

Heated version of the PLG 2100 with automatic refill unit



## Description

In addition to a built-in heating unit, the PLG 2100 S generator is also equipped with an automatic refill unit. **Startup** The liquid to be dispersed is simply filled in the reservoir. The nozzle system developed by Palas<sup>®</sup> is immersed in the liquid. This nozzle system is based on the Laskin principle and guarantees extremely precise dosing constancy with uniform particle size. The mass flow is adjusted using the volume flow through the nozzle. The volume flow is controlled by a pressure regulator and a manometer on the device. The filling level in the reservoir is monitored by a sensor. If the minimum filling level is not reached, then material from an external reservoir is added by means of a pump. As soon as the maximum filling level has been reached, the filling of additional material is stopped automatically. The automatic refill unit enables non-stop aerosol generation for a period of several days with the PLG 2100 S.

## Benefits

- Excellent short-term and long-term dosing constancy
- Heatable
- Best reproducibility with respect to particle size distribution and particle concentration
- Large mass volume range (very low and very high)
- Long dosing time over several days with automatic refilling (optional)
- Robust design (optionally resistant against chemically aggressive liquids)
- Compact and light
- Easy to operate, proven in industrial applications

**Datasheet**

<i>Parameter</i>	<i>Description</i>
<b>Volume flow</b>	
	3 – 110 l/min
<b>Power supply</b>	
	115 – 230 V, 50 – 60 Hz
<b>Dimensions</b>	
	440 • 380 • 390 mm
<b>Weight</b>	
	approx. 18 kg
<b>Mass flow (particles)</b>	
	< 100 g/h (white oil)
<b>Aerosol outlet connection</b>	
	Ø <sub>inside</sub> = 32 mm, Ø <sub>outside</sub> = 42 mm
<b>Special features</b>	
	Heatable up to 100°C, with automatic refilling unit
<b>Mean particle diameter (number)</b>	1.5 µm
<b>Filling quantity</b>	1 l

## Applications

- Filter industry/oil separators
  - Determination of separation efficiency
  - Determination of fractional separation efficiency
  - Loading test
- Test of cooling lubricant separators
- Used on the HMT 1000 filter test rig to test oil nebulizers
- Comparison of particle measurement devices
- Tracer particles
- Flow visualization

**Palas GmbH**  
Partikel- und Lasermesstechnik  
Greschbachstrasse 3 b  
**76229 Karlsruhe**  
Germany

**Managing Partner:**  
Dr.-Ing. Maximilian Weiß  
**Commercial Register:**  
register court: Mannheim  
company registration number: HRB 103813  
USt-Id: DE143585902



**Contact:** E-Mail: [mail@palas.de](mailto:mail@palas.de) Internet: [www.palas.de](http://www.palas.de) Tel: +49 (0)721 96213-0 Fax: +49 (0)721 96213-33