Centralized hospital medical gas monitoring system is designed to:

- **Control** the hospital medical gas system pressure in the gas sources, in the closure points of pressure regulation.
- **Control** supplied medical gas flows detecting possible gas leaks, while analyzing earlier periods of gas flow quantities.
- **Perform** consumed medical gas calculation for a day, a week, a year.
- **Under** the system given pressure and flow parameters signal to the central computer and the mobile communication system about impermissible deviations.
- **Analyze** the obtained information in the central computer about cause of fault alarm signals and their correction method.
- **Perform** the most important system’s installation working time accounting, notify about the equipment’s servicing terms, register failures.

The system consists of:

- **Gas pressure and flow** measures with changers.
- Specialized analogical and discrete signals processing, storing and transferring to the RS-485 line interface **modules**. These modules, depending on the number of control points, are built directly into the installation’s composition or as separate devices.
- **Three-wire** system to which all system interface modules are connected in parallel.
- **Audio and luminous signal sources** which inform about a state of emergency.
- **Specialized computer** with RS 485 interfaces.
- **Specialized software** can be modified depending on the hospital's type and size of existing equipment.
Hospital medical gas monitoring system-functional scheme
Medical gas pressure and flow drawing from working hospital 09.10.2010
Red part of the flow chart 19.10.2010 is informing about appeared leakage in the system, or sanctioned increased oxygen demand.

Oxygen daily flows comparison chart.

The main points of the control gas pressure bar graphs.