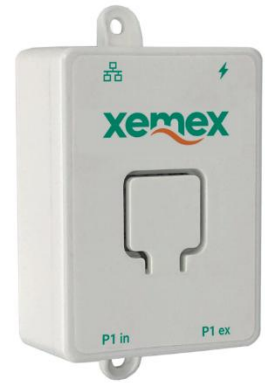




Smart A1/P1 Connect

Smart Meter interface module



Product Overview

The Xemex Smart A1/P1 Connect is a compact converter module changes the Smart Meter P1 and A1 message contents into Modbus TCP or MQTT. The module supports P1 in the Netherlands defined by DSMR4.2 or higher (incl SMR5.0), and in Belgium the P1 and A1 as defined in the E-MUCS standard.

The Smart Connect connects to the P1 port of the Smart Meter via a cable with RJ12 connectors on both ends. The unit is powered by the power present on the P1/A1 port of the Smart Meter.

User interaction is facilitated by a multicolor backlit button, which utilize color coding to indicate the status.

Customization can be done for both the Modbus TCP memory map and MQTT broker. For the standard implementation see User Manual for more details.

Installation Details

1. When utilizing the P1/A1 input
 - a. DSMR 4.2 gives new P1 data every 10sec
 - b. SMR 5.0 gives P1 data every 1sec*
 - c. E-MUCS gives new P1/A1 data every 1sec

Ensure the P1/A1 message is activated on the meter. This does not affect the metering or billing settings.

2. When utilizing the P1/A1 output
 - a. Power supply is required
3. When utilizing MQTT
 - a. No Power Supply required
 - b. Data and broker details in the User Manual
4. Always limit the cable length to max 30m.

IT Connection

The following are based on IPv4:

- mDNS
- Fixed IP
- DHCP

Modbus TCP Maps

- Phoenix EMPro
- **More coming soon**

Technology

General

- Connects to the P1/A1 port of Smart Meter
- Powered from the P1/A1 of Smart Meter
- Optional power via USB-C port
- Data frequency: Dependent on Message
- Modbus TCP meter emulation
- Easy configurable via Web Interface

P1 interface

- P1/A1 input port – RJ12
- P1/A1 output port – RJ12
- Protocol compatible with DSMR 4.2, SMR 5, and E-MUCS
- Country compatible NL/BE
- Support for 1 phase & 3 phase meters

LEDs & Button

- 1 LED to visualize status
 - Red 'On': Booting
 - Red/Green 'Blink': No P1 data
 - Orange/Green 'Blink': No IP address
 - Green 'On': No Issues
- Button:
 - Click: Reconnect to network
 - Hold 1 sec: Reset to factory defaults

Technical specification

- Operating voltage: 5V DC
- Power consumption: < 3W
- Operating temperature range: 0°C till 50°C
- Storage temperature range: -40°C till 85°C
- IP rating: IP22
- Dimensions (HxWxD in mm): 25 x 50 x 70

Compliance

- IEC 62368-1:2023
- EN 55032:2016
- EN 55032:2017

*Note:

- SMR5 for L+G E350 gives every second P1 data but re-iterates the data 10 times
- SMR5 for L+G E360 gives every second new P1 data