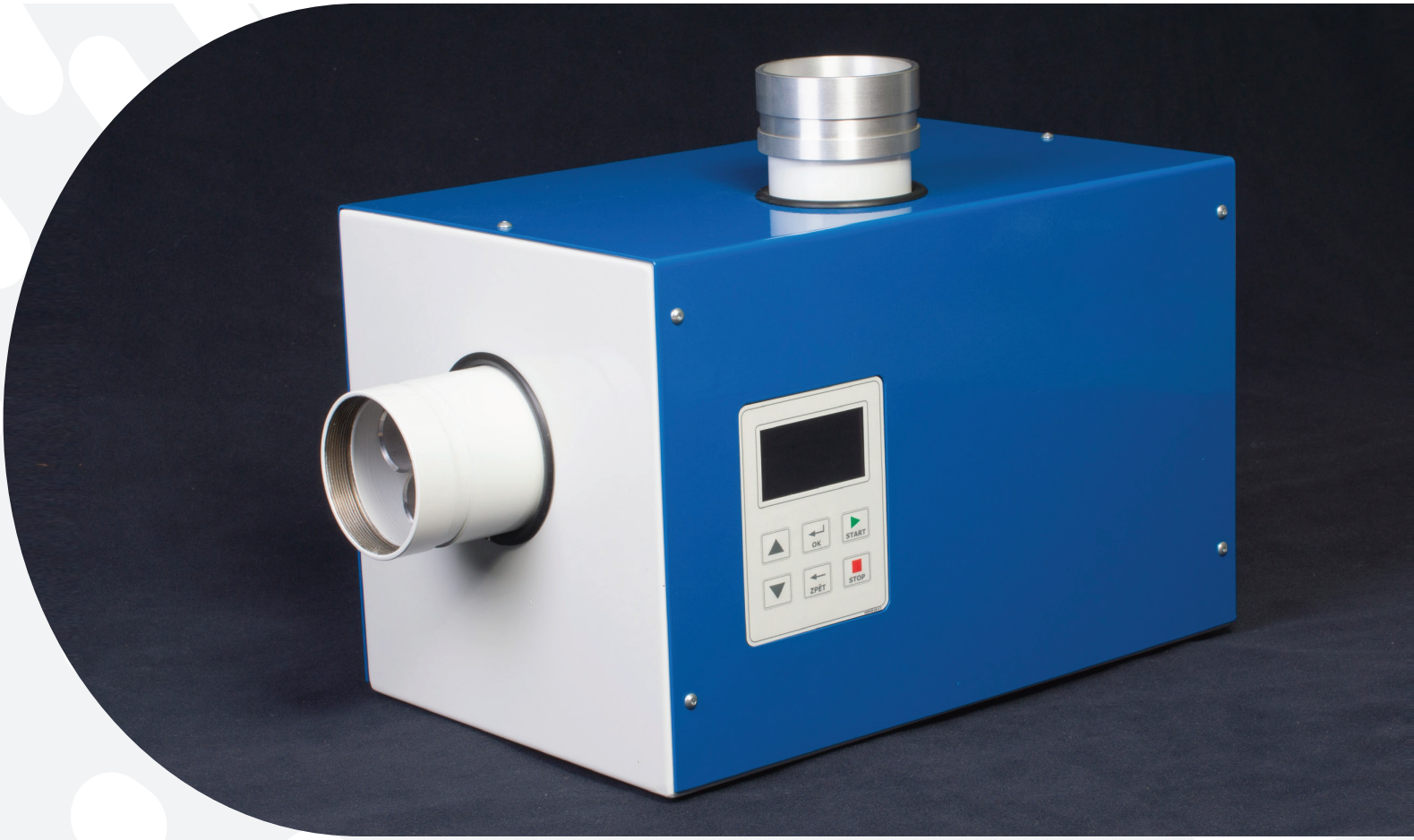
NUVIATECH INSTRUMENTS

SPECIFICATION SHEET

NuRMS EGS Auto-Controlled Volume Air Sampler



EGS is a high volume air sampling system used for capturing radioactive aerosols, emissions, dust and other air pollutants contained in sampled ambient air. Sampled air passes through removable filters that are subsequently analysed in a laboratory to evaluate volume activities of captured particles.
This state-of-the-art air sampler is easy to operate and can be incorporated into various automated sampling systems. The system is designed to be remotely controlled including for the setting of parameters and data collection.

