



# PHARMAGAS

## Medical Gas Analysis & Monitoring

Pharmagas is designed to monitor & analyse medical gases in the hospital piping network. It is a perfect tool for healthcare facilities to carry out a continuous analysis of all medical gases delivered to patients, and make sure that they comply with the requirements of the European Pharmacopeia monograph, or of any other local regulation.

### Key features :

- CO/ CO2 analyzers included as standard
- 5 additional optional analyzers available
- High definition color touch screen with enhanced monitoring capabilities
- Compact metallic case, to be wall-mounted
- Lateral control panel for calibration and flow regulation

### Benefits :

- Complete traceability : instant measure of up to 7 gases as listed in European Pharmacopeia
- Modular design : separate analysis modules can be added upon request



# Pharmagas

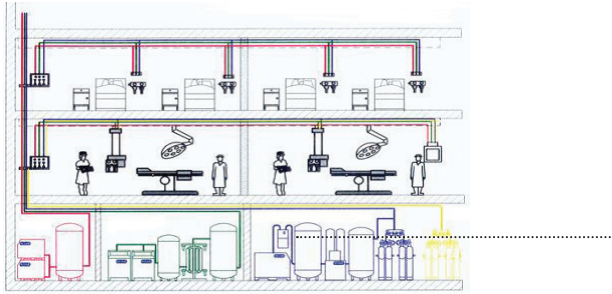
Medical Gas Analysis & Monitoring



## Instant analysis, full traceability

Traceability is key for hospitals and clinics, who must comply with clear requirements from European Pharmacopeia, or local regulations. Compact and easy to use, Pharmagas guarantees this traceability.

Designed to be wall mounted, it can be connected near the medical gas production or distribution system, or anywhere in the hospital site where a medical gas outlet is available.



## Multisensor Gas Analysis

Pharmagas is designed on a modular basis. The main module includes **CO and CO2** analysers, pressure and flow regulators as well as the required connections.

Up to 5 additional analyzers can be incorporated, to measure:

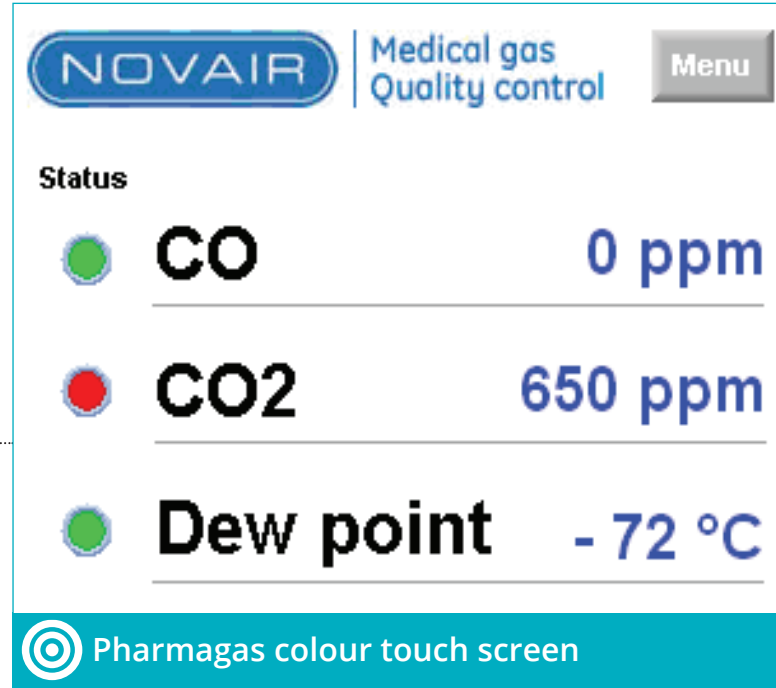
- Dew point
- Oxygen
- Nitrous Oxide
- Nitrogen Dioxide
- Sulfur Dioxide

## Technical Specifications

Medical gas compatibility	Medical air, Oxygen, Oxygen 93
Inlet sample pressure	3 to 10 bar
Remote alarm	1 potential free contact for global alarm reporting
Communication	RS 232/485, Modbus, CANbus, Profibus, Optionally: Ethernet connection for TCP/IP, GSM Module
Dimensions	210 x 450 x 300 mm
Weight	9kg

## Analysis modules specifications

Component	Carbon monoxide CO	Carbon dioxide CO2	Water vapour H2O	Oxygen O2	Nitrous oxide NO	Nitrogen dioxide NO2	Sulfur dioxide SO2
Sensor type	Electrochemical	Infrared	Capacitive probe	Electrochemical	Electrochemical	Electrochemical	Electrochemical
Measuring range	0-100 ppm	0-1000 ppm	-80 / +20 °C or 0-500 ppm	0-25% or 0-100%	0-50 ppm	0-10 ppm	0-10 ppm
Standard Pharmacopeia alarm level	5 ppm	300 ppm	67 ppm	21,4% or 90%	1 ppm	1 ppm	1 ppm



## Pharmagas colour touch screen

Pharmagas comes with a high definition colour touch screen 3,5" - TFT LCD, with enhanced monitoring features:

- Continuous monitoring of pollutant levels, with instant comparison to regulatory levels
- Alarms management with historical logging
- Historical trending curves with 1 year recording capacities on SD card Excel™ format (optional)
- Adjustable settings such as alarm levels and timers
- Analogical outputs and optional communication capabilities

## Optional features

- TCP/IP module for remote monitoring through Internet or local computer network
- GSM modem for mobile phone alarms text message (SMS) sending capabilities
- Medical gas outlet for sampling purpose or external analysis
- Portable Version