



EQUS

Three-phase electricity meter



Multipurpose electricity meter for three-phase four-wire networks, with extended functionality. It allows direct measurement of active and reactive energy in multi-rate prepayment metering mode or in a fully autonomous credit mode. Interchangeable communication modules and a built-in contactor make the device a perfect foundation for Smart Metering systems.

FEATURES

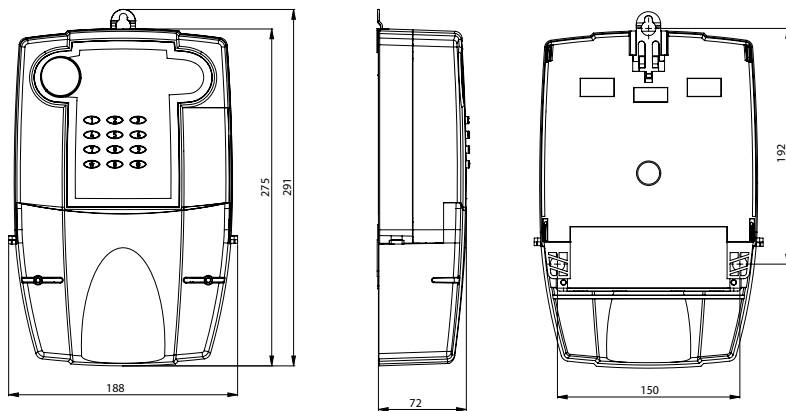
- Bidirectional and reverse measurement of active and reactive energy
- Measurement of power grid parameters: effective current and voltage, frequency, power factor
- Measurement of instantaneous power and maximum power
- Load profile logging
- Built-in contactor which allows disconnection of current circuits
- Operating mode: prepayment, credit or switched prepayment-credit
- Advanced prepayment functions
- Manual or automatic ending of a billing period
- Memory of at least 21 billing periods data
- Real-time clock managing two switchable complex calendars
- Calendars supporting 16 time zones and allowing to define any number of special days and permanent holidays, and 240 movable holidays
- Current and power limiting features
- Event logging
- Optical port and built-in communication port: serial (RS-485 or RS-232), M-Bus slave, M-Bus concentrator
- Removable communication module: PLC, GSM, RS-232/RS-485, LAN, SRD radio or other.
- TV remote control via infrared port
- LCD display
- Measurement data can be read from the display (and by optical connection if powered by a replaceable AA 3.6 V battery) in the event of power failure

Meter's functions depend on the operation mode

Smart, Comprehensive,
Modern

TECHNICAL DATA

Model		EQU5
Connection method		direct
Rated voltage U_n	[V]	3 x230/400
Reference current I_{ref}	[A]	5 or 10 or 15 or 20
Maximum current I_{max}	[A]	40 or 60 or 80 or 100
Measurement accuracy of active energy		A or B
Measurement accuracy of reactive energy		2 or 3
Power consumption in current circuit (per phase)	[VA]	<0,2
Power consumption in voltage circuit (per phase)	[W] / [VA]	<0,7 / <1
Electric strength	[kV]	4 (AC 50Hz), 6 (surge 1,2/50 μ s)
Impulse frequency	[imp/kWh]	640 or 1280
Clock		Internal, accuracy better than 0.5s/24h at 23°C, synchronised with the AMR system.
Communication		Optical port, baud rate configurable from 300 to 19200 Bd. Second communication port: serial RS-485 or RS-232, M-Bus slave, M-Bus concentrator. Interchangeable communication modules: PLC, GSM, RS-232/RS-485, LAN, SRD radio or another. Protocol support: comprehensive proprietary protocol dedicated for AMI systems, EN 62056-21 (IEC1107). Infrared port (RC5).
Inputs and outputs		Two pulse inputs or outputs, two relay outputs
Event logging		End of a billing period, power loss and return, excessive current and power overload, synchronisation of the real-time clock, changed configuration of the calendar, unauthorized removal of the terminal box cover, magnetic field tampering with date and time stamp.
Display		A dedicated LCD display (showing manufacturer's or OBIS error codes, EN 62056-61)
Temperature of operation		from -40°C to 70°C
Casing		IP 54, class II insulation
Standards		MID Directive (B+D) EN 50470



TYPE DESIGNATION

EQU5 23 A P C

- └─ LCD display
- └─ PLC communication module
- └─ system meter
- └─ maximum current: 80 A
- └─ base current: 5 A

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.