Benefits

- Continuous or pre-defined sampling interval or air volume
- Powerful vacuum pump with asynchronous induction motor
- Flow rate and flow volume measurement and logging
- Automatic pump power adjustment to keep constant flow rate despite rising blockage of used filter
- Adjustable for various filter types
- Remote control

Key figures

5 - 140 m^3/h

Adjustable air flow rate

13 kg

Weight

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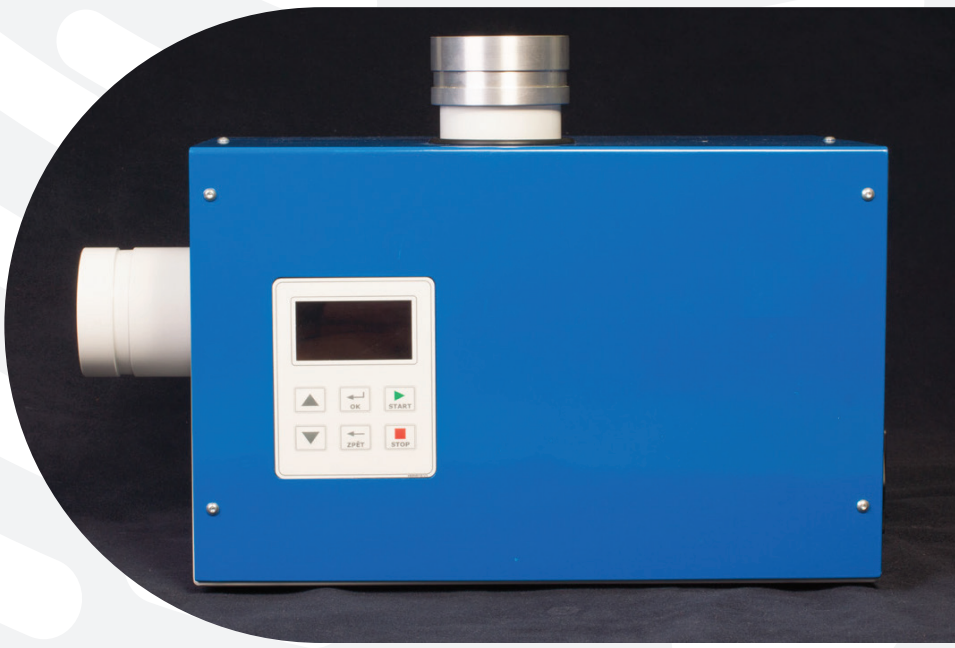
NuRMS EGS

Auto-Controlled Volume Air Sampler

Product description

The EGS advanced concept is designed to capture radioactive aerosols on filters with adjustable flow rates ranging from 5 to 140 m^3/h. The flow rate is automatically regulated with increasing resistance of the clogged filter. The principle of the EGS operation is based on a centrifugal high-velocity pump with a brushless asynchronous AC motor ensuring minimal maintenance of the system.

EGS is a compact device in a metallic case. Removable rubber feet allow comfortable installation on solid surfaces. Inlet flange is mounted on the front panel, the power switch, Ethernet socket, RS-232, AUX, USB connectors and power line socket are located on the rear side, exhaust flange is placed on the top of the unit and OLED display and keypad are located on instrument side.



Product applications

- Air sampling for radioactive material concentration measurement at workplaces - results are used for estimation of workers' intakes and determination of appropriate protective equipment and measures
- Sampling system for collecting air in ventilation stacks for aerosol evaluation
- Installation as a sampling device in bypasses of sampling systems
- Outdoor sampling system / monitoring station for subsequent ambient air analyses

Product specifications

Power supply	230 V / 50 Hz
Power consumption	Standard 300 VA, max. 800 VA
Max. current	4 A
Pump	Centrifugal
Pump drive	Asynchronous AC motor
Flow rate control method	Automatic pump drive power adjustment
Flow rate measurement method	RPM of the measuring turbine
IP protection	IP30
Max. noise level	87 dB (informative measurement in the unloaded state at a flow rate of 140 m^3/h at a distance of 1 m)
Means of control	Local 6-key keypad Remote administration via LAN
Display	OLED type
Dimensions	400 × 260 × 270 mm without exhaust and inlet flange, 460 × 260 × 340 mm in total
Weight	13 kg (without the sampling filter attached)
Operational environment	Temperature from +5 to +40 °C Humidity max. 75%, non-condensing
Flow rate	From 5 to 140 m^3/h
Sampled medium inlet	Via flange (80 mm diameter or customised)
Medium exhaust	Via flange (can be customised)
Interface	USB, LAN, RS-232, RS-485
Displayed data (OLED display, or sent via LAN remote administration)	Current flow rate in m^3/h Real time Temperature Pressure Total sampled volume of the gas medium Total running time Sampled volume within the START-STOP interval Status report of the device and occurred failures Others