ampisent

In today's energy-conscious world, efficient power management is not just an option-it's a necessity.

Ampisent, a cutting-edge power monitoring solution designed to transform how businesses understand and optimise energy usage.

Ampisent PowerPro 1PH IoT Energy Meter
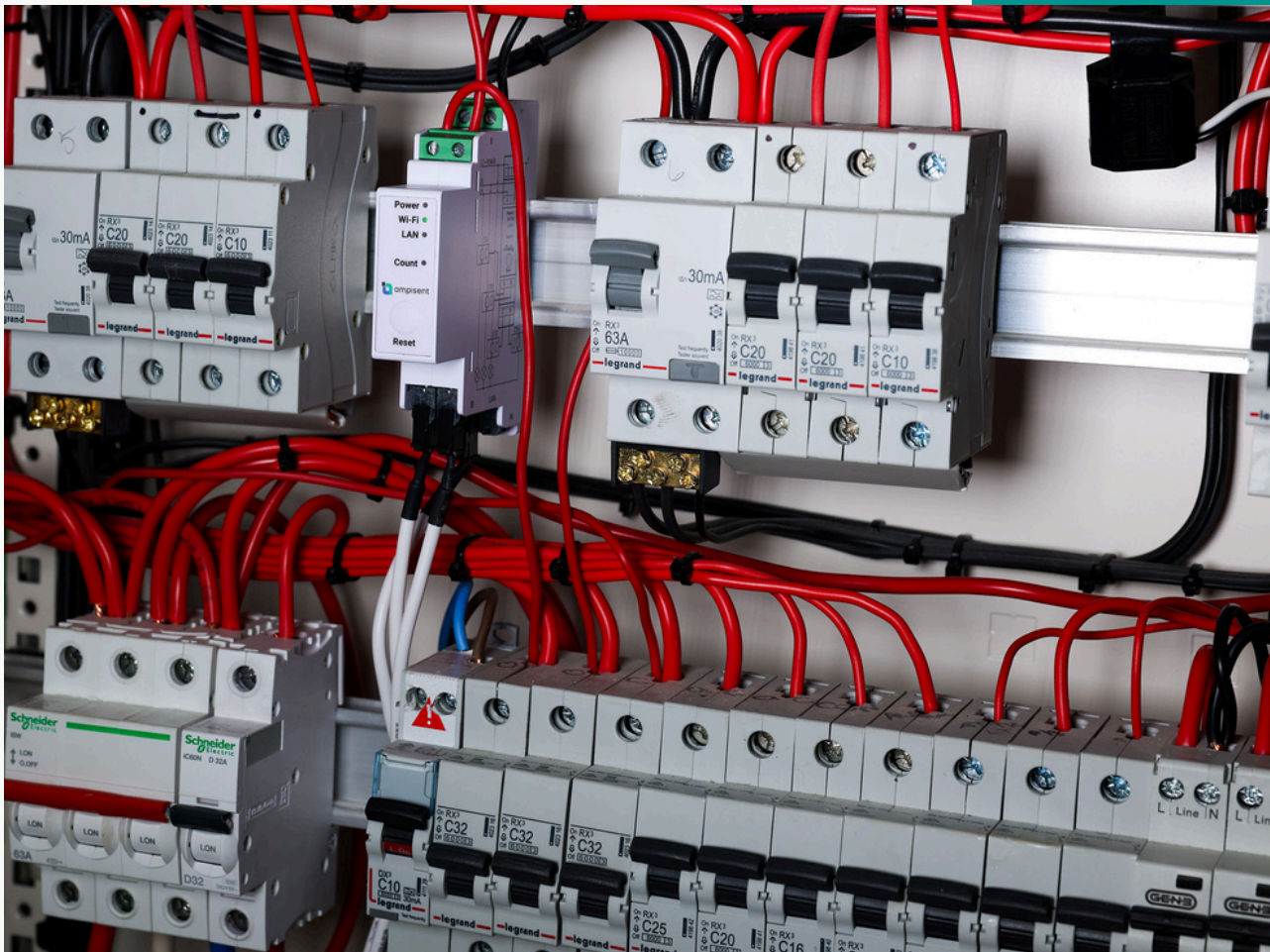
Ampisent provides real-time insights and analytics, enabling you to monitor energy flow, detect inefficiencies, and reduce costs with precision. Whether you're looking to enhance operational efficiency, achieve sustainability goals, or simply cut down on energy expenses, Ampisent empowers you with the tools to make informed decisions and take control of your power consumption.
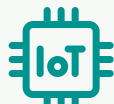
Highlights

