

Ampisent PowerPro 3PH IoT Energy Meter

REAL TIME POWER MONITORING SUPPORTS DECISION MAKING

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 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.













Dashboard

Highlights

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



Alerting

IIoT

SaaS



Ampisent PowerPro 3PH

Ampisent PowerPro 3PH (Powered by Shelly) is a DIN rail mountable three-phase energy meter. It provides professional integrators with additional options for end-customer solutions. Ampisent Power Pro 3PH reports accumulated energy as well as instantaneous voltage, current, and power factor per phase in real-time. Key features include:

- can measure up to 120A per phase and the neutral
- 4 quadrant measurement with multiple connection types
- Accuracy Class B active energy (Compliance with IEC 62053-21 based on manufacturer testing)
- Photovoltaic ready
- Phase sequence error detection (option)
- Optical pulse indication of energy usage
- Measurement accuracy to 1%
- Stores data in non-volatile memory that can be retrieved for a period of up to 60 days in 1-minute intervals
- Package includes 3 pieces of 120A 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 mono-phase electrical systems with up to 3 points simultaneously.



Scripting Functionalities

Ampisent PowerPro 3PH 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: $62 \pm 1 \text{ g}$

ENVIRONMENTAL

Ambient temperature: -20 °C to 40 °C

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: ±1 % (2 - 120 A), ±2 % (1 - 2 A), ±5 % (0 - 1 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