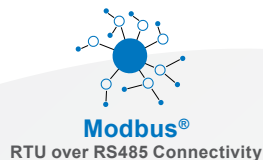


Power Signal Conditioner

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



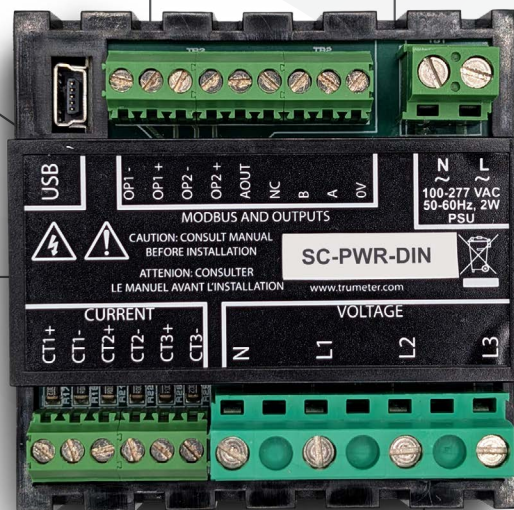
Remote monitoring
with **APM Gateway** and
Trumeter Cloud



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.

Go to www.trumeter.com for further information

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

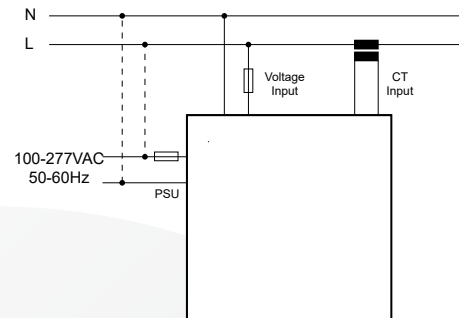
1P2W, 1P3W, 3P3W, 3P4W,

Modbus® RTU over RS485

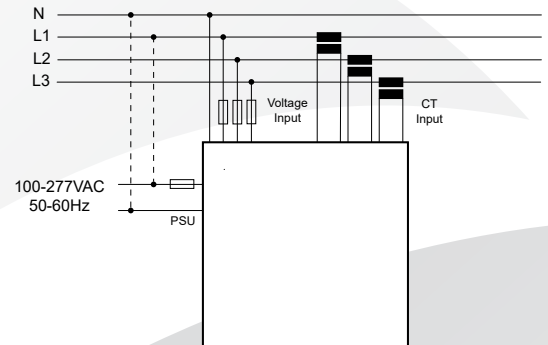
CE, RoHS, UL, cUL

Wiring Diagrams and Isolation

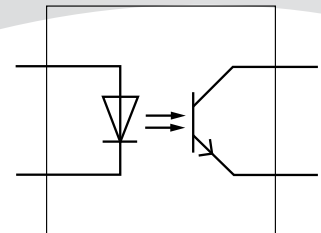
Single phase 2-wire (1P2W)



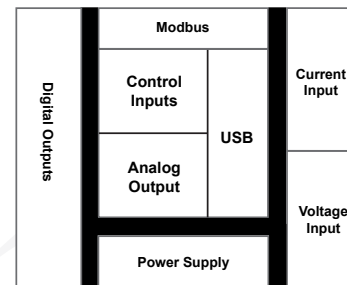
3 phase 3-wire (3P3W)



Control Outputs



Isolation

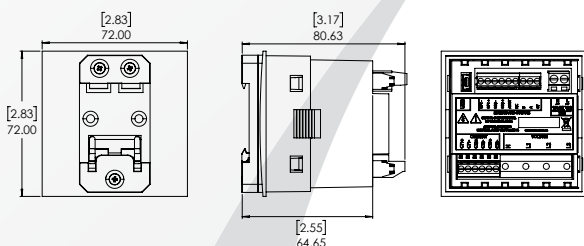


Isolation barriers:
Galvanic Isolation Barrier

UL US LISTED
Open-type Measuring and Testing Equipment
E469717

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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