Rental
Air Sampler Calibrator

geotech

Bios Defender 510M Primary Standard Calibrator

The Defender Model 510M (soapless) electronic calibrator uses volumetric calibration for personal air samplers and other volumetric instruments. Designed exclusively for the occupational health and safety industry and built on next-generation Bios DryCal® technology. The Defender has a broad dynamic flow range and a choice of single, hands-free continuous, or user-specified "Burst" measurements. You can measure the time intervals between measurements for checking personal sampling pump stability over a typical sampling period product description.

FEATURES

- **Menu-driven system for complete reading flexibility**

- **Highly accurate and repeatable**

- **50 ml to 5 L wide flow range**

- **Large illuminated graphical display with zoom feature**

- **Sleek new design -** smooth molded case with rubber handgrips is slim enough for a briefcase

- **RoHS compliant - lead-free components**

- **Easy menu system allows user to select:**
  Single, continuous (hands-free), or time interval readings
  Flow unit display – ml, L, cc, or cfm
  Number of readings in an average – up to 100
  Time interval between readings – 1 to 60 minutes

- **Auto shut-off**

- **Interior shock absorbers for field use**

- **Improved internal valve design for greater reliability**

- **Large illuminated flow cell viewing window**

- **Integrated serial PC interface and Optimizer software:**
  For data transfer, secure audit trail and reportingprovides a link to your PC and automatically transfers readings to be saved as a text file.*

* Software requires Windows 2000 SP3 or XP SP2 and available COM port on PC.

OPTIONAL ACCESSORIES

- **Optimizer 120 Deluxe Software** on CD

- **Pelican Carry Case** with customized foam for single Defender, black

- **Nylon Carry Case** with padded detachable shoulder strap, for single Defender, black

- **RS-232 Serial Card** for portable PCs, detachable cable, RoHS compliant. The manufacturer supports use of the serial card only.

- **CalChek Communication Cable** – The CalChek Communication Cable provides direct communication between a CalChek-compatible SKC AirChek 2000 or Leland Legacy sample pump and a CalChek-capable Defender primary standard flowmeter.

CALL GEOTECH TODAY (800) 833-7958

Geotech Environmental Equipment, Inc.
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SPECIFICATIONS

Flow Ranges	50 mL - 5,000 mL/min
Accuracy	1% volumetric
Weight	29 oz./820 g
Dimensions (H x W x D)	5.5 x 6 x 3 in. /140 x 150 x 75 mm
User-Selectable Measurement Units	
Volumetric Flow	mL/min, L/mi
Temperature	°C, °F
Approximate Time Per Reading	1-15 seconds
Gas Compatibility	Use with non-corrosive, non-condensing, non-combustible gases, less than 70% humidity
Flow Modes	Suction or Pressure
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Measurement Cell Style	Integrated
Temperature and Pressure Sensors	In The Flow Stream
Pressure:	3.5 mmHg (typical), 7.0 mm (max)
Temperature:	0.8°C (typical), 1.3°C (max)
Reading Styles	Single (manual), Continuous or Burst, with averaging function user-selectable from 1 to 100 measurements
AC Adapter/Charger	12V DC, >250ma, 2.5 mm, center positive
Battery System	6V rechargeable, sealed lead-acid, 6-8 hours typical operation
Battery Operational Time (5 cycles/min)	3 hours backlight on, 8 hours backlight off
Pressure and Suction Fittings	¼" ID hose barb
Storage Temperature	0-70°
Ambient Humidity	0-70%, non-condensing
Operating Pressure (Absolute)	15 PSI
Display	Backlit graphical LCD
Data Port (for use with Optimizer software)	Serial (RS-232)
Data Cable (for use with Optimizer software)	1 meter (Defender data port to PC serial port)

Laboratory accuracy is certified by NIST through NVLAP and backed by ISO 17025 accreditation.

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