

CRF3 Cleanroom Fogger™

High-Visibility DI Water Fog Generator for Cleanroom Airflow Visualization

Overview

The **CRF3 Cleanroom Fogger™** is a high-performance ultrasonic DI-water fog generator designed for visualization of airflow patterns, turbulence, and pressure migration in cleanrooms and controlled environments.

Using advanced multi-piezo ultrasonic atomization technology, the CRF3 produces a dense, highly visible fog without contaminants, making it ideal for pharmaceutical, medical device, semiconductor, and compounding environments.

The unit features a large interactive touchscreen display and dual 80 mm outputs for precise airflow testing and documentation.



Key Features

- **24 Ultrasonic Piezos** for dense, stable fog production
- **1.2 m³/min fog volume output**
- **Highly visible laminar flow visualization**
- **Dual 80 mm fog outlets**
- **Large interactive touchscreen control display**
- **Adjustable fog intensity**
- **Instant on/off fog control**
- **Low water protection system**
- **Quiet operation — no heated smoke or glycol contamination**
- **DI, distilled, or WFI compatible**

Performance Specifications

Parameter	Specification
Fog Volume	1.2 m³/min
Water Consumption	128.2 mL/min
Water Capacity	9–11 Liters
Atomization System	24 Piezo Ultrasonic Transducers
Outputs	Dual 80 mm Ports
Control Interface	Large Interactive Touchscreen
Fog Type	Pure DI-Water Fog
Droplet Size	~5 µm nominal (ultrasonic microdroplet class typical)
Startup Time	< 30 seconds
Operation Duration	~70–90 minutes typical (dependent on output level)
Power	115VAC or 220VAC



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Applications

- Cleanroom airflow qualification
- Laminar flow verification
- ISO 14644 airflow visualization
- USP <797> / <800> sterile compounding compliance
- HEPA filter leak identification
- Barrier isolator testing
- RABS airflow analysis
- Semiconductor contamination control studies
- Smoke studies and video documentation

The fog enables visualization of:

- Airflow patterns
- Turbulence
- Pressure differentials
- Air migration pathways

Water Requirements

Use only:

- De-Ionized Water (DI)
- Distilled Water
- Water For Injection (WFI)

The CRF3 produces a **pure non-contaminating fog** suitable for critical environments.

Advantages Over Heated or Glycol Foggers	Typical Environments	Included Components	Optional Accessories
<ul style="list-style-type: none"> • No residue • No thermal currents • No contamination risk • Suitable for sterile environments • Repeatable airflow results 	<ul style="list-style-type: none"> • Pharmaceutical cleanrooms • Compounding pharmacies • Sterile suites • Semiconductor fabs • Medical device manufacturing • ISO 1–9 controlled environments 	<ul style="list-style-type: none"> • CRF3 Fogger Unit • Dual Output Ports • Flexible Fog Hose • Power Cable • Touchscreen Control System 	<ul style="list-style-type: none"> • Fog curtain wand • Extended hose kits • Y / T adaptors • Remote operation module • Transport case • Contrast lighting kit

Positioning vs Other Foggers

Compared to LN₂ foggers, ultrasonic foggers provide safe, clean, repeatable visualization without cryogenic handling while still offering strong airflow visibility.

Your older CRF series produced similar pure fog visualization performance using DI water, but the CRF3 improves usability with touchscreen control and dual-port distribution.