Electronic counting device with telemetry module

RusTechnology
Russian automation technologies

Automatic transmission of readings to the collection server, remote control of the shut-off valve, monitoring of leaks and exceeding the maximum flow rate.

Meters equipped with the electronic counting mechanism of Rustekhnologiya LLC fully comply with **the standard technical requirements of Gazprom Mezhregiongaz LLC** for household gas meters, approved by the order of Gazprom Mezhregiongaz LLC dated January 24, 2020 No. 81-R/4.

Main characteristics:

- Alphanumeric LCD display.
- High quality PCB antenna.
- Resistance to ultraviolet radiation.
- Extended temperature range from -40 to +60 °C.
- Proprietary data transfer protocol, low load on the GSM network.
- Two independent power supplies for the metrological and telemetric parts of the board.
- Reduced power consumption, telemetry power supply LiPo 2000mAh 4.2 3.4V.
- Digital thermal correction.
- Possibility of setting excess pressure constant.
- Session diversity module increases transmission reliability in "difficult" areas significantly, since sessions are separated by time.

Benefits for meter manufacturers:

- 100% ready solution.
- Verification and calibration software.
- Production process software.
- Package of documents for certification.
- Full support.

It is possible to adapt the board to any type of membrane natural gas meter.





GPRS or NB-IoT version

The GSM GPRS/NB-IoT controller supports internal firmware and fast data exchange with the server.



SUPPORTED METERS

Membrane natural gas meters

with electronic counting device

- Controlled parameters: archives of meter readings, emergency situations, events, interventions, impacts, in accordance with the standard technical requirements of Gazprom Mezhregiongaz LLC for household gas meters.
- battery life up to 5 years
- unified data collection software
- integration with billing systems
- user's personal account
- mobile app









Gas meter
VECTOR SGV GSM







Gas meter
PIETRO FIORENTINI

Display modes:

- measured volume of gas (m3), reduced to a standard value at a temperature of +20 °C;
- instantaneous gas flow (m3/h), reduced to the standard value at a temperature of +20°C;
- gas temperature (°C);
- supply voltage values for metrological and telemetric batteries;
- set value of absolute gas pressure (kPa);
- current date and time;
- next communication session;
- serial number;
- emergency situations and events;
- stages of data transfer to the server.

Shut-off valve control:

- Remote control of the shut-off valve can be performed from the server by the system operator.
- Automatic closure of the valve occurs when consumption > 1.25Qmax or when the housing is opened.
- Leakage control when the valve is open.

Storing and transferring archives to the server:

- Accumulated volume reduced to standard conditions.
- Consumption and temperature values averaged over an hour.
- Archives of accidents, emergency situations, events.



