

Applied Physics, Inc.

400 N County Road 2 East Monte Vista, CO 81144 USA

Nano Particle Technology

Cel 720-635-3931

Email Sales@AppliedPhysicsUSA.com WEB www.AppliedPhysicsUSA.com

Cleanroom Ultrapure Fogger, AP 32

The AP32 Cleanroom Ultrapure Fogger produces a high volume of ultrapure fog needed in clean rooms, sterile rooms and ISO rooms, providing an adjustable 2-5 cubic meters per minute (170 cubic feet / minute) for up to 90 minutes, which easily visualizes airflow for more than 20 feet distance; surpassing all other ultrapure foggers in use today...two times the fog volume and visible fog distance for about the same cost as other ultrapure foggers.

Patterns of air flow, turbulence and velocity can be viewed with a non-contaminating fog; thus no clean up is required. The AP32 ultrapure fog generator is used in Semiconductor and Pharmaceutical companies to visualize airflow patterns, turbulence, find dead zones, see direction and visualize velocity. The ultrapure fogger provides a very dense fog by generating vapor fog droplets at 2-3 micron diameter, permitting the fog to travel much further in the air stream. As the fog evaporates, it reverts back to the same elements we breathe. The exit temperature of the fog is about 78 F degrees with a very low exit pressure, ensuring a neutrally buoyant fog entering the airflow. The high purity fog floats into the airflow, rather than dropping as with ultrasonic foggers. A polycarbonate Fog Tube and long, flexible, 15 foot, (5M) Fog Hose is provided. The ultrapure fogger rolls easily across a floor with wheel casters underneath. A front storage drawer is provided.

AP32 Advantages:

Very High Fog Density
Highest Fog Volume
Low Fog Exit Pressure
Ultrapure Fog, SS Enclosure
Neutrally Buoyant Fog
Video Capabilities
Fog Curtain Wand
Fog Illumination

Providing from 20-30 feet visible airflow distance, 90 minutes 2-5 Cubic Meters (170 CF) per minute, <u>Adjustable</u>

Minimal fog entry pressure is created

No cleanup required, no contamination to fog or clean room

Fog floats into airflow without dropping

Video of the airflow turbulence is very easy with dense fog Optional Fog Curtain Wand to spread out the fog visibility Optional Blue LED Fog Illuminator to contrast airflow



Cleanroom Ultrapure Fogger

Fog purity is achieved by bringing DI water to a high temperature creating an ultrapure water vapor. The DI water vapor is then combined with LN2 (LNG) liquid nitrogen, which boils at room temperature. The two vapors combine to form a highly dense, ultrapure fog to visualize airflow, patterns and turbulence in clean rooms, ISO suites and sterile rooms. The fog generated is the

highest volume, highest density, highest purity to visualize airflow and turbulence. The fog is neutrally buoyant, thus when entering the airflow, the fog travels with the airflow, rather than dropping in the airflow, as with ultrasonic foggers that produce lower temperature fog outputs.

The high purity fog offers no exit turbulence to the airflow being visualized due to a low exit pressure. The AP32, Cleanroom Ultrapure Fogger fog leaves no contamination behind; requiring no cleanup of any kind after fog operations. The very high fog density increases the airflow visualization distance. The Stainless Steel enclosure contains the liquid nitrogen in a Dewar and holds the DI water in a separate boiler, ensuring a durable design. The AP32 is CE Mark, meets guidelines for ISO 14644-3 ANNEX B7 and USP 797 Insitu Airflow Analysis.

Visualize airflow patterns around equipment, tools, hallways, door entries and personnel. Balance airflow pressure on two sides of a closed clean room or ISO suite. Locate standing vortices that can transport particle contamination into critical work areas and sterile rooms. Visually track air flow direction and velocity, as well as 3D airflow modeling to ensure air flow balance between clean rooms, ISO suites and sterile rooms. Detect unwanted air infiltration into a clean room to verify process environments are operating properly. The AP32 Ultrapure Fog Generator produces a very dense, ultrapure fog, providing superb visual & video observations, making it the very best clean room fogger available today. A Blue LED Illuminator is available to contrast and highlight airflow turbulence.



Very Dense Fog



Wide Fog Curtain

Specifications:

Part #: AP32
Fog Duration
Fog Volume
Fog Type

Weight

LN2 (LNG) Dewar Capacity DI Water Boiler Capacity

DI Water Boiler Capacity
Dimensions

Cleanroom Ultrapure Fogger, AP32

up to 90 minutes

170 CF / minute, (2-5 Meters³ / minute), 15,300 CF, Adjustable

UltraPure for Class 1 to Class 10,000 use

32L, 8.45 US Gallons 5L, 1.32 US Gallons

1.095M H x 540mm W x 766mm D, 42.7" H x 21" W x 29.9" D

77kg, 170lbs

ÅP is a trademark of Applied Physics, Inc. All rights reserved. Copyright since 1997.

Bill To: PO Box 186, Monte Vista, CO 81144 USA Ship To: 400 N County Road 2E, Monte Vista, CO 81144 USA

Million.

Blue LED Illuminator