



Hardware-software complex **GAS**

Hardware-software complex "Gas" is a specialized system, including software and hardware, which is designed for metering the volume of gas consumed at industrial and municipal enterprises.

Purpose of the device

This is a complex solution designed for monitoring, collection, processing and visualization of data from gas meters installed at industrial and utility enterprises.

Main functions

- There is a mobile application;
- Monitoring and data collection from gas meters;
- Visualization of information from gas meters (readings, graphs, reports, related documentation);
- Data storage;
- Configuration of devices;
- Remote software update;
- Report generation.

Hardware:

- 19" 1U enclosure;
- Power supply unit (2pcs):
 - Main (220 AC);
 - Backup (48 DC);
- CPU: 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 (USB) - for wireless data transmission;

- Data export via API.

Program part

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

Scaling

Adding new devices, sensors, users, customization of LoRaWan to meet the customer's requirements.

Number of supported devices

Up to 250 pcs.

Number of supported users

Up to 5.

Delivery set

Standard delivery set:

- Hardware-software complex "Gas";
- AC 220 V power cable;
- DC 48 V power cable;
- Passport.

Additional to the standard delivery set (on request):

- Keyboard
- Mouse;
- Monitor;

- 19" rack for the Hardware-software complex "Gas".

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" |