

## SQUID Pro

### 12-channel electrical submeter with LoRaWAN wireless communication



Discover the **SQUID Pro**, a revolutionary 12-channel energy meter for electrical submetering of your single-phase and three-phase installations.

Capable of measuring and transmitting via a **LoRaWAN** wireless connection: **active power**, **reactive power**, **phase shift**, and other information. This PRO version surpasses the performance of traditional meters for optimized management of your installations.

Using its 12 clip-on current measurement clamps, its 3 voltage inputs, and its secure, long-range connectivity, the SQUID Pro transmits real-time energy data, providing you with total control over your consumption and a comprehensive view of your electrical network.

Experience unparalleled performance and intelligent energy management for energy savings and improved operational efficiency.

#### ADVANTAGES

- Electrical submetering with **12 measurements using clip-on clamps**
- Accurate measurement of **active and reactive power**, and **phase shift** for optimized energy management
- Wireless **LoRaWAN** communication for reliable, long-range, and secure connectivity
- **Real-time** data transmission for optimal monitoring of your energy consumption
- **Configuration and updates** via a simple and intuitive application
- 4 clamp sizes available, from 10mm (75A) to 36mm (600A). No setup required.

## USE CASES

- 🕒 **Building Management:** The SQUID Pro is the ideal solution for monitoring and optimizing energy consumption in buildings such as offices, shopping centers, and hospitals. Thanks to its advanced technology, it detects energy-intensive equipment, analyzes consumption peaks, and identifies energy-saving opportunities, allowing you to reduce your costs and improve your energy performance.
- 🕒 **Industry:** Industrial companies can take advantage of the SQUID Pro to effectively monitor and control the energy consumption of their machines and equipment. This translates into optimized preventive maintenance, improved production processes, and significant reductions in energy costs.
- 🕒 **Regulatory Requirements:** By choosing the SQUID Pro, you facilitate the implementation of your energy management project and ensure compliance with various regulatory requirements worldwide. Opt for a high-performance and accurate solution for efficient and sustainable energy management, tailored to meet the diverse regulatory obligations.

## TECHNICAL CHARACTERISTICS

### Measures

- 🕒 **Energy:** active consumed, active produced, positive reactive, negative reactive, apparent
- 🕒 **Power:** active, reactive, apparent
- 🕒 Current
- 🕒 Tensions
- 🕒 Frequency

### Wireless communications

- 🕒 **Frequency:** 868mHz to 915mHz
- 🕒 **Maximum transmission power:** 25 mW
- 🕒 **Communication distance:** up to 15 km in open field
- 🕒 **Version:** 1.0.1
- 🕒 **Class:** A

### Power Supply

- 🕒 **Voltage:** 5VDC via external power supply
- 🕒 **Maximum consumption:** 0.5A

### Connectors

#### Measurement Clamp Inputs

- 🕒 12 inputs
- 🕒 **4 clamp sizes available:** 10mm (max 75A) / 16mm (max 100A) / 24mm (300A) / 32mm (600A)

## Voltage Inputs

- 4-pole connector
- 3 phases and neutral (230VAC)

## Configuration

- 1 mini-USB port

## Power Supply

- **2-pole connector:** 5VDC and ground

## Environmental characteristics

- **Area of use:** indoors (IP20)
- **Operating temperature:** from 5°C to +60°C
- **Storage temperature:** from -20° to +70°C
- **Operating humidity:** 10 to 80%, non-condensing
- **Maximum altitude:** 2000m
- **Supply voltage fluctuation:** ± 10% of nominal voltage
- **Pollution degree:** 1
- **Overvoltage category:** III

## Physical characteristics

- **Dimensions (H x W x D):** 90.5 x 87.8 x 62 mm
- **Size:** 5 modules
- **Weight:** 152g
- **Mounting:** Rail according to DIN EN 6 0715 (1 x 35 mm)

## Approvals and conformity

- EMC
- **EN 61000-6-2:** Immunity for the industrial environment
- **EN 61000-6-3:** Emission for the residential environment
- **EN 55022:** IT equipment immunity
- RADIO
- EN 30022
- SECURITY
- **EN 61010:** Electrical measuring devices

## Antenna Connector

- **type:** SMA female
- **Impedance:** 50 ohms
- **Frequency:** 868 MHz

## References

- **SQUID-PRO KIT:** Kits including a SQUID-PRO, all necessary accessories:
  - 1 power supply with fixing on a 230VAC-5VDC din rail (ref.: ALIM-RAIL-5V)
  - 1 magnetic antenna for mounting outside the cabinet (ref.: ANTMAGNSUP)
  - **Attention:** There is no pliers in the kit.
- **CURLAMP-HC-S1:** Clip-on measuring clamp  $\varnothing 10\text{mm}$  - 75A eff max
- **CURLAMP-HC-S2:** Clip-on measuring clamp  $\varnothing 16\text{mm}$  - 100A eff max
- **CURLAMP-HC-S3:** Clip-on measuring clamp  $\varnothing 24\text{mm}$  300A eff max
- **CURLAMP-HC-S4:** Clip-on measuring clamp  $\varnothing 36\text{mm}$  600A eff max
- **SQUID-PRO:** Product reference only, without accessories.
- **ALIM-RAIL-5V:** 230VAC 5VDC power supply fixing on DIN RAIL
- **ANTMAGNSUP:** Antenna with magnetic base (Cable length: 4m)

