DYNACALIBRATOR® MODEL 150 CALIBRATION GAS GENERATOR

DESCRIPTION

The Dynacalibrator® Model 150 is a constant temperature system designed to generate precise PPM or PPB concentrations of chemical compounds in a gas stream, using permeation devices as the trace gas source for the calibration of a wide range of instruments. It is used for gas chromatography, verifying the accuracy of analytical data generated from air pollution monitoring, industrial hygiene surveys, odor survey programs, tracer studies, and in other instruments that measure gas concentrations.

FEATURES

Two chamber options: state of the art passivation technology or Hastelloy C | Stainless steel cap | Dedicated switched-mode temperature controller with front panel and serial port control | Digital readout for set point and chamber temperature | Power switch with LED indicator light | Stainless steel inlet and outlet fittings for 1/16" tubing (1/4" and 1/8" also available) | Universal power input 110 VAC/230 VAC | Cooling fan

BENEFITS

PPB to high PPM range | Temperature control with an accuracy of ±0.01°C | Economical and flexible alternative to bulky bottled gas mixtures

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ADVANTAGES OVER BOTTLED STANDARDS

Permeation devices from VICI® Metronics offer several key advantages over cylinder-supplied gas calibration standards.

Economy is always a major consideration; customers who have done the arithmetic, factoring in the cost of cylinder purchase, shipment, and disposal, typically discover that the purchase of a Dynacalibrator and a supply of permeation devices will start to save them money in the second year of use.

Multicomponent mixtures can be easily generated with a Dynacalibrator and the appropriate combination of permeation devices. This technique also allows the removal of a single component from a gas mixture by simply removing the appropriate permeation device. Alternative methods require expensive custom mixtures or a large number of gas cylinders, which consume valuable lab space as well.

Bottled standards can also have problems arising from degradation of the standard within the cylinder, from changes in the concentration levels as the cylinder pressure changes, and from interaction of calibration components and surfaces.

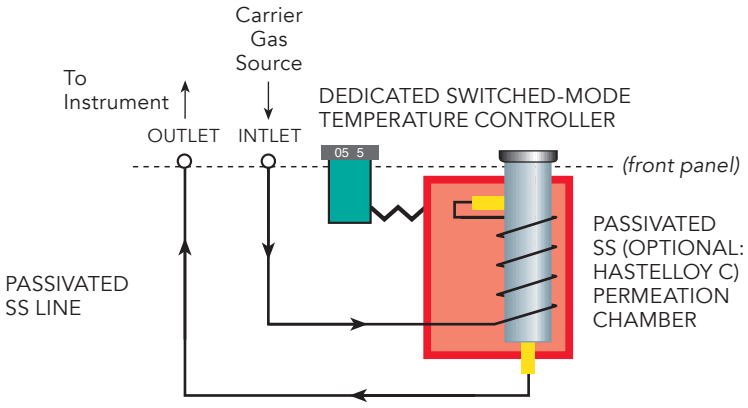
Permeation Chamber	Stainless steel, state of the art passivation technology OR Hastelloy C Screw cap access 9.5" long by 0.875" ID (24 cm x 2.2 cm)
Permeation Device	Maximum total length: 24 cm (9.5") Maximum diameter: 1.6 cm (0.62")
Temperature Control	Range: 30°C to 110°C Accuracy: ±0.01°C at a set point from 5°C above ambient to 110°C
Carrier Flow	Recommended range of 100 to 1200 mL/min
Dimensions	15.4 cm W x 38.1 cm D x 17.7 cm H (6" W x 1" D x 7" H)
Weight	10.5 lbs (4.8 kgs)

ACCESSORIES

Power cord for 110 and 220 VAC | Forceps for removing and inserting permeation devices | Tool for removing and securing permeation chamber cap

OPERATING DIAGRAM

A passivated stainless steel permeation chamber houses the permeation device(s), with measured inert carrier gas sweeping the calibration gas/vapor from the chamber. A digital temperature controller maintains the chamber temperature at a set point with an accuracy of ±0.01°C, traceable to NIST standards. The wide range of temperature settings (5°C above ambient to 110°C) allows the end user to generate a wide range of volumetric concentrations for both low and high vapor pressure chemical compounds, establishing or changing the desired volumetric concentration by simply varying the carrier flow.



Custom plumbing also available.