Single-phase electricity meters DLMS

Single-phase electricity meter AIST A100 H Ethernet

Single-phase electronic electricity meter “AIST A100 H” is used for measurement and metering of active and reactive energy in single-phase AC circuits and transmission of telemetric information about consumed electricity when used in automated data acquisition systems.

The meter is additionally equipped with a data input-transmission unit (Ethernet module).

Ethernet module allows to simplify remote reading and additional information from the meter. Ethernet modules work in any Ethernet network and are fully compatible with the global Internet.

Technical specifications

Name of characteristic	Value
Accuracy class of active energy	1
Base, Ib (maximum) current, A	5 (60)
Rated voltage value (Unom), V	230
Starting current (sensitivity threshold):	0.004Ib
Set operating voltage range, V: **- for a meter with DLT645 protocol** **- for the meter with SPODES protocol**	 0.9 to 1.1Unom 0.7 to 1.2Unom
Extended voltage range, V	0.8 to 1.15Unom
Power consumption, VA, not more: **- for the meter with DLT645 protocol** **§ voltage circuit** **§ current circuit** **- for the meter with SPODES protocol** **§ voltage circuit** **§ current circuit**	 5 0,2 10 0,5
Nominal value of mains frequency, Hz	50
Maximum number of tariffs	4
Minimum tariff duration, min	15
RS-485 interface communication speed, bps	1200~9600
Accuracy of the built-in clock at normal temperature, better, s/day	± 0,5
Storage period of the profile of the received and given active and reactive energy (power) with programmable interval of integration time from 1 minute to 60 minutes (with integration time of 30 minutes), not less than days	90
Storage in the non-volatile memory device of data on the received and given active and reactive energy with cumulative total at the beginning of the current billing period and previous programmed billing periods, not less than	36
Liquid crystal display (LCD): **- number of indicated digits** **- unit price of the lowest digit when displaying energy, kWh**	 8 0,01
Meter constant, imp/(kWh): **- for the meter with DLT645 protocol** **- for the meter with SPODES protocol**	 1200 1000
Average MTBF, h	at least 160 000
Meter clock power supply service life, years	at least 10
Additional I/O units	RF modem, PLC modem, GSM modem, Ethernet module, Wi-Fi module,

	LoRaWAN module, NB-IoT module
Temperature range, °C: **- for the meter with DLT645 protocol** **- for the meter with SPODES protocol**	 from “minus” 40 to +55 minus 40 to +70
At temperatures from “minus” 20°C to “minus” 40°C partial loss of LCD functionality is allowed	
Relative air humidity at 25°C, %	5 to 95 (without condensation)
Overall dimensions (H×W×D), mm: **- for the counter with DLT645 protocol** **- for the counter with SPODES protocol**	 190×113×75 220×125×75.5
Weight of meters, kg: **- for the counter with DLT645 protocol** **- for the counter with SPODES protocol**	 not more than 2.8 no more than 1.0
Protection class: **- for the meter with DLT645 protocol** **- for meter with SPODES protocol**	 IP30 IP54