TOPAS ®

Laser Aerosol Particle Counter LAP 340

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The particle counter LAP 340 is a mobile useable evaluation system for measuring the number and size of particles in air streams and gaseous media.

The measuring range comprises 0.3 … 10 µm in 16 particle size channels at a flow rate of 28.3 l/min. This makes it suitable for a variety of measuring tasks. These include monitoring and checking of clean rooms, clean benches, filter facilities in operation rooms or filling facilities in the pharmaceutical industry. Another area of application, especially in connection with the Topas Dilution System Series DIL, are separation efficiency tests of filters.
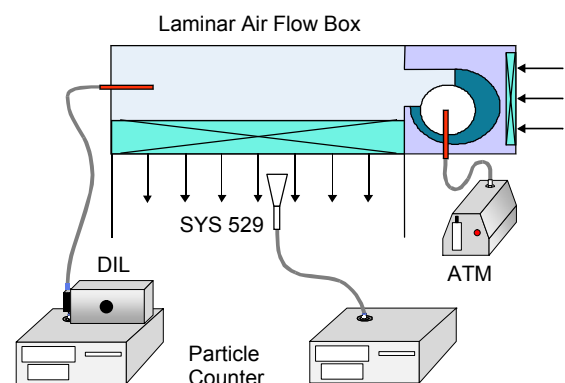
An LCD display allows during the measurement an overview of various data such as particle size channels, date, time and the current measurement. The measuring results are shown in a table. At the end of the measurement, a thermal printer enables a print out of the data together with threshold value exceedings and sample identification. With the in-house developed Topas software package PASWin further processing of the measuring results can be done in programs like MS Excel. The software also allows direct measuring and archiving.

Advantages

- Portable particle counter for stationary as well as mobile use

- Complies with the following standards:
  VDI 2083
  DIN 1946
  DIN 12950 / 12980
  US Federal Standard 209 E
  DIN EN 14644

- Automatic calibrating function enables an easy checking and recalibration of the system

- User-friendly software for measuring and archiving

- Quick instrument setup

Applications

- Validation and monitoring of Clean rooms and Laminar air flow boxes

- Emission measurement (e. g. vacuum cleaner testing)

- Fractional efficiency tests of filters and separators

Arrangement of Topas instruments Aerosol Generator ATM, Dilution System DIL, Sampling Probe SYS 529 and Laser Aerosol Particle Counter LAP 340 for validation of a laminar air flow box

Specification

Measuring Range

Model	Flow rate in		Measuring range with Latex calibration	Max. concentration
	cfm	l/min	µm	particles/cf (particles/cm³)
LDS 328	1	28.3	0.3 – 10	980 000 (35)

The sensor is calibrated with certified Latex particles. For the smallest particle size, we guarantee a counting efficiency rate of at least 50%. The maximum concentration is indicated at a coincidence error of 7.8 %.

Accessories

- Aerosol Generator Series ATM 226
- Dilution System Series DIL 554/T (with ¼" connector)
- Isokinetic Sampling Probe SYS 529
- Data acquisition software: Topas Particle Analysis Software PASWin
- Sensors for temperature, relative air humidity, differential pressure and air velocity
- Remote control with start/stop switch for initiating measurements at a distance of up to 5 m from the device
- Antistatic flexible tube ¼"

Technical Data

Flow generation	Vacuum pump
Optical system	90° light scattering optics
Display and control	Background-lighted graphical LCD display, 19-key-operation
Measuring time / pause time	1 (or 0) seconds … 99 hours
Measuring mode	Single measurement technique with 1…9 measurements per cycle or continuous measurement
Data contents per data batch	Date, time, sample identification / number, measuring time, pause time, 16 programmable particle size channels with distributive, cumulative particle number and volume distribution, mean value depending on setting
Alarm level	Programmable alarms for each clean room class
Printer	Thermal printer (width of paper roll 114 mm)
Computer interface	RS 232 C (V. 24)
Power supply	230 V AC, 50/60 Hz, max. 250 W (115 VAC on request)
Size (W x D x H)	410 x 280 x 180 mm
Weight	13 kg

For more information please visit our website at www.topas-gmbh.de

Specifications are subject to change without notice.