

## Aerosol Generator Model #7.811

This model has two pumps inside, one for the flow through a nebulizer (generating aerosol raw concentration) and a second pump which provides dry air for optional diluting and drying of the raw aerosol (using a Silica gel dryer).

Both flow rates can be controlled and switched on/off independent from each other with two switches and potentiometers on the front side of the instrument.

The dryer is located at the front side and can be removed for Silica gel regeneration or replaced by standard tubing in case no drying is necessary or wanted.

A flow meter allows monitoring of the "dry-air-flow".

Up to six nebulizers can be stored inside the removable cover on the instruments backside (see picture).



#7.811 Aerosol Generator

### ■ Preliminary specification

- Power input: 100 - 240 VAC; 47 - 63 HZ; 3 A max.
- Size: 262 x 313 x 253 [mm; H x W x D]
- Mass: ~ 9 kg
- Nebulizer flow: ~ 1 to 3.5 l/min.
- Dry air flow: ~ 5 to 20 l/min.

- Monodisperse particles: PSL-solution (~100 nm to ~5 μm) concentration depends on size and solution dilution
- Polydisperse particles: DEHS, max. concentration > 10<sup>7</sup>/cm<sup>3</sup> (other substances have not yet been tested by GRIMM)

The following graphs show typical distributions of PSL (155 nm) and DEHS measured with a GRIMM #5.400 CPC (Condensation Particle Counter) and a #5.500 Classifier "Vienna"-Type DMA.

