

7813 | 7814 Diffusion dryer

For humidity reduction in the Aerosol Sample

- Refillable and regenerable silica gel
- Large and small Version to fit needs at its best



Features

- **Aerosol drying with Silica Gel Orange***
Color change from orange to white
- **Inlet and outlet with push-in fittings (Festo), 8 mm**
For easy integration in experimental setups
- **Operation in any orientation**
Works vertical, horizontal or tilted
- **Two sizes**
Small and large version to fit needs at its best

Benefits

- **Silica-Gel Orange*** beads allow easy handling
- **Simple regeneration in the dryer cabinet**
- **Wide range of applications**
 - Drying of nebulized aqueous suspension (PSL) and solutions (NaCl)
 - Drying of wet aerosols
 - Conditioning of atmospheric aerosol
- **Connection and maintenance possible without tools**
- **Low operating costs**
- **Compatible with all GRIMM aerosol measuring instruments, e. g. 7811 aerosol generator, 5416 CPC**

Technical data

Drying agent	Silica Gel Orange* beads with indicator, grain size 2 ... 5 mm
Color change	Orange: dry White: used, must be regenerated
Adsorption capacity	At 10% RH: approx. 6.5 weight % At 80% RH: approx. 42 weight %
Regeneration	130 °C (166 °F) for about 4 hours
Sample flow rate	0.3 ... 5 l/min
Connections	Push-in fittings (Festo), 8 mm
Operating temperature	+4 °C ... +40 °C (32 °F ... 104 °F)
Transport and storage	Recommended storage temperature: 15 °C ... 25 °C, dry (59 °F ... 77 °F), connection fittings closed
Pressure range	± 100 hPa to ambient pressure
Dimensions (L x Ø)	Small: 29 x 19 cm (11.4 x 7.5 inch) Large: 50 x 19 cm (19.7 x 7.5 inch)
Weight	Small: 2.3 kg (5.07 lbs) Large: 7.4 kg (16.3 lbs)

* The term "Silica Gel Orange" is a product name of the company Roth