- End to end hardware and software solution
- Lower cost
- Easy installing / Retrofitting
- Real time
- High data resolution (seconds)
- Easy system integration

Real Time Monitoring

Alerting

IIoT

SaaS

Mobile App

Dashboard

Ampisent PowerPro 1PH

Ampisent PowerPro 1PH (Powered by Shelly) is a DIN rail mountable two-channel, single-phase energy meter. It has an integrated switch with dry contacts for contactor control.

Key features include:

- LAN, Wi-Fi and Bluetooth connection for high security and reliability
- Reports accumulated energy, as well as instantaneous voltage, current, active and apparent power per phase in real time
- Power metering - two independent measurement channels on the same phase
- 4 Quadrant measurement with optical pulse indication of energy usage
- Can be used with contactors for bigger loads
- Accuracy Class B (IEC 62053-21)
- Photovoltaic ready
- Stores data in non-volatile memory that can be retrieved for a period of up to 60 days in 1-minute intervals.
- Package includes 2 pieces of 50 A Current Transformers
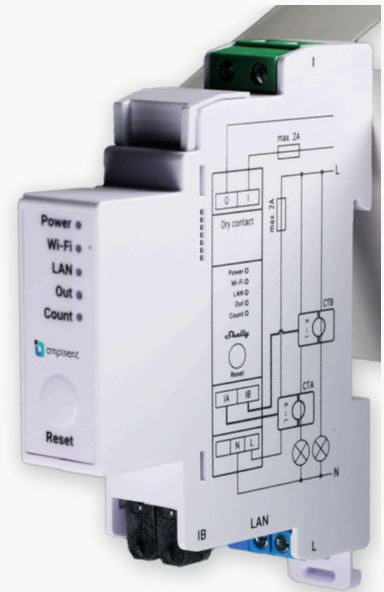
Funcitonalities

Rich Measurement

Capacitive and inductive load types of active imported and exported energies.

Accuracy class B

Has a measurement accuracy of 1%.

Wifi, LAN, Bluetooth

MQTT, inbound and outbound WebSocket, UDP, mTLS support.

Power Monitoring

Monitors two independent channels on the same phase.

Scripting Functionalities

PowerPro 1PH fully supports mjS scripting, allowing you to create further features and functionalities.

MODBUS Support

Allows for easy and fast deployment in existing industrial installations.

Specifications

PHYSICAL	
Mounting	Din rail mount
Shell material:	Plastic
Weight:	62 ±1 g / 2.19 ±0.05 oz

ENVIRONMENTAL	
Ambient temperature:	-20 °C to 40 °C / -5 °F to 105 °F
Humidity:	30 % to 70 % RH
Max. altitude:	2000 m / 6562 ft

ELECTRICAL	
Power supply voltage AC:	110 - 240 V, 50/60 Hz
Power supply voltage DC:	N/A
Power consumption:	< 3 W

SENSORS, METERS	
Temperature sensor:	Yes
Voltmeters (RMS for each phase):	100 - 260 V
Voltemeters accuracy:	±1 %
Ammeters accuracy:	0-50A, ±1 % (5 - 50 A), ±2 % (0 - 5 A)
Power and energy meters:	Active and apparent power, Active and apparent energy, Power factor, Fundamental active and fundamental reactive energy

MCU	
CPU:	ESP32-D0WDQ6
Flash:	16 MB

FIRMWARE CAPABILITIES	
Webhooks (URL actions):	20 with 5 URLs per hook
Scripting:	mJS
MQTT:	Yes
CoAP:	No