



## Primary Gas Flow Measurement

The ML-One™ provides primary gas flow measurement with an uncertainty of 0.15% of reading and +/- .01 ccm across a flow range of 5 to 50,000 ccm.

### Product Capabilities:

- Corrosive gas capability
- Automatic flow range selection
- Faster readings
- Enhanced accuracy
- Greater portability

The ML-One™ is an all-in-one measurement instrument for use in a laboratory or transported on a cart for factory floor measurements. It is designed to measure corrosive gases compatible with wetted path materials: (304-316 stainless steel, borosilicate glass, Teflon®, and AFLAS® elastometric). Three tubes sit horizontally in the instrument and are fitted with low mass - borosilicate glass pistons with a low friction coating that oscillate between two detectors to quickly and accurately measure gas flow rates.



### Benefits:

- Improved operational efficiency (work smarter and faster)
  - Less time changing cells
  - Faster readings
  - Less down time (by taking device to where it is needed)
  - More time for other job responsibilities
- Greater versatility (do more with a single device)
  - Multiple gases
- More confidence (one less thing to worry over)
  - Consistently defensible results
  - Mesa performance history
  - Exceptional product support

### Key Technical Features:

- Innovative horizontal tube design - no 'dead piston time' for faster readings
- Low mass low friction pistons, reduced leakage concerns, reduced piston sticking
- Touch-pad operation - simpler, faster, more intuitive to operate

Operation of the ML-One™ is intuitive and simple, a typical gas flow measurement only requires the user to connect the gas flow and touch 'measure' on the screen followed by start.

## ML-One™ Product Specifications

<b>Flow Range:</b>	5-50,000 sccm
<b>Low Tube:</b>	5-500 sccm
<b>Medium Tube:</b>	350-5,000 sccm
<b>High Tube:</b>	3,500-50,000 sccm
<b>Measurement Gas Pressure Range:</b>	Atmospheric Pressure +/- .5PSIA
<b>Temperature Range - Operating:</b>	15-30° C
<b>Temperature Sensors (One Per Tube):</b>	Accuracy +/- .03% (max), sensor is located in incoming gas stream
<b>Temperature Range - Storage:</b>	0-70° C
<b>Pressure Transducer:</b>	0-16 PSI (absolute), accuracy .05% FS
<b>Gas Compatibility / Wetted Path Materials:</b>	Gases compatible with (316/304 SS, borosilicate glass, Teflon, AFLAS elastomeric)
<b>Compressibility Factor Correction:</b>	User selection of gases to apply compressibility factor correction for non-ideal gas behavior
<b>Language Selection for Display:</b>	English, German, Spanish, Italian, Dutch
<b>Power Supply:</b>	External Power Module
	Input: 100-240VAC, 1.5A 50-60 Hz
	Output: 24VDC, 3.0A
<b>User Interface:</b>	Touch screen or via Commands through data port
<b>Data Port Connections:</b>	R2-232 and USB
<b>Inlet and Outlet Fitting:</b>	1/2 inch VCR fitting
<b>Approximate Measurement Interval:</b>	Flow dependent (.5-60 seconds) typical 2 seconds
<b>Dimensions:</b>	22" (56cm) w x 15" (38cm) h x 13" (33cm) d
<b>Weight:</b>	62 lbs - 28 kilograms
<b>Warranty:</b>	1 year (battery 6 months)
<b>ROHS Compliant:</b>	YES
<b><u>Measurement Uncertainty</u></b>	
<b>Standardized Flow:</b>	0.15% of reading and +/-0.01 sccm
<b>Volumetric Flow:</b>	0.15% of reading and +/-0.01 ccm



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