

The DryCal 800 positive displacement primary standards provides a cost-effective, entirely dry means of precisely measuring gas flow while maintaining defensible, direct traceability to NIST.

**±0.15% Accuracy Primary Flow Standard**  
**0.5 sccm to 100 slm Primary Flow Standard**



The DryCal 800 enables you to perform fast, incredibly accurate flow measurements, with the confidence of Proven DryCal<sup>®</sup> technology.

DryCal 800's simple touch screen operation and instant gas flow measurements require little user training and minimize user-interpretation - which means that multiple staff members can step in and perform precise calibrations at any time.



### DryCal 800 Base:

- 4.3" resistive touch screen
- USB and RS-232 interfaces
- Firmware updates through communication port (no disassembly required)
- New high efficiency electronics with minimal heat generation eliminates a potential source of measurement uncertainty
- Compatible with all existing ML-800 flow cells and software
- Low profile design provides increased stability



### DryCal 800 System:

- Reliable – Over 15 years of proven DryCal Technology
- Traceable – NVLAP-accredited, ISO 17025, ANSI Z-540, NIST Handbook 150
- Flexible – Portable, modular design with integrated software
- Convenient – simple, dry operation that requires no mercury or other liquids

# Metrology Series DryCal 800

## DryCal 800

Model	Flow Range*	Standardized/ Volumetric Uncertainty	Weight	Dimensions
<b>800-3</b>	0.5-50 scc/min	±0.25% plus .002 sccm	80 oz / 2300 g	9.0 x 4.0 in / 229 x 102 mm
<b>800-10</b>	5-500 scc/min	±0.15%	85 oz / 2413 g	13.3 x 4.0 in / 337 x 102 mm
<b>800-24</b>	50-5,000 scc/min	±0.15%	86 oz / 2439 g	13.3 x 4.0 in / 337 x 102 mm
<b>800-44</b>	500-50,000 scc/min	±0.15%	88 oz / 2507 g	13.3 x 4.0 in / 337 x 102 mm
<b>800-75</b>	1-100 slm	±0.15%	160 oz / 4535 g	14.8 x 5 in / 375 x 102 mm
<b>Base</b>			5 lbs / 2268 g	3.9 x 8.5 x 12.6 in / 99 x 216 x 320 mm

Measurement uncertainty is stated as a percent of reading (including standardization, if applicable) with a 95% confidence interval. (k = 2)

### DryCal 800 Specifications

<b>Gas Compatibility:</b>	Noncorrosive, noncondensing, noncombustible gases, less than 70% humidity
<b>Flow Modes:</b>	Pressure or suction
<b>Temperature and Pressure Sensors:</b>	In the flow stream
<b>Reading Modes:</b>	Single, Auto or User-Specified Burst
<b>AC Adapter:</b>	Output: 12V DC, 3A, 2.5 mm, center positive Input: North American standard, others available
<b>Inlet and Outlet Fittings:</b>	800-3: 1/8" ID Swagelok tube compression fittings 800-10,24,44: 1/4" ID Swagelok tube compression fittings ( 1/2" outlet fitting on -44) 800-75: 1/2" ID Swagelok tube compression fittings
<b>Operating Temperature:</b>	15-30° C
<b>Storage Temperature:</b>	0-70° C
<b>Operating Humidity:</b>	0-70%, non-condensing
<b>Operating Pressure (Absolute):</b>	Atmospheric, maximum 15 PSIA
<b>Display:</b>	4.3" resistive touch screen
<b>Data Port:</b>	Serial (RS-232) and USB
<b>Warranty:</b>	1 year



Mesa's Butler, N.J. manufacturing facility (pictured above) is our NVLAP accredited ISO 17025 laboratory.

\*At gas pressure of 760 mmHg, and a gas temperature of 25° Centigrade with Standardization temperature set to 0° Centigrade.