



smart EMU 1

Single-phase electricity meter



Multipurpose electricity smart meter for single-phase two-wire networks. Enables direct measurement of active and reactive power. Designed for use with smart systems. Intended for municipal customers of all tariff groups.

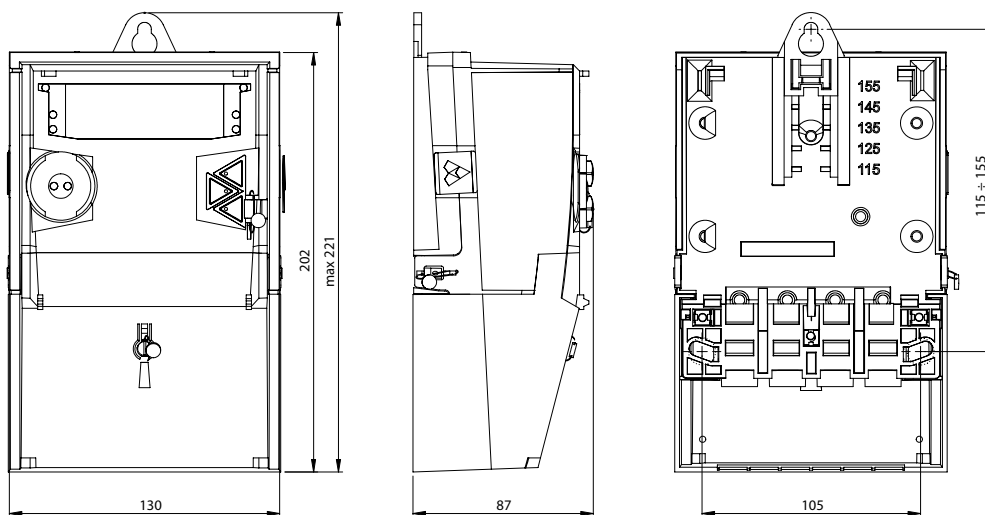
FEATURES

- Bidirectional measurement of active power
- Four-quadrant measurement of reactive power
- Energy logging in four rate plans
- Measurement of voltage, current, instantaneous power and maximum power
- 15-minute and daily load profile
- Billing data logging on a monthly basis
- Built-in contactor allowing disconnection of the current circuit
- Power limiter function
- Communication protocol: DLMS/COSEM, AES128 encryption standard
- Local communication: optical port, serial port (optional)
- Communication with AMI system: PLC Prime, GSM/3G, or other
- USB port that supports communication module for home area network
- Remote non measurement software change
- Segment LCD display
- Resistance to external magnetic field
- Extensive event logging
- Instant messaging about events to the data concentrator

Smart, Multipurpose,
Modern

TECHNICAL DATA

Model		smartEMU 1
Connection method		direct
Rated voltage U_n	[V]	230
Reference current I_{ref}	[A]	5
Maximum current I_{max}	[A]	60 or 80 or 100
Measurement accuracy of active energy	acc. EN 50470-3	B
Measurement accuracy of reactive energy	acc. EN 62053-23	2
Power consumption in current circuit	[VA]	< 0,1
Power consumption in voltage circuit	[W] / [VA]	<2,5 / <10
Electric strength	[kV]	4 (AC 50 Hz), 6 (impulses 1,2/50 μ s)
Impulse frequency	[imp/kWh]	5000
Clock		Internal, accuracy not lower than 0.5s/24h at 23°C
Communication		Optical port: DLMS/COSEM protocol Basic communication module: PLC Prime or GSM/3G: DLMS/COSEM protocol USB port that supports communication module for home network or internal wireless M-Bus module Optional: RS-232/RS-485 serial port
Display		Segment LCD display (showing OBIS error codes; EN 62056-61)
Temperature of operation		from -40 °C to 70 °C
Casing	acc. EN 60529	IP 54
Weight	[kg]	~0,9
Standards		MID Directive (B+D) EN 50470-1 EN 50470-3 EN 62053-23



This publication has been made exclusively for information purposes and shall not constitute an offer under the civil law. The designs are presented as an example; functions of the meter can be customised.

