



Hardware-software complex LoRaWAN Water Metering

Software and hardware complex “LoRaWAN Water Metering” is a system for collecting and visualizing data from water meters installed at the customer's site.

Main functions:

- There is a mobile application;
- Collect data from existing water meters and transmit it to the customer using the necessary protocols;
- Data export via API.

Hardware:

- 19” 1U enclosure;
- Power supply unit (2pcs):

- Main (220 AC);
- Backup (48 DC);
- CPU1: 8-core 64-bit ARM processor (4xCortex-A76 and 4xCortex-A55);
- 16GB DDR4;
- SSD drive: 256 GB (NVMe SSD drive into M.2 PCIe2.0 slot);
- HDMI - for monitor connection;
- Switch - 10/100/1000 (6 Ethernet ports).

Optional:

- LTE modem #1 (USB) - for wireless data transmission.

Software part:

- PostgreSQL - database;
- Network Server (if necessary) - installed and configured to work with devices operating via LoRaWan communication channel;

Technical specifications

Name of characteristic	Value
Power Specifications	(85-265VAC) - main power input (36-72VDC) - redundant power input
Power consumption	max. 50 W
Processor	8-core 64-bit: 4 Cortex A76 cores and 4 Cortex A55 cores
Maximum frequency	2.4 GHz
RAM capacity	at least 8GB of LPDDR4/4x memory
Flash memory for bootloader	16 MB SPI
Primary SSD drive (M.2 PCIe2.0 slot)	256GB - SSD NVME NVME M.2 NETAC
Enclosure	metal 19" (482x250x44mm)
Service life	8 years
Switch	built-in 6-port managed 10/100/1000 Mbps
Monitor connection port	HDMI
USB port	2pcs
Watchdog timer	built-in
Operating system	Pre-installed Linux
IoT platform	Pre-installed Jcom-iot
DBMS	Pre-installed "PostgreSQL"