

°C Breeze



Applications

- NSF 49/ANSI Testing
 - Microbiological Safety Cabinet
 - Chemical Fume Hood
 - Clean Environment Containment Validation
- USP 797 Validation
- Building Envelope Commissioning (NIBS 3-2012) Tests
- Filter Challenging
- HVAC Ventilation Performance Tests
- Local Exhaust Ventilation (COSHH Regulations) Testing
- Data Center Airflow Visualization
- Electronics Cooling Design Verification
- General Testing of Air-Cooled Product Prototypes

Overview

The °C Breeze Fog Instrumentation system is used for the visualization of airflow profiles, using low-impulse, thermally neutral fog. This handheld device allows mobility in large areas or remote locations where a direct connection to power is not practical.

The °C Breeze provides a steady stream of condensed fog, capable of filling 3 m³ [100 ft³] in constant-on mode, before evaporating. The micro-sized fog particles provide excellent air flow visibility without premature settling or dispersion. The supplied nozzle extension tube allows precise fog delivery into small spaces. This easy-to-operate unit produces fog quickly with virtually no warm-up delay. Fog may be generated continuously for 10 minutes on a single battery charge, or, using the optional 110/230V AC wall power supply, fog can be generated continuously for a period of up to one hour.

The °C Breeze uses a high quality, FDA Generally Recognized As Safe "GRAS", approved chemistry for a clean, safe, non-toxic fluid. Applications include microbiological safety cabinet and chemical fume hood certification, critical containment verification for medical and clean technology, building ventilation testing, electronic system cooling design studies, and generalized flow visualization work.



The °C Breeze System comes with:

- °C Breeze Visualization Instrument
- Locking Carrying Case with Keys
- Nozzle Extension Tube, 225 mm [9"]
- 500 ml [17 oz] Fluid Bottle
- 12 VDC Lead Acid Battery
- Battery Charger
- User Manual
- Quick Start Guide
- Material Safety Data Sheet (MSDS) [upon request]

Degree Controls, Inc.

is an ISO-9001 certified, world-class designer and manufacturer of airflow sensing, monitoring, and control solutions. With over 20 years of proven experience, we pride ourselves on delivering solutions which provide the value, differentiation, and service required by our customers, to meet the rapidly changing competitive landscape that they face.

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Features

- Easy-to-use, battery operated, handheld portable fogging device
- Neutral density, nontoxic fog, traces airflow profiles
- High opacity and long visual latency to meet your application needs
- Uses FDA GRAS approved, non-depositing, oilless and smoke-free fog fluid (residence time of 30-60s)
- Useful for overhead or under floor applications
- Starts in seconds, no warm-up delay
- Switch options include constant-on or toggle on/off fog delivery
- Switch option for high/low fog operation
- Includes battery charger with illuminating LED charge indicator
- Available NiMH battery option
- International power plug adapters available
- Wireless, remote control available
- Dedicated power supply for continuous (battery-less) operation available
- Useful in lab/cleanroom testing (ISO 14644)

Specifications

| | |
|-----------------------------------|--|
| °C Breeze Instrument Weight | 2.7 kg [6 lbs] |
| °C Breeze Instrument Dimensions | 227 mm x 66 mm x 81 mm [8.9" x 2.6" x 3.2"] |
| Power Consumption | High Setting: 75 W Low Setting: 65 W |
| Battery (Supplied) | 12 VDC / 2.3Ah |
| Charger Power Requirements | 100-240V ~2A, 50/60 Hz |
| Fog Output | High Setting: 2.8 m ³ /min [100 cfm] Low Setting: 1.4 m ³ /min [50 cfm] |
| Fog Fluid Reservoir Capacity | 110 mL [3.7 oz] |
| Fog Fluid Consumption | High Setting: 2 mL/min [.068 oz/min] Low Setting: 1 mL/min [.033 oz/min] |
| Spare Fluid Bottle Capacity | 500 mL [17 oz] >5 hours continuous operation |
| Fog Fluid Composition | Propylene Glycol – FDA GRAS |
| Fog Composition | Condensed moisture vapor |
| Fog Particle Size (mean diameter) | 0.2 - 0.3 µm |

This Product Uses Propylene Glycol

Only use Degree Controls, Inc. Fog Fluid, PN MS191, in your °C Breeze Airflow Visualization Instrument. Only the °C Breeze Fog Fluid meets the equipment's purity grade needed for the °C Breeze Fogger. Using entertainment-grade fog chemicals will invalidate the product warranty and clog the internal precision components of the °C Breeze product. Entertainment grade fog chemicals may be dangerous to your health and may deposit residues onto your product or test surfaces. °C Breeze Fog Fluid is safe and harmless to individuals when used as directed

Accessories

- Wireless Remote Receiver/Transceiver (315 MHz US) part # MS193
- Dedicated Power Supply for Continuous (battery-less) Operation part # MS192
- 12 VDC Lead Acid Battery part # BA004
- Battery Charger for Lead Acid Battery part # MS194
- 12 VDC Ni-MH Battery part # BA006
- Battery Charger for Ni-MH Battery part # BA005
- Nozzle Extension Tube, 225 mm [9"] part # 51300FA003
- 500 mL [17 oz] Fog Fluid Bottle part # MS191

Standard Instrument, Case, and Components

- °C Breeze Airflow Visualization Kit with Lead Acid Battery part # FM51300
- °C Breeze Airflow Visualization Kit with Ni-MH Battery part # FM51310

Tool Set

- FlowBulb, low-flow velocity applications and live demos part # 51300AS003
- MiniFlow, hard-to-reach ingress or leakage points part # 51300AS004
- PlanarFlow, testing face velocity uniformity in containment cabinets part # 51300AS005



Remote Control Operation



Dedicated Power Supply for Continuous Operation (includes proxy battery)



Airflow Tool Set



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