

SERINUS CALIBRATOR 1000, 2000 AND 3000



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)

Photometer Serinus Cal 3000

Range:

0-20 ppm

Precision:

0.5 ppb or 0.2% of reading,
whichever is greater

Linearity:

<1% of full scale

Noise At Zero:

<0.25 ppb

Response Time:

30 seconds to 95%

Zero Drift:

Temperature: 1.0 ppb per °C
24 hours: < 0.3 ppb
7 days: < 0.3 ppb

Span Drift:

Temperature: 0.1% per °C
7 days: 0.5% of reading

Ozone Generator Serinus Cal 2000 & 3000

Output Concentration:

3 ppb to 5000 ppb

Flow Rate:

Variable dependent on Dilution
Mass Flow Controller installed

Repeatability:

< 1% short term (24 hours)
5% long term at constant
temperature and humidity

Power

Operating Voltage:
100-240V VAC 50/60Hz (Auto Ranging)
Power Consumption:
165 VA maximum (typical at start-up for 3000) 95 VA after warm-up

Operating Conditions Ambient Temperature Range:

0°C-45°C (32°F-104°F), 20°C-35 °C
for optimum performance

Pressure:

Maximum altitude:
3000m above sea level

Physical Dimension

Case Dimensions:

Rack length (front to rear):
597 mm (23.5")

Total length (w/ 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:

Serinus Cal 1000: 18.2 kg
Serinus Cal 2000: 20.5 kg
Serinus Cal 3000: 23.8 kg

Communications

User Interface:
Via front panel keypad or computer
Programmable calibrations:
16 separate programmable sequences
32 separate programmable points
Analog Output (3000 only):
Voltage output of 0 to 5 V, with menu selectable zero offset of 0%, 5% or 10%
Analog Input:
Three analog voltage inputs (0-5VDC) 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 400mA each @ 12VDC (max
total output 2A)

8 Digital Inputs, 0-5VDC,
CAT I rated

1 Diluent Control. +12V output

