



CAL-100

Gas Dilution Calibrator

The Met One Instruments CAL-100 performs gas dilution calibrations and is used in conjunction with regulatory traceable gases and a zero air generator.

The most cost effective solution, the CAL-100 allows the most up-to-date calibrations technology to be available to all.

Features

- Performs single and multi-point calibrations using the CAL-100 Calibrator's precision mass flow controllers, for utmost confidence in the results.
- Performs calibration manually through user interface or remotely via RS232, USB networks, or digital inputs.
- Designed and developed with wide-ranging customer input for easy, intuitive, accurate use.





Dilution & Span Flows

Dilution Gas Inputs:	1 standard 100 - 200 kPa (g) (2 optional)
Source Gas Inputs:	4 standard 100 - 200 kPa (g) (8 optional)
Dilution Mass Flow	
Controller:	10 SLPM, 0 Deg, 1 ATM (std),
	1 SLPM, 2 SLPM, 5 SLPM or 20 SLPM (optional), 2nd MFC (optional)
Source Mass Flow	
Controller:	50 SCCM, 0 Deg, 1 ATM (std),
	10 SCCM, 20 SCCM, 100 SCCM, 500 SCCM or 1 SLPM, 2 SLPM (optional),
	2nd MFC (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:	< 0.6 % per year
Response Time:	< 5 seconds
Output Manifold:	4 output ports standard
Dilution Ratio:	Variable 10:1 to 2000:1 (std configuration)
Case Dimensions	
Rack length:	597 mm (23.5") (front to rear)
Total length	
(with latch release):	638 mm (25.1")
Chassis width:	418 mm (16.5")
Front panel width:	429 mm (16.9")
Chassis height:	163 mm / uses 4RU (6.4")
Front panel height:	175 mm (6.9")
Weight:	18.2 kg



Communication

User Interface:	Via front panel keypad or computer
Programmable calibrations:	16 separate programmable sequences
	32 separate programmable points
Analog Input:	Three analog voltage inputs (0 - 5 VDC) CAT I rated
Digital Output:	RS232 port #1: Normal digital communication
	RS232 port #2: Multidrop port used for multiple analyzer connections on a
	single RS232
	USB port connection on rear panel
	25 pin connector with discrete status and user control
	USB stick memory (front panel) for data logging, event logging and
	parameter storage
	8 Digital Outputs, open collector max 400 mA each at 12 VDC (max total
	output 2A)
	8 Digital Inputs, 0 - 5 VDC
	CAT I rated
	1 Diluent Control, + 12 V output

Power

Operating Voltage:	100 - 240 V VAC 50 / 60 Hz (auto-ranging)
Power Consumption:	165 VA maximum (typical at start-up) 95 VA after warm-up
Operating Conditions Ambient	
Temperature Range:	0 - 45 °C (32 - 104 °F), 20 - 35 °C for optimum performance
Pressure:	Maximum altitude: 3000 m above sea level



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