Defender 530+

Defender 530+

Featuring a number of quality and performance enhancements over traditional flow meter technologies, the Defender 530+ offers:

- Quick Start Operation
- Graphical LCD Display
- User-selectable Flow Units and Time Intervals
- Fully Customizable

Proven DryCal® TECHNOLOGY

Flexible Ways of Working

No matter your application, the portable Defender 530+ is ready to go to work for you, because it's a true volumetric standard based on the principle of positive displacement. The Defender 530+ provides immediate indication of the actual gas flow rate, accurately and independently of the gas type. It also includes integrated temperature sensors and pressure transducers in the flow stream, so you can compensate for standard conditions - allowing traceable verifications of mass flow devices.

A versatile, push-button flow meter, the Defender 530+ is also a primary flow standard, enabling you to accurately calibrate a variety of instrumentation.

- **Reliable -** 20 years of Proven DryCal® Technology
- **Accurate -** Backed by ISO 17025; NVLAP accredited
- **Portable -** Lightweight and impact-resistant
- **Simple -** Push button testing; no user interpretation or external calculations required

		Defender 530+ L Low Flow	Defender 530+ M Medium Flow	Defender 530+ H High Flow
Model and Flow Ranges		5-500 sccm	50-5,000 sccm	300-30,000 sccm
Volumetric Accuracy		0.75%	0.75%	0.75%
Standardized Accuracy		1%	1%	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	smL/min, sL/min, scc/min, scf/min	smL/min, sL/min, scc/min, scf/min	smL/min, sL/min, scc/min, scf/min
	Temperature	$^{\circ}$C $^{\circ}$F	$^{\circ}$C $^{\circ}$F	$^{\circ}$C $^{\circ}$F
	Pressure	mmHg, PSI, kPa	mmHg, PSI, kPa	mmHg, PSI, kPa
Pressure Accuracy		$\pm$ 3.5 mmHg (typical) $\pm$ 7.0 mm (max)	$\pm$ 3.5 mmHg (typical) $\pm$ 7.0 mm (max)	$\pm$ 3.5 mmHg (typical) $\pm$ 7.0 mm (max)
Temperature Accuracy		$\pm$ 0.8 $^{\circ}$C (typical) $\pm$ 1.3 $^{\circ}$C (max)	$\pm$ 0.8 $^{\circ}$C (typical) $\pm$ 1.3 $^{\circ}$C (max)	$\pm$ 0.8 $^{\circ}$C (typical) $\pm$ 1.3 $^{\circ}$C (max)

Defender 530+ Specifications

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Approximate Time per Reading:	1-15 seconds
Reading Styles (with averaging function user-selectable from 1 to 100 measurement):	Single (manual), Continuous or Burst
Gas Compatibility:	Non-corrosive, non-condensing, less than 70% humidity
Flow Modes:	Pressure or Suction
Measurement Cell Style:	Integrated
AC Adapter/Charger:	12V DC, >250ma, 2.5 mm center positive
Battery System:	6V rechargeable, sealed lead-acid, 6-8 hrs typical operation
Battery Operational Time (5 cycles/min):	3 hrs backlight on, 8 hrs backlight off
Pressure and Suction Fittings:	1/4" ID Swagelok® compression fittings, 3/8" fittings on High Model
Warranty:	1 year; battery 6 months
Storage Temperature:	0-70° C
Ambient Humidity:	0-70%, non-condensing
Operating Pressure (Absolute):	Atmospheric, 15 PSI Max
Display:	Backlit graphical LCD
Data Port (for PC interface):	Serial (RS-232)
Data Cable (for PC interface):	1 meter (Defender Data Port to PC included)
Protective Case:	Pelican case available
Dimensions (H x W x D):	5.5" x 6" x 3" / 140 x 150 x 75 mm
Weight:	29 oz / 820 g

RoHS and CE Compliant

Backed by ISO 17025 and Proven DryCal® Technology, the Defender 530+ helps assure compliance with environmental regulations and improves your process control.

NVLAP®

NVLAP Lab Code 200661-0
Calibration