

## EMU Professional

3-phase energy and power meter with MID B+D approval for energy-management according to ISO 50001

Made in Switzerland 

### Configuration

Configuration can be done by the keys on the EMU Professional kWh-meter.

- Current transformer ratio (5/5 to 20'000/5 and 1/1 to 4'000/1A)
- M-Bus, Modbus or IP addressing
- S0 pulse-output: Rate and length
- Threshold optimization (peakcontrol)

### Features

- Transformer ratio, pulse rate and length, addressing adjustable by keys
- Double tariff (high/low tariff - day / night)
- Read-out interfaces: M-Bus, KNX, Modbus RTU & ASCII, Modbus TCP, LONworks, web server, direct-http
- Peakload optimization



## Read-out interfaces

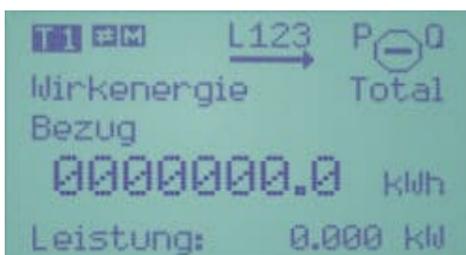
The EMU Professional can be equipped with a variety of read-out modules. All read-out modules are integrated in the EMU Professional where they are protected from contamination and manipulation. A variety of measurement readings are transferred via the Bus system, for instance active and reactive power, current, voltage, active, reactive and apparent power, power factor, power frequency, minimum and maximum values.

- M-Bus
- KNX
- LON
- Modbus RTU & ASCII
- TCP/IP (Webserver, Modbus TCP, Direct-http)



## LCD-Display

A 60x30 mm graphic LC-display with LED background lighting makes it possible for parameters and settings to be read, and the figures are very visible. The desired menu language can be selected via the keys. The clear and intuitive operation makes commissioning and daily use of the energy meters easier



## S0 impulse outputs

On the EMU Professional there are 4 S0 Impulse outputs (Opto Power MOSFET, 5–400V AC or V DC, 90 mA) available.

- Active energy import
- Active energy export
- Reactive energy inductive
- Reactive energy capacitive

Pulse rate per kWh/kvarh: 0.001, 0.01, 0.1, 1, 10, 100, 1'000 or 10'000

Pulse length in milliseconds: 4 to 250 ms, adjustable in 2 ms-stages

Default configuration ex factory:

- Direct connection: 1'000 impulses/40 ms
- Current transformer connection: 10 impulses/120 ms



## MID approval & Billing purpose

EMU Professional has been checked and approved in accordance with MID modules B + D (Measurement Instrument Directive).

- MID Module B = Approval of the energy meter
- MID Module D = QM system for manufacture and final inspection

With additional certification according to module D, QM system for manufacture and final inspection, all EMU Professional can be used ex factory for billing purposes within the European Union.

## Direct metering 75A

Articlenumber	Description
P0200000	EMU Professional 3/75
P020000K	EMU Professional 3/75 KNX
P020000M	EMU Professional 3/75 M-Bus
P020000T	EMU Professional 3/75 TCP/IP (Webserver, Modbus TCP)
P020000L	EMU Professional 3/75 LON
P020000MO	EMU Professional 3/75 Modbus (RTU & ASCII)

## Current transformer connection (indirect metering)

Articlenumber	Description
P1200000	EMU Professional 3/5
P120000K	EMU Professional 3/5 KNX
P120000M	EMU Professional 3/5 M-Bus
P120000T	EMU Professional 3/5 TCP/IP (Webserver, Modbus TCP)
P120000L	EMU Professional 3/5 LON
P120000MO	EMU Professional 3/5 Modbus