

TDA-5B Aerosol Generator



Description

The TDA-5B Aerosol Generator has been designed to provide operator convenience and improved performance. The TDA-5B is ideal for certifying or testing HEPA filters or installations with air flows from 1,500 to 65,000 cfm. It requires an inert gas source and 120/240 volts @ 750 watts electrical service.

TDA-5B Features

The TDA-5B has all of the controls and displays grouped on the front panel away from the aerosol generator output nozzle. The unit has a large aerosol liquid capacity for operation up to 4 hours at full output without refilling. In addition, its digital temperature control allows the operator to set the unit for optimum conditions for the specific aerosol agent being used.

The TDA-5B produces an aerosol of consistent particle size distribution which is created by discharging a regulated quantity of aerosolized liquid onto a large heated area. The liquid is vaporized and reconstituted into a polydispersed aerosol by a small amount of nitrogen delivered at approximately five pounds of pressure. The efficiency at which the aerosol is produced enables the TDA-5B Generator, when used in conjunction with an Analog or Digital photometer, to provide enough aerosol to leak test filtration systems from 1,500 to 65,000 cfm. Systems of more than 6,500 cfm may be tested for leaks at less than 100 micrograms per liter if the sensitivity of the photometer is increased.

TDA-5B Specifications

Aerosol Output Range: 1,500-65,000 cfm

Aerosol Concentration 100 ug/1@*: 6,500 cfm

Aerosol Concentration 10 ug/1@*: 65,000 cfm

Generator Type: Vapor Condensation

Compressed Air: Not Required

Compressed Gas: Nitrogen, Argon, Carbon Dioxide or Helium (* 20 cfh @ 50 psi)

Aerosol Type: Polydispersed (Cold)

Size: 14" L x 10" W x 10" H

(35cm L x 25cm W x 25cm H)

Weight-Pounds (lbs): 20 lbs.

Weight-Kilograms (kg): 9.1 kg

Electrical: 110 VAC / 60 Hz or 220 VAC / 50hz

*For high volume output, more uniform particle size, and safety, the liquid is aerosolized, superheated to vapor then recondensed by ambient air into a cold poly-dispersed aerosol. The propellant must be an inert gas since the liquid vapor temperature is above the liquid flashpoint.