



Controller of meters, data acquisition and transmission

Controller PUMA 30.05.06 LoRaWAN

Controller "PUMA30.05.06-LoRaWAN" is designed for building automated information and measuring systems of commercial energy metering (Automated Information and Measuring System of Commercial Energy Metering (AIMSCEM) and other energy resources, as well as for building systems of monitoring, dispatching, status monitoring and control of modes of equipment of remote object. The controller is a device made in a durable plastic case. Inside the case there is a board with microcontroller, memory device, RS485, RS232, Ethernet interface node and LoRaWAN wireless communication modem. On the outside of the housing there are connectors for connecting interface cables. LED indicators for power supply and current controller status. The following communication interfaces can be used for connection of external equipment to the controller and remote communication with it: RS485, RS232, 1-wire. The controller design allows to place it in electrical wiring cabinets with the possibility of DIN-rail mounting.

Technical specifications

Name of characteristic	Value
Device power supply	8-60 VDC
Power consumption	max. 10W
Voltage for power supply of external devices	12VDC, 8VDC, 5VDC
User interface for customization	Web interface
Ethernet interface	2 ports
10/100 Base T interface data transfer rate	up to 100 Mbps
Serial interfaces with galvanic isolation	RS485, RS232
Galvanic isolation voltage for RS485, RS232	1000 VDC
Data transfer rate via interfaces (RS485, RS232)	1200-115200 bps
Type of built-in radio modem	LoraWAN
Frequency ranges	RU868, EU868
LoRaWAN device class	C
Number of LoRaWAN channels	8
Method of activation in LoRaWAN network	ABP or OTAA
Radio communication range in rural areas	up to 15 km
Radio communication range in dense urban areas	up to 5 km
Support temperature sensor with 1-wire digital interface	+
Indication (LEDs) power	supply, statuses
Operating temperature range	-40 to + 80°C
Integrated hardware watchdog circuitry	+
Type of power, interface, sensor connectors	Terminal screw connectors
Ethernet connector type	RJ45
Antenna connector type on the controller unit	SMA (F)
Antenna on a magnetic base. Cable length of 3 meters.	included
Housing	Plastic
Mounting	DIN rail 35 mm
Overall dimensions	105x51x65
Weight of the controller, not more than	0.8 kg
Average MTBF	at least 150000 h
Service life	20 years