

iLoMod - I





The iLoMod - I contains a certified LoRaTM - module of the latest design with SecureElement for highest security during data transmission and a powerful, power-saving DualCore CPU with WLAN and Bluetooth interface. At the isolated RS-485 interface, up to 32 devices, whose data fields are provided with selectable data types and individual conversion, are monitored by an interactively easily configurable Modbus RTU master with galvanically isolated interface. The generated data are collected, logged locally if necessary, and transmitted in bundles several times a day to hourly, in case of limit violations or alarms even within seconds.

Overview

- ✓ 868 MHz LoRaWANTM radio modem (range I
 10 km)
- → Double AES encrypted data transmission
- ✓ LoRaWAN™ activation adjustable via UI
 (OTAA/ABP, AppKey)
- External antenna (can also be mounted remotely via extension cable)
- Wide range power supply from approx. 20 V
 DC to 250 V AC
- Low power consumption thanks to sleep modes
- WLAN and Bluetooth interface
- Approx. 8 MB log memory
- \smile Buffered RTC, time synchronization via LoRaWANTM
- MicroChip ATEC608A Cryptographic Co-Processor

- two dual-color status LEDs, one button for activating the SoftAP web UI
- Web UI suitable for mobile devices (in future also as app)
- Software updates via WLAN
- Tunnel solution for remote maintenance by iPLON Solutions
- ✓ Numerous RS-485-based inverter protocols
- Time and limit triggered data transmission, calculation functions for mean and extreme values, etc.
- Possible local retrieval of detailed data not transmitted
- Enabling of further interfaces via expansion modules (e.g. RS-485, M-Bus, S0, digital IO, etc.)

Subject to technical changes



Features

- Remote meter reading and monitoring
- → Photovoltaic Monitoring
- Remote monitoring of industrial and building sensors with Modbus
- Configuration via WLAN-AP/STA with tablet (mobile) or PC
- Commissioning possible without installation of configuration software
- Interactive configuration and commissioning of the Modbus interface
- Transmission of calculated values (mean value, maxima, sums, counters, etc.)
- ✓ iSOL portal platform (with iView portal)

Technical data

- → Power supply: 20 250 V AC/DC
- → Power consumption: max. 0.5 W
- → Operating temperature: 20 °C to + 65 °C
- ✓ Rel. humidity: 10 85 %
- Mounting: DIN-Rail
- → Housing (W x H x D):

 approx. 35 mm x 65 mm x 90 mm
- ✓ Weight: approx. I 50 g
- ✓ WLAN: 802.11 b/g/n (2.4 GHz), up to 150 Mbps, simultaneous SoftAP+Station - Mode possible, Bluetooth v4.2 BR/DER/BLE i.V.

Interfaces

- ✓ I x 868 MHz LoRa[™]/LoRaWAN[™],
 OTAA/ABPI x I50 Mbps WLAN
- I x Bluetooth (optional)
- ✓ I x RS-485 galvanically isolated
- ✓ I x extension (e.g. M-Bus, RS-485, S0, DIO, etc.)

