



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 Serinus® 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 scaleFlow Repeatability:Within 0.15 % of full scaleLinearity: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 conguration)

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 computerProgrammable 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 analyser 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 (autoranging)

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

