

Power Signal Conditioner

For precise measurement and monitoring of key electrical parameters



For Single, Split and 3-Phase Networks



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



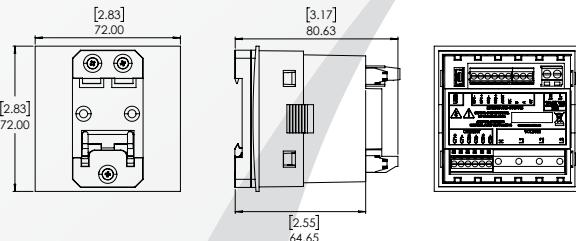
The Power Signal Conditioner is designed for single-, split-, and three-phase applications, delivering precise measurement and monitoring of key electrical parameters. It measures active (W), reactive (VAr), and apparent (VA) power, along with a full range of instantaneous values including voltage (L-L 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

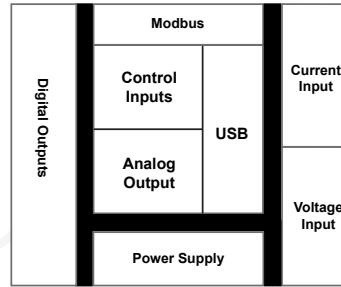
NETWORKS	1P2W, 1P3W, 3P3W, 3P4W,
MEASUREMENT	
Frequency	45 - 65 Hz
Voltage measurement range	L-N: 10 - 300VAC L-L 1P3W: 600VAC L-L 3P3/4W: 520V
Programmable PT range	1:1 to 1000:1
Current measurement range	0 - 5A
Programmable CT range	1:1 to 10000:1
Accuracy	1% (THD 5%) of full scale
ENVIRONMENTAL	
Temperature - 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	Modbus® RTU over RS485
CERTIFICATION	CE, RoHS, UL, cUL

Dimensions:



INSTALLATION:
Standard 35mm
Top Hat Slotted
(TS35) DIN rail

Isolation



Isolation barriers:
 Galvanic
Isolation Barrier

 UL
Listed
Open-type Measuring
and Testing Equipment
E465787

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!**



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