

Serinus[®] Cal 1000

GAS DILUTION CALIBRATOR



The Serinus® Cal 1000 performs gas dilution calibrations and is used in conjunction with regulatory traceable gases and a zero air generator.

The most cost effective solution, the Serinus® Cal 1000 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
- 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

1 standard 100 - 200 kPa (g) **Dilution Gas Inputs:**

(2 optional)

Source Gas Inputs: 4 standard 100 - 200 kPa (g)

(8 optional)

Dilution Mass Flow

Controller: 10 SLPM, o Deg, 1 ATM (std),

1 SLPM, 2 SLPM, 5 SLPM or 20 SLPM

(optional), 2nd MFC (optional)

Source Mass Flow

Controller: 50 SCCM, o 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 Within 0.15 % of full scale Linearity:

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 (o - 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, o 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

 \bullet o - 45 °C (32 - 104 °F), 20 - 35 °C for optimum performance

Pressure

• Maximum altitude: 3000 m above sea level



