

Particulate Reference Sampler MicroPNS Type LVS1



MicroPNS LVS1
with outdoor
housing and PM 10
sampling head
according EN
12341:2014

Highlights

- Microcomputer computes the physically correct volume
- Sampling on PUF or membranes 47mm
- Time or volume controlled sampling
- Non-volatile memory
- Real time clock
- Weather proofed outdoor housing
- PM10 or PM2.5 or TSP sampling head included

Description

The microcomputer controlled air sampler, MicroPNS Type LVS1, is a system for the automatic collection of particles on filters.

The modular system is furnished with an internal pump for volume flow rates of up to 3m³/h (others on request possible). Collection to 1 membrane diam. 47mm or PU Foam etc. Gas flows are regulated via mass flow controllers, which are controlled by the built-in microcomputer and electronic of MicroPNS. The flow meter principle is with orifice plate and differential pressure measurement. All values are calculated with temperature and pressure compensation. Different sampling heads for PM10, PM 2,5 or TSP are offered as an accessory. Sampler specifications are in full accordance with EN12341:2014.

With the MicroPNS LVS1 you can preset a sampling for a variable volume during an unrestricted period of time or a sampling over a preset period with a constant gas flow.

The collection starts in each case on a preset date and time. The internal microcomputer computes the physically correct volume and shows different status messages and the actual volume on a display. All parameters and all data are stored and can be output to the display, RS 232 or an optional printer. The system is available in an outdoor cabinet or as 19" version for mounting in a measuring station.

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The MicroPNS particulate reference sampler guarantees an exact sampling in accordance with VDI and EN standards (Association of German Engineers) and can be employed in the area of emissions, immissions, testing for waste disposal sites, MAK value monitoring (maximum admissible concentration), as well as being applicable to many other industries and fields.

The mechanical execution depends on the application. A variety of different sampling heads, in accordance to EN 12341:2014, filter racks, stream selectors outdoor housing are offered optionally.

MicroPNS outdoor housing

Technical data

Sampling:	independent, microcomputer controlled sampling on particulate filters,
Sample filters:	filters diameter 47mm or PU Foam
Sampling control:	constant flow or constant volume
Flow control:	flow controlled by orifice plate with temperature and pressure compensation
Sample Pump:	carbon vane pump 4m ³ /h
Flow range:	1m ³ /h or 2,3m ³ , free selectable
Power supply:	230V/50Hz Consumption approx. 250VA Automatic
Sequencer:	unattended automatic operation; user enters time and date for beginning and stop, volume, and flow rate for each sampling event; If flow rate falls outside these limits, the sampling will stop and indicate that these sampling was not valid
Flow Limits:	The user can set flow limits as a range of percent difference from the expected value
Data storage:	all data are stored in a non-volatile memory, RAM
Mechanical:	19" rack mounted or outdoor housing, GFK
Noise:	< 35dBA according to DIN 2058 in a distance of 8m
Input/Outputs:	RS 232, optional USB