

Defender 520

Standardized & Volumetric Primary Flow Standard

Defender 510

Volumetric Primary Flow Standard

With Bios DryCal® Technology. Available in flow ranges from low to high.

The Bios Defender 500 Series meets the highest quality assurance standards for measurement uncertainty, including ISO 17025 third party assessment by the National Voluntary Laboratory Accreditation Program (NVLAP) administered by NIST (the National Institute of Standards and Technology)



Bios Defender 500 Series

With proven DryCal® Technology

Everything you love about Bios DryCal® technology, in a new series of true primary flow standards that make it easier than ever to calibrate your air sampling pumps.

Turn it on. Connect it to your pump. Start taking readings.

It's as simple as that. Calibrations within a minute, and no messy soap bubble solutions. Or, set the Defender 500 Series to take hands-free continuous readings while you quickly and accurately set the flow rate on your air sampling pumps. Connect the Defender 500 Series to your PC and download your pre- and post-calibration data into Optimizer, our available Windows™ based calibration software.

And, with the Defender 520, you can capture ambient temperature and pressure conditions during the calibration process without the need for additional instrumentation, as well as automatically correct your volumetric flow readings to standard temperature and pressure conditions.

With the new Defender 500 Series of true primary flow standards, Bios continues to redefine what it means to calibrate in the industrial hygiene and environmental compliance community.

Reliability

15 years of proven DryCal® performance

Accuracy

Backed by ISO 17025, NIST NVLAP accredited

Flexibility

Lightweight and impact-resistant design, built-in data download port

Simplicity & Convenience

One-step testing, no messy solutions

Bios
Driving a Higher Standard

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More Information

Flow Ranges

Available in a variety of flow rates from 5—30,000 mL/min

Low (L) 5—500 mL/min

Medium (M) 50—5,000 mL/min

High (H) 300—30,000 mL/min

Accuracy

Volumetric

(Defender 510 or 520)

1.0%

Standardized

(Defender 520 only)

1.4%

Size

Small enough to fit easily in your hand, slim enough to slide into a briefcase or tote.

Weight

29 oz. / 820 g

Dimensions (H x W x D)

5.5 x 6 x 3 inches / 140 x 150 x 75 mm

Flexible Ways of Working

Both the Defender 510 and 520 work for suction or pressure applications, in either single, continuous, or “burst” readings (burst quantity is user-selectable).

User-Selectable Measurement Units

Volumetric Flow

(Defender 510 or 520)

mL/min

L/min

cc/min

cf/min

Standardized Flow

(Defender 520 only)

smL/min

sL/min

scc/min

scf/min

Pressure

mmHg

PSI

kPa

Temperature

°C

°F



Bios' laboratory accreditation provides the peace of mind and legal protection customers value in air sampling.

Bios Optimizer Software

Software for Doing More

Bios Optimizer 110 software allows users to download data for easier collection, storage and record-keeping.

Upgrade to Bios Optimizer 120 to add stored Device Under Test (DUT) profiles, easy search of past calibrations and an out-of-the-box solution to creating Calibration Certificates featuring your specific test conditions, notes and company logo.

For more information on this valuable new dimension of air flow calibration, contact Bios or your Bios distributor today.

Bios

Driving a Higher Standard

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