°Catalytic Instruments

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20th – 22nd June 2023



The Silver Particle Generator produces silver particles ranging from 2 to 200 nm in a stable and repeatable manner at a touch of a button.

Short warm-up time (< 15 min)

Remote data logging (USB, WLAN, LAN)

One-touch presets for two size modes



High particle concentrations are achieved from 2 to 200 nm after an electrostatic classifier.



The particle size distribution can be adjusted by varying the heater temperature.



GMD and GSD rise steadily with heater temperature, while Total **Concentration reaches a maximum** at 1050 °C.

The generator flow rate can be adjusted to experimental needs with low impact on aerosol size or distribution or concentration.

Aerosol day-to-day variation is below ± 20% for GMD and Total **Concentration**.



Aerosol size over 15 hours of continuous operation is highly stable; GMD varies only by $1\sigma = 1$ %.



Total Concentration over 15 hours of continuous particle generation varies only by $1\sigma = 1.25$ %.



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Silver particles are spherical at sizes up to 20 nm, and form agglomerates for larger sizes. Sintering makes particles more compact and spherical.



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Patent pending.



SPG Brochure

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