

Sample Switching Unit



Sample switching unit SYS 520 connected with and to be controlled by the Laser Aerosol Spectrometer LAP 321/322

To determine fractional efficiencies of filters or filter media, measurements at two different sampling points are usually necessary, i. e. upstream and downstream of the filter. This can be realized by means of the Sample Switching Unit SYS 520 with only one particle size analyzer.

The sample switching unit enables an automated and reliable changing of the measurement between a sampling line I, a sampling line II and a purge routine (using the integrated HEPA filter).

The SYS 520 is especially designed for connection to the aerosol spectrometers of the LAP 32x series. The LAP 321 series feature the corresponding control interface (3-pin) by default. The device is powered by an external power supply.

SYS 520

Special Advantages

- Automated sample switching at difficult to access positions
- Reliable switching at the sample by means of pinch valves
- Selectable purging routine for assuring the measuring results

Applications

- Particle measurements at two different sampling points by switching between the sampling tubes
- Determination of fractional efficiency curves at test stands



Scheme of the Sample Switching Unit SYS 520

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Specifications

Details

The essential components of the Sample Switching Unit series SYS 520 are:

- three magnetic valves (pinch valves), with one of them being internal (flushing air)
- an internal HEPA-filter (for the flushing air)
- an external flushing air connector
- an external AC-adapter and a connector for the control cable (LAP 321/322) or a combined hardware connection for power supply and device control respectively
- an adapter for connecting the sample tubes to the aerosol spectrometer LAP.

Special silicone tubing is used for sample flow I and II. Its dimensions are determined by the design of the pinch valves (I and II). For the flushing air a standard PVC-hose can be used.

Further Device Models

The device models SYS 520/P and SYS 520/H are designed and intended for use in test systems. Both models are equipped with a hardware interface transmitting control signals and ensuring the power supply.

The device model SYS 520/S is designed for use with various particle measuring devices. Control is performed via a serial communication interface (RS232) by means of a computer. Power supply is provided via an external AC-Adapter.



SYS 520 with adapter for particle measuring device



SYS 520/S with RS232 interface for PC-connection

Technical Data SYS 520 and SYS 520/P

| Sampling tubes | 4,7 x 3,4 mm (silicone) | |
|----------------|--------------------------|--|
| AC adapter | 100240 V AC / 24 V DC | |
| Power supply | 24 V DC | |
| Dimensions | 200 x 160 x 130 mm³ | |
| Weight | 1,8 kg | |

Technical Data SYS 520/H and SYS 520/S

| Sampling tubes | 9,6 x 6,4 mm (silicone) | |
|----------------|---------------------------------|--|
| AC adapter | 100240 V AC / 24 V DC | |
| Power supply | 24 V DC | |
| Dimensions | 210 x 300 x 150 mm ³ | |
| Weight | 3,1 kg | |

Interface and Connecting Dimensions

| Device model | Interface | Sampling tube |
|-----------------|--------------------|---------------|
| SYS 520 | 3-pin, for LAP 32x | 4.7 x 3.4 mm |
| SYS 520/P | Hardware | 4.7 x 3.4 mm |
| SYS 520/H | Hardware | 9.6 x 6.4 mm |
| SYS 520/S | RS232 | 9.6 x 6.4 mm |



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

Specifications are subject to change without notice.

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PARTICLE UNDER CONTROL