Model 336Tritium In-Air Collector

Part Number: 48-4482

Features

- Real-Time and Totalized Air Flow Readout
- Short 15-Minute Warm-Up Delay
- Easy-To-Use Temperature Display and Control
- Visual Pump Run-Time Counter
- Backflow Prevention Protects Catalyst



Introduction

The Model 336 Tritium In-Air Collector is a desktop or rack-mounted tritium sample collecting solution. It features a maintenance-free diaphragm air pump to pull air through six cascaded 20 mL vials. The first three vials collect HTO (tritiated water vapor) from the air being monitored, the first vial catching the bulk of the HTO, while the second and third vials ensure that virtually all of the HTO is collected. The air is then oxidized by an internal catalyst, converting all the HT (tritium gas) still in the air to HTO to get collected by the last three vials.

Backflow prevention ensures the catalyst is protected from sampling fluid. Airflow is measured with a mass-flow sensor, with the value displayed on the front LCD. Catalyst temperature setpoint and real-time reading are conveniently displayed on the front panel. The instrument has only a few simple controls, making it easy to use, and comes in a case which can be installed in a standard 19-inch rack or set on a desktop.

Specifications

SENSITIVITY: 1 x 10^{-9} µCi/cc for 7-day collection time at 100 cc/min

AIRFLOW: 0 - 600 cc/min, real-time LCD readout with current and totalized readings

TEMPERATURE DISPLAY: real-time readings and temperature setpoint

SAMPLE TUBING CONNECTIONS: 1/8 inch MNPT connections on back of instrument; one inlet, one exhaust

TEMPERATURE RANGE: 0 to 50 °C (32 to 122 °F)

UNIT COOLING: 2 ea. 27 cfm (cubic feet per minute) parallel continuous duty fans

PUMP: maintenance-free diaphragm pump, typically 100 cc/min

POWER: 110 Vac input with two 5A fuses

CONSTRUCTION: powder-coated aluminum, stainless steel tubing

SIZE (W x H x D): 48.3 x 26.4 x 59.2 cm (19 x 10.4 x 23.3 in.)

WEIGHT: 14 kg (30 lb)

CONNECTORS:

- 9-pin D connector provides data out for streaming measurements or calibration use.
- 4-pin connector provides potential-free relay contacts for failure conditions.