

Dynacalibrator® Model 190 Calibration Gas Generator

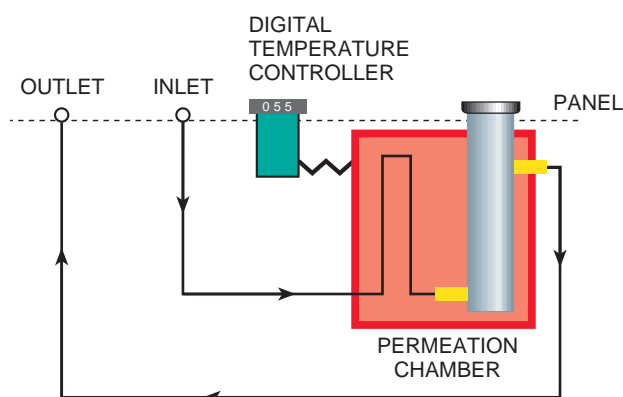
- PPB to high PPM range
- Precise temperature control to 110°C
- Economical, flexible alternative to bulky bottled mixtures



Description

Metronics Dynacalibrators enable calibrations traceable to NIST standards for almost any gas analyzer, in the lab or in the field. They are ideal for verifying the accuracy of analytical data from air pollution monitoring, industrial hygiene surveys, odor survey programs, and other instruments measuring gas concentration.

The design takes full advantage of all the conveniences inherent in our Dynacal® permeation devices to generate and deliver precise concentrations ranging from ppb to high ppm for hundreds of different compounds. Standard features include front panel permeation chamber access, a solid state proportional temperature controller, digital readout for set point and chamber temperature, stainless steel inlet and Teflon® outlet, (1/8" tube fittings), and a cooling fan.



Advantages Over Bottled Standards

Calibration 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.

Specifications

Permeation chamber	Pyrex® (standard) .85" ID x 9.4" (2.1 cm x 24 cm) Teflon® (Option P) .69" ID x 9.4" (1.8 cm x 24 cm) Stainless steel (Option H) .875" ID x 9.25" (2.2 cm x 23.5 cm)
Permeation device	
Maximum total length	23.5 cm (9.25")
Maximum diameter	1.6 cm (0.62")
Temperature controller	Controls chamber temperature at a set point with an accuracy of $\pm 0.1^{\circ}\text{C}$ (30°C - 50°C) or $\pm 0.2^{\circ}\text{C}$ (50°C - 110°C)
Temperature control range	5°C above ambient to 110°C
Output pressure	0 - 5 psi standard; 50 psi optional (Option H)
Flow capacity	Recommended range of 200 - 1200 ml/min for carrier flow
Dimensions	10.6" wide x 14.5" deep x 9" high (26.9 cm x 36.8 cm x 22.9 cm)
Weight	21.4 lbs. (9.7 kg)
Accessories	Power cord for 110 VAC power source (220 VAC w/option C) Forceps for removing and inserting permeation devices
Options	Option C 220 VAC Option H High pressure stainless steel chamber Option O Overflow option with activated charcoal scrubber and 5 psi poppit valve Option V Flow control option with micrometering needle valve

Calibration you can count on