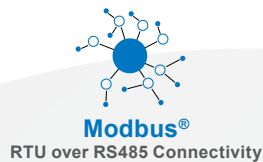


Power Signal Conditioner

For precise measurement and monitoring of key electrical parameters



**For Single, Split
and 3-Phase
Networks**



1%
Accuracy



User-configurable
settings via the **free,**
easy-to-use software



2 Digital Outputs
1 Analog Output



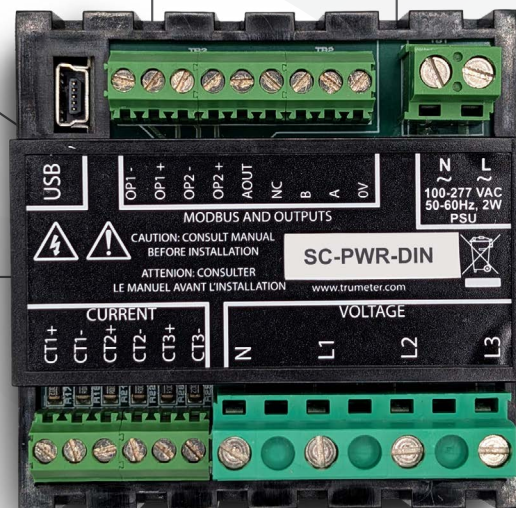
Remote monitoring
with **APM Gateway** and
Trumeter Cloud



DIN Rail Mount
Compact design for
simple installation



Ten user
configurable
alarms



Instantaneous:

- Voltage (L-L and L-N)
- Current
- Reactive Power (VAR)
- Active Power (W)
- Apparent Power (VA)
- Frequency (Hz)
- Power Factor (PF)
- THD Voltage & Current
- % Max Load
- Alarm Status (available on Modbus communication)
- Phase Angle (available on Modbus communication)
- Total Energy (kWh or kVAh)

Networks:

- Single phase, 2-wire
- Single phase, 3-wire (split-phase)
- 3-phase, 3-wire
- 3-phase, 4-wire



The Power Signal Conditioner is designed for single-, split-, and three-phase applications, delivering precise measurement and monitoring of key electrical parameters. It measures active (W), reactive (VAR), and apparent (VA) power, along with a full range of instantaneous values including voltage (L-L and L-N), current, frequency, power factor, total harmonic distortion (THD) for voltage and current, and percentage of maximum load. Through Modbus® communication, users can also access alarm status and phase angle data, and more, ensuring complete visibility into system performance.

Supporting multiple network configurations (single-phase (2-wire), split-phase (3-wire), and three-phase (3- or 4-wire)) the device offers flexibility across a wide range of electrical systems. It features two independent opto-isolated digital outputs and a 4–20mA analog output for seamless integration into control or monitoring systems. With Modbus RTU communication standard and user-programmable CT and PT ratios, the Power Signal Conditioner can be easily configured to monitor the most critical parameters with high accuracy and adaptability.

Specifications

NETWORKS

MEASUREMENT

Frequency

45 - 65 Hz

Voltage measurement range

L-N: 10 - 300VAC
L-L 1P3W: 600VAC
L-L 3P3/4W: 520V

Programmable PT range

1:1 to 1000:1

Current measurement range

0 - 5A

Programmable CT range

1:1 to 10000:1

Accuracy

1% (THD 5%) of full scale

ENVIRONMENTAL

Temperature - operating

-10 to +60°C

Temperature - storage

-40 to +70°C

IP rating

IP20

POWER SUPPLY

Input

100 - 277 VAC

Supply frequency

50-60Hz

Max power

2W

DIGITAL OUTPUTS

Number

2

Type

Opto-Isolated

Operating modes

Momentary

Max voltage

24VDC

Max sink current

15mA

ANALOG OUTPUTS

Number

1

Analog output

4-20mA

COMMUNICATION

CERTIFICATION

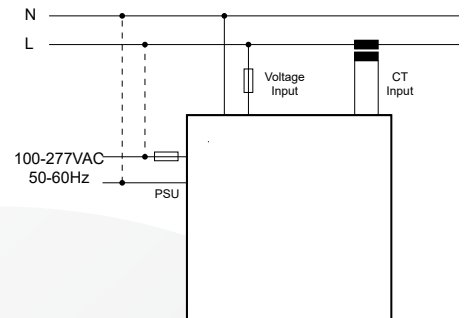
1P2W, 1P3W, 3P3W, 3P4W,

Modbus® RTU over RS485

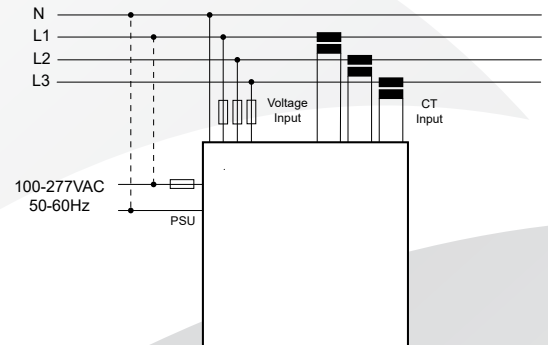
CE, RoHS, UL, cUL

Wiring Diagrams and Isolation

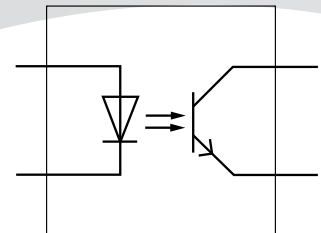
Single phase 2-wire (1P2W)



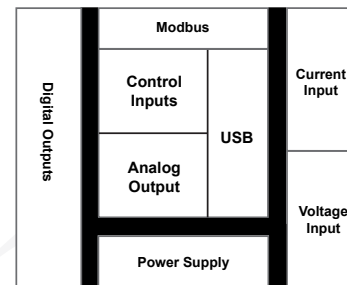
3 phase 3-wire (3P3W)



Control Outputs



Isolation

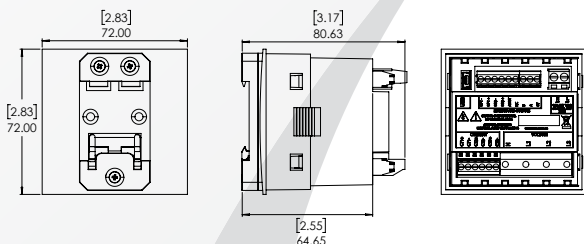


Isolation barriers:
Galvanic
Isolation Barrier

UL US
LISTED
Open-type Measuring
and Testing Equipment
E469767

CE RoHS

Dimensions:



Part Numbers

SC-PWR-DIN

Power Signal Conditioner, DIN Rail Mount

029461-01

USB A to USB Mini-B Cable

We can **customize our Signal Conditioners** to match your requirements, adding extra **functionality or communication protocols** to suit your needs. If you can't find what you're looking for, **ask about our custom solutions!**

custom
is our passion



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