Meticulously Measure, **Confidently Calibrate**

Gas Flow Calibration Solutions



MesaLabs

Mesa Labs specializes in gas flow calibration solutions to ensure defensible data.

Why Mesa's Defender 500 Series?

+ High accuracy. Calibrators in Mesa's Defender Series are backed by Proven DryCal technology and have a reading uncertainty of less than 1%.
+ Durability. All DryCal calibrators are field-proven and have provided IH professionals with reliable performance for decades.
+ Real-time flow data. Calibrator flow data is captured in real time with our DryCal Pro software, directly uploaded to a PC and exported to a Microsoft environment.
+ Convenient mail-in factory calibration. An annual NIST-traceable calibration by Mesa's ISO-accredited facility provides a defensible audit trail and full refurbishment.
+ Trusted accreditation. Mesa Labs is a fully accredited ISO-17025 facility with a 0.08% Scope of Accreditation for gas flow by NVLAP of NIST.



When it comes to portable primary calibrators, our Defender 500 Series provides you with the flexibility and dependability you need, enabling you to focus on what matters most: defending lives.

Get to Know The DryCal 800

Model		Defender 510 Volumetric Primary Flow Standard	Defender 520 Enhanced Volumetric Primary Flow Standard	Defender 530+ Standardized and Volumetric Primary Flow Standard
Flow Ranges		Low: 5-500 ccm Medium: 50-5,000 ccm High: 300-30,000 ccm	Low: 5-500 ccm Medium: 50-5,000 ccm High: 300-30,000 ccm	Low: 5-500 ccm Medium: 50-5,000 ccm High: 300-30,000 ccm
Volumetric Accuracy		1%	1%	0.75%
Standardized Accuracy		N/A	N/A	1%
User Selectable Measurement Units:	Volumetric	mL/min, L/min, cc/min, cf/min	mL/min, L/min, cc/min, cf/min	mL/min, L/min, cc/min, cf/min
	Standardized	N/A	N/A	smL/min, sL/min, scc/min, scf/min
	Temperature	N/A	°C °F	°C °F
	Pressure	N/A	mmHg, PSI, kPa	mmHg, PSI, kPa
Pressure Accuracy		N/A	+ 3.5 mmHg (typical) + 7.0 mm (max)	+ 3.5 mmHg (typical) + 7.0 mm (max)
Temperature Accuracy		N/A	+ 0.8 °C (typical) + 1.3 °C (max)	+ 0.8 °C (typical) + 1.3 °C (max
Industry Applications		Industrial Hygiene, Air Quality		Manufacturing, Air Quality, Personal Gas Sampling
Pressure and Suction Fittings		1/4" ID Hose Barb		1/4" ID Swagelok® compression fittings, 3/8" fittings on High Model

Looking for the Definer? The Defender 530+ is a direct replacement and offers the same high-accuracy and portability.

START SIMPLE.

Turn the Defender on, connect it to your pump and begin taking measurements. It's that simple. Instantly calibrate your gas flow using Quick Start – there is no preparation involved, no messy soap bubble solutions. Defender's many user-selectable options make customizing your calibrations easy, giving you exactly what you need in the format you prefer.

Defender Service from Mesa Labs

All calibration equipment needs periodic maintenance to ensure accuracy and traceability to comply with monitoring regulations. As the manufacturer of the Defender, Mesa Labs is the only laboratory in the United States that can repair and adjust the instrument if required. We are also a fully-accredited ISO-17025 lab with NIST-traceable flow standards that have an industry-leading accuracy of 0.08%.

DryCal Extended Warranty Plan

Ensuring your flow calibrator accuracy is now even easier. Mesa Labs is offering an extended warranty package option with new Defender purchases. Under this plan, you receive three additional years of our manufacturer's warranty, with annual factory calibration included.

Warranty Features:

+ Calibration reminder at 30 days prior to annual calibration date
+ Full product warranty for 4 years from date of purchase*
+ 3-years of factory calibration – each factory calibration includes ISO-17025 NIST-traceable certifications with as-received and as-found data included
+ Average of 10% savings on current 3-year service prices

Three Warranty Options to Choose From:

+ Defender 510 Extended Warranty
+ Defender 520 Extended Warranty
+ Defender 530+ Extended Warranty

*1 year of warranty is already included with new product purchases
See extended warranty terms and conditions for details on the terms of the sale

Ordering Information

Part # 200-510L:	Defender 510 Low
Part # 200-510M:	Defender 510 Medium
Part # 200-510H:	Defender 510 High
Part # 200-520L:	Defender 520 Low
Part # 200-520M:	Defender 520 Medium
Part # 200-520H:	Defender 520 High
Part # 200-530+:	Low Defender 530+ Low
Part # 200-530+:	Medium Defender 530+ Medium
Part # 200-530+:	High Defender 530+ High

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Learn more at mesalabs.com

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