

5D Thermal Aerosol Generator



The 5D Thermal Aerosol Generator is designed for operators who require a wide range of aerosol output concentrations to perform leak tests on smaller clean air cabinets through cleanroom air handling systems.

It is the high capacity solution used in demanding industries and applications such as:

- Nuclear Facilities
- Pharmaceutical Manufacturers
- Medical Facilities and Cleanrooms
- Independent Filter Certifiers



The 5D Provides:

- ✓ High aerosol output
- ✓ Widest range of system flow rates
- ✓ One minute warm-up time
- ✓ Flex-fuel capability
- ✓ Rugged portability
- ✓ Safe and reliable operation

Cost-Effective

Save time and money in the most demanding multi-filter cleanroom installations. In high-volume HEPA and ULPA airflow environments, the 5D can significantly reduce the time it takes to conduct filter leak test scans, generating aerosol concentrations that can challenge the largest Air Handling Unit (AHU) configurations. With 1- to 2-minute warmup and cool-down times, begin testing high-flow systems without waiting, and be ready to store and move the unit minutes after the job is complete.

Rugged Portability

The 5D components are housed in a **stainless-steel enclosure** designed to withstand the rigors of portable filtration-system certification. Its lightweight, slim profile and supplied hand and shoulder straps make it an everyday, portable aerosol generator.

Flexible

Generating the widest aerosol concentration range available, the 5D accommodates both high- and low-flow environments, from cabinets¹ to the most demanding cleanroom installations. And with **flex-fuel capability**, the 5D can use the following reagents, including DOP (DEHP), PAO-4, DOS (DEHS), Ondina, or mineral oil.²

Safe and Reliable

An innovative design minimizing system thermal requirements provides a faster, simpler, and safer alternative to other available solutions. The 5D is certified to comply with all applicable electrical and safety requirements, including CE and RoHS 2 standards.

1. Per NSF/ANSI 49, use 4B/4BL/6D laskin nozzle generators for biosafety cabinet testing.

2. Paraffin Oil and Corn Oil should not be used with a thermal generator.



Heavy-Duty Case with polyurethane wheels and a retractable handle allow for easy transport.

PRODUCT SPECIFICATIONS

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|-------------------------------------|---|
| Generation | Thermal vapor |
| Warm-Up and Cool-Down Time | 1-2 minutes |
| System Flow Rates | 500 – 70,000 cfm (833-119,000 m ³ /hr.) |
| Aerosol Output at Max Concentration | 100 µg/m ³ @ 11,900m ³ /hr (100 µg/L @ 7,000 cfm) 10 µg/m ³ @ 119,000 m ³ /hr (10 µg/L @ 70,000 cfm) |
| Particle Distribution | Meets ANSI/ASME N509/510 |
| Flex-Fuel Capability | DOP, PAO-4, DOS, Ondina EL, and Mineral Oil |
| Electrical | 120 VAC, 60 Hz, 10 Amps (for P/N 9300408 and 9300409) 240 VAC, 50 Hz, 5 Amps (for P/N 9300410 and 9300411) |
| Size | 43 cm x 12 cm x 36 cm (17 in. x 5 in. x 15 in.) |
| Weight | 8 kg (approximately 17.6 lb) empty |
| Standards | ISO 14644-3, CE RoHS 2 (2011/65/EU directive) |

Specifications are subject to change without notice.

Accessories



Heavy-Duty Transport Case

Heavy-Duty Transport Case combines 5D, carrying straps, hose adapter, and inert gas regulator.

Inert Gas Regulator Assembly

Four single stage regulators are available to connect your 5D to an inert gas source – the CA 320 for CO₂, CA 580 for N₂, Ar or He, BS341 #8 for CO₂ and BS341 #3 for N₂.



Hose Adapter Assembly

Provides an easy method to adapt hose sizes ranging from 2" (50.8 mm) to 1" (25.4 mm) ID to your equipment.



Accessories for In-situ Testing

Positive Injection Pump (PIP)

Used to inject the aerosol output of the 5D into a positive pressure duct or plenum.



Aerosol Injection Ports

Easy and repeatable method to introduce aerosol into a duct.



Sparge Pipes

Used to distribute the challenge aerosol evenly and effectively into a test system, including ducts.