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MAIN FEATURES





Active or active and reactive energy, apparent energy.



Maximum power, integration period from 1 to 60 min.



Measurement of energy in one or two directions or absolute measurement. (+A, +R; -A, -R; |A|, |R|), optionally by quadrants (R1, R2, R3, R4).



Multi-tariff registration, internal tariff calendar or external management via tariff inputs/outputs.



Internal real-time clock with DST (Daylight saving mode). Backup power source by Li-lon battery, optional super capacitor.



Time profiles of measuring data recording (up to 6 channels).



Measurement of voltage, current and power factor.



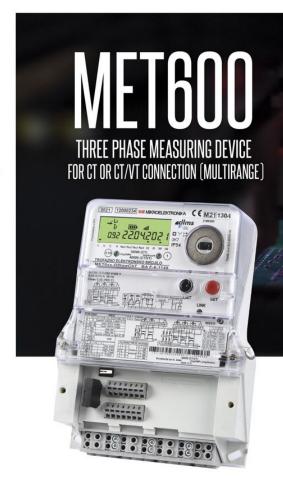
RS485 communication interface.



For three phase 4-wire networks.



Impulse output(s) (kWh or kWh + kvarh).

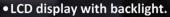


MET600 is a measuring device for measuring active energy and power and alternating current of three phase system with 4 conductors (in Aron circuit with 3 conductors).



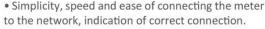
Communication modems supported:

- GSM/GPRS
- PLC (S-FSK, DCSK, G3)
- ETHERNET
- LoraWan



- Labeling data by OBIS code: IEC 62056-61
- Programmable data collection and order on the display, manual and auto.

1 5057055 580



- Self-extinguishing polycarbonate housing.
- Compact design of meter according to DIN 43857.
- IP54 degree of protection against penetration of moisture and dust.
- High resistance to electromagnetic interference.
- Monitoring and registering violation of meter's work integrity (forceful opening, strong magnetic field action, wrong password access attempt, ...).
- DLMS communication protocol.
- Possibility of switching into a remote measurement and management system by installing one of the communication modules: GSM/GPRS, PLC (S-FSK, DCSK, G3), ETHERNET, LoraWan.

- Universal modem socket for single phase and three phase meters, plug in connection. The modem is mounted under the meter's connecting ports cover.
- Battery replacement without removal of the measuring seal
- Operating state indication for the meter and communication module.
- Relay outputs for remote and local load control.
- Optical output(s): Semi-indirect connect.: 10000 imp/kWh (kvarh), Indirect connection: 40000 imp/kWh (kvarh).
- LIST and SET buttons (ability to seal the SET button).

The meters correspond to European standards EN 50470-1 and EN 50470-3, as well as to international standards IEC 62052-11 and IEC 62053-21, and are designed and manufactured according to ISO 9001 standard. The active and reactive electrical power meters, in addition to the specified standards, meet the requirements of international standard IEC62053-23.









Due 1

20 Imax

(IEC 61000-4-6)

FUNCTIONAL AND TECHNICAL DATA

This is a measuring device designed to work in extended voltage range (mutlirange voltage) of (3x57.7/100 - 230/400) V. After connecting the device to a power source, it decides whether to use CT or CT/VT connection. The decisive threshold is 115 V.

Measurement and registration:

- Energy in one flow direction (taken).
- Energy in two flow directions (taken and handed over).
- Always in a positive direction (absolutely).
- Four-quadrant for reactive energy (optional).

Accuracy/Calibration:

Thanks to long-term measurement stability, there is no need to re-calibrate the meters during utilisation period.

Indicators:

LED 1 (red): kWh impulses.

LED 2 (red): kvarh impulses.

Unsteady: the current is higher than the starting current.

Illuminating: voltage connected, while the current is less than the starting current.

Not illuminating: no voltage is being applied to the meter.

Communication:

Optical port (IEC 62056-21) for local programming and meter reading.

Additional communication port: RS485, M-Bus, HAN.

