



HELLO!

Allrounder

Professional

M-Bus Center

Energy management





ALLROUNDER & PROFESSIONAL

3-phase power meter

Our digital 3-phase kWh-meters are set up for billing systems and energy management in compliance with ISO 50001. The MID certification in accordance with module B and D enables the EMU Professional and Allrounder power meters to be used for billing purposes.

Application examples

Cost centre billing, building technology, energy management in compliance with ISO 50001, load-optimization, ventilation / heating systems



Features

- Certification MID and CE
- Double tariff (Day/Night)
- · Read-out interfaces
- · S0 impulse output
- · Certification for PV systems
- Suitable for ISO 50001

TECHNICAL DATA

Operating voltage:	3x230/400V, 50/60 Hz
Connection:	75A Direct, /5 and /1A current transformer
Accuracy class:	B (1%) in compliance with EN50470-3
S0 impulse output:	1, 10, 100, 1000 or 10'000 Imp./kWh
Interfaces:	M-Bus, TCP/IP, KNX, LON, Modbus TCP + RTU
Graphic LCD:	60x30mm, 1234567.8 kWh
Mounting:	DIN rail mounting, 5 module 90mm

M-BUS DATA LOGGER

M-Bus Center

Automated meter readout guarantees no errors and continuous data collection for later analysis and billing in compliance with ISO 50001. All energy meters (e.g. electricity, water, heat, gas) are fitted with an M-Bus interface in compliance with EN 13757-2,-3 and connected to the M-Bus Center via a 2-wire cable.

The integrated userfriendly web-server can be accessed for configuration and data evaluation via any web-browser and IP address.

The local BMS can read all meter values by BACnet IP or OPC UA.



Features

- Web-server for graphic evaluation and professional data processing
- · CSV, JSON, (s)FTP-Upload
- M-Bus to BACnet IP Gateway
- · M-Bus to OPC UA Gatewa
- · Firmware-Update & Backup

TECHNICAL DATA

Data storage:	Micro SD-Card, expandable
Inputs:	3x M-Bus, 4x Impulse input, 2x PT 1000
Outputs:	1x USB A, 1x USB B, 1x Ethernet 10 / 100 Base 2x Relay output
M-Bus level converter:	Integrated high performance level converter
Mounting:	DIN rail mounting, 5 module 90mm
Operating voltage:	24 VDC, 1A

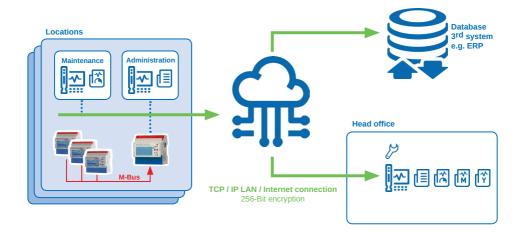
ENERGY MANAGEMENT SYSTEM ISO 50001 Web-based software

We will get your system into shape!

With our energy management system according to ISO 50001 you monitor all consumption data and create bills at your fingertips. The EMS can be quickly integrated into existing IT infrastructure and is fully scalable to an unlimited number of meters (e.g. electricity, water, heat / cooling or gas) and locations.

Your advantage

EMU kWh-meters, data logger and energy management software supplied by the manufacturer - a one-stop service.



FEATURES

- Visualization including individual charts and key figures (KPI)
- Ad hoc analysis & plausibility checks
- Monitoring including threshold value and tolerance range alerts
- · Sankey diagram
- Multi-user capability and multilingual

- Automated and detailed evaluations / reports e.g. as PDFs via email
- Billing for cost centres and apartments
- Professional automated data processing including exports
- Suitable for electricity, water, heat or gas

OUR SFRVICES

Consultation

Our project service encompass all important aspects, recording your requirements and needs, taking into account the technical conditions, the alignment with sub-projects, management and control during the implementation phase and continual monitoring after the project implementation.

Whether a brand new product, a latest trend or an ingenious design - you receive the tools from us to make the most of your energy.

Development and production

As we have developed our electricity-meters, data loggers and energy management software ourselves we know all the details and are able to react to customer requirements. Tell us what you have in mind and we will create a practical solution.

Individual configuration

We configure all our products in accordance with your requirements, whether they are M-Bus addresses, IP addresses or current transformer ratios.

Training

We deliver our expert knowledge to you about the measurement technology or the billing and energy managment systems during just one training day. You will receive comprehensive background details about the construction and functionality of our system from the energy meter, right through to the completed PDF evaluation and bill. We discuss practical application scenarios together.







ORDER INFORMATION

kWh-meters	Direct connection 75A	Current transformer /5 and /1A
Professional	Item no. P0200000	Item no. P1200000
Professional M-Bus	Item no. P020000M	Item no. P120000M
Professional TCP/IP	Item no. P020000T	Item no. P120000T
Professional KNX	Item no. P020000K	Item no. P120000K
Professional LON	Item no. P020000L	Item no. P120000L
Professional Modbus RTU	Item no. P020000MO	Item no. P120000MO
Allrounder	Item no. A0200000	Item no. A1200000
Allrounder M-Bus	Item no. A020000M	Item no. A120000M

M-Bus data logger	Item number
M-BUS Center for 250 M-BUS meters	Item no. 201.250.00
M-BUS Center for 120 M-BUS meters	Item no. 201.120.00
M-BUS Center for 60 M-BUS meters	Item no. 201.060.00
M-BUS Center for 20 M-BUS meters	Item no. 201.020.00
S0 Impulse for M-Bus Converter, 2 inputs	Item no. 940079

Energy Management-Software ISO 50001	Item number
Joulio-Web BASIC incl. licence for 30 meters	Item no. EMS0EL000
Joulio-Web Licence for 10 meters	Item no. LIC0EL010
Joulio-Web Licence for 50 meters	Item no. LIC0EL050



Subject to changes and errors. Similar to illustrations.

ABOUT EMU ELECTRONIC

EMU Electronic AG was established in 1989 as a spin-off from Landis & Gyr. The founders developed the first worldwide digital kWh-meter Today we offer our customers a complete solution from MID approved kWh-meters, data loggers through to energy management and billing software in compliance with ISO 50001.

References

- ETH Campus Livingscience
 Evaluation of more than 1300 energy meters
- B. Braun Medical AG Certified in compliance with ISO 50001
- Football stadium Stade de Suisse
 Energy meters and data loggers with customized software



OUR STRENGTHS

- Our motivated teams are highly organized, making us fast and flexible.
- The EMU Professional / Allrounder and data logger are 'Swiss Made'. Thanks to premium grade components you benefit from the long service life of our high quality energy meters.
- We keep a large inventory and guarantee a short delivery time.



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