

GasCal 1100

Gas Calibrator

The Ecotech GasCal 1100 Gas Dilution Calibrator performs precise gas dilution calibrations, ozone analyzer precision checks and gas phase titrations using an optional internal ozone generator. It can also be used as an ozone transfer standard utilizing its optional photometer. It is ideal for stand alone use or incorporation into ambient air or emissions monitoring systems.



Standard GasCal 1100



GasCal 1100 in Portable Case

Features

- Single and multipoint calibrations can be performed using precise mass flow controllers.
- Perform gas phase titrations (U.S. EPA Method) and ozone precision checks using an internal ozone generator (option).
- Photometer option enables it to be used as a transfer standard for performing ozone analyzer calibrations
- Parameter setup and output via inbuilt LCD and keypad or an external PC.
- External remote control possible via data acquisition system or suitable gas analyzer.
- Mass flow controller zero stability drift less than 0.6 % full scale per year.
- Optional Carry case allowing the GasCal-1100 to be securely carried from location to location
- Optional purge facilitates flushing of calibration gas lines.

Specifications

Dilution and Span flows:

Input dilution gases:	1 standard 170-200 kPa (g)
Input source gases:	1 to 4 as standard 140-170 kPa (g)
Dilution Mass Flow Controller:	0-10slpm (std), 0-2 or 0-5slpm (optional)
Source Mass Flow Controller:	0-50sccm (std), 0-20 or 0-100 sccm (optional)
Flow Accuracy (constant temp):	Within 1% of full scale
Flow Repeatability:	Within 0.15% of full scale
Linearity:	Within 0.15% of full scale
Operating Gas Pressure:	100-200 kPa
Zero Drift:	< 0.58% per year
Response Time:	< 5 seconds
Output Manifold:	4 output ports standard (8 optional)
Dilution Ratio:	Variable 100:1 to 2000:1 (std)

Ozone Generator (optional):

Output	50 ppb to 1000 ppb at 3 slpm
Repeatability:	< 1% short term (24 hours), 5% long term at constant temperature.

Photometer (optional)

Ranges:	0-1000 ppb
Linearity:	+/- 2 ppb or + 1% of full scale whichever is greater
Precision:	+/- 2 ppb
Zero Drift:	+/- 1 ppb 30 days
Span Drift:	+/- 2 ppb 30 days
Flow rate:	3 slpm

Interface:

Programming:	Via front panel keypad or computer.
Programmable Calibrations:	20 separate programmable sequences.
Digital inputs:	8 digital input bits can start/stop calibration sequences.
Digital Input Types:	Relay contact closures or TTL logic inputs.
Digital Outputs:	8 digital output bits send status and alarms.
Display:	Four line illuminated display.
Memory:	Non volatile protected, automatic start-up after power failure.

System:

Operating Temperature:	0° – 50°C (20° - 35°C for optimum performance)
Input Voltage:	100-120V or 200-240V AC (switch selectable) 50/60 Hz
Dimensions:	19" Rack mount (135mm H x 450mm W x 440mm D) (Rack mounting drawer optional)
Weight:	GasCal-1100 11kg ⁽¹⁾ Carry case 9kg

⁽¹⁾ Excluding photometer option

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