Multi-tariff registration:

According to an internal real time counter or external transfer of tariffs. Programmable tariff number (1 ... 8 tariffs).

7-segment liquid crystal display:

- according to VDEW recommendations, 8 digits for data, 6 digits for EDIS identification code (DIN 43863-3) + a certain number of signal flags/indicators; Indicators: direction/ quadrant of energy flow, presence of voltage, current, remote communication, measuring units, ...
- display mode: automatic, manual data display (using keys), auto-diagnostics;
- A programmable set of displayed data as well as their order; Option: Present the data on the display when the meter is not under any voltage (battery mode).

Real Time Counter:

- 32 kHz quartz crystal;
- Allows switching of tariffs by default, switching of seasons, transfer from winter to summer time, and vice versa, power period measurement and data measurement time profiles.

Current clamps:

- Directly connected meters: Universal clamps for all types of conductors (Main connectors = 16 mm2; Auxiliary connecting clamps = 1.5 mm2);

Housing: Self-extinguishing UV stabilized polycarbonate. Degree of protection against dust and water: IP 54.

	or B (according to EN 50470-3)
	1 (according to IEC 62053-21)
	0.5 (according to IEC 62053-22)
	r 2 (according to IEC 62053-23)
Reference/ Nominal current In	5 A
Max. current Imax	6 A, 10 A
Min. current Imin	0,01 ln
Starting current	0,001 ln
Nominal voltage Un:	
Semi-indirect link (CT connection	on) 3 x 230 V / 400 V
Indirect link (CT/VT connection):
Three-system measuring	3 x 100 / √3 V / 100 V
Two-system measuring	3 x 100 V
Voltage range	0,8 Un 1,15 Un
Nominal frequency	50 Hz
Operating temperature range -40	°C +55°C (LCD: -25°C +55°C)
Extended temperature range	-40°C +70°C
Temperature of storage	-40°C +85°C
Relative humidity	≤ 95%
Encoder constant, A/R energy (op	tical output, LED red):
Semi-indirect link	10000 imp/kWh (imp/kvarh)
Indirect link	40000 imp/kWh (imp/kvarh)
Encoder constant, A/R energy (el.	outlet, galvanic. isolat., passive
Semi-indirect link	5000 imp/kWh (imp/kvarh)
Indirect link	20000 imp/kWh (imp/kvarh)
Display: Type	LCD
Number of characters for	displaying the meas. sizes 8
Number of characters for	displaying the OBIS tags 6
Optical port	IEC 62056-21
Accuracy of internal counter	≤±3 min/year. (IEC 62054-21)
Back-up power supply of counter	10 years (Li-battery)
Impulse output(s) characteristics	
Voltage	< 27 V EN 62052-11
Electricity	< 27 mA EN 62053-31
Tariff output(s)	Option for output relays
Own power consumption (with me	
Own consumption of voltage bran	
Own consumption of tariff input	< 150mW

Own consumption of tariff input 4 kV, 50 Hz, 1 min Dielectric strength

measuring circuits: 12 kV 1,2/50 µs Impact voltage auxiliary circuits: 6 kV 1,2/50 μs

Short circuit current Fast transients (burst)

Measur. circuits without/ with load 4 kV (IEC 61000-4-4) Auxiliary circuits

Surge test

Measur. circuits without/ with load 4 kV (IEC 61000-4-5) Auxiliary circuits

Electrostatic discharge

8 kV (IEC 61000-4-2) Contact discharge Contactless discharge

80 MHz 2 GHz (IEC 61000-4-3) Resistance to el.mag. RF fields

Influence of radio interference

Contact discharge 150 kHz 30 MHz (IEC 61000-4-3) Contactless discharge 30 MHz 1 GHz

Vibrations (Vibration test) Shock test (IEC 61000-4-27)

Flammability; Glow-wire flammability test (IEC 61000-4-11)

Date of expiration < 15 years

Dimensions 300 x 175 x 68 mm

< 1,3 kg

METER DIMENSIONS

