD/NONE			
Chan Dit 1 and	Data Bit	8			
Stop Bit 1 or 2	Stop Bit	1 or 2			

Dimensions

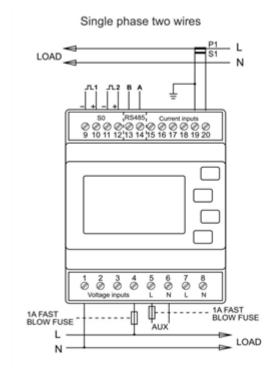
http://wiki.hiq-home.com/ Printed on 2025/12/05 03:08

 2025/12/05 03:08
 3/4
 Three phase power sensor



Installation

Three phase three wires Three phase four wires L1 L2 So (RS485), Current inputs So (RS485), Current i



hiq_pm3-e-d-ct_user_manual_v1.pdf hiq_pm3-e-d-ct_protocol_v1.6.pdf

From:

http://wiki.hiq-home.com/ -

Permanent link:

http://wiki.hiq-home.com/doku.php?id=en:hiq_hw:pm3-e-d&rev=1669800642

Last update: 2022/11/30 09:30



http://wiki.hiq-home.com/ Printed on 2025/12/05 03:08