# **Integrator Pro**

Integrator Pro MFC/MFM Control and Readout Device

The Integrator Pro MFC/MFM control and readout device integrates Proven DryCal® Technology to perform in-house verifications and multi-setpoint calibrations of your critical analog mass flow devices.



While it powers and controls your mass flow control devices, the Integrator Pro, combined with the DryCal Pro software running on your personal computer, communicates with your Mesa Labs Metrology Series primary piston prover for instant flow comparisons and deviation percentages, comprehensively presented on the DryCal Pro software user interface screen.





### **Integrator Pro: Control and Readout Device**

- Connects to your mass flow devices via manufacturer-specific cables.
- Offers manual operation mode for easy calibration set up and verifications of mass flow devices.
- Simultaneously displays your Metrology Series' flow measurements, your device's readouts and deviation percentages.
- PC command interface for automated calibration with DryCal Pro or software.
- Commands your mass flow controllers to generate specific flows, while simultaneously indicating and verifying their output.
- Generate user-entered setpoints for most mass flow controllers.
- Provide diagnostic readings of set point and mass flow device output, in milliamps or volts.

Using available valve drivers and bi-directional communication, our gas flow calibration solution is customizable, meaning your organization gets exactly the level of calibration control you need.

The Integrator Pro is designed for use with the Mesa Labs Metrology Series of primary piston provers for the precise, high-speed calibration of most industry standard MFCs and MFMs.



# **Product Specifications**

Programmable Values	Channel Ranges: Off, 0-20 mA, 4-20 mA, 0-10 V, 2-10 V, 0-5 V, 1-5 V
Output Power Supply Voltage	±15 V, +24 V DC
Channel Interface	
Input	Interface: DA15S Analog Voltage: 0-10.000 V $\pm$ 0.1% of FS Analog Current: 0-20.000 mA $\pm$ 0.1% of FS Zi 100 ohm
Output	Interface: DA15S Analog Voltage : 0-10.000 V $\pm$ 0.1% of FS Analog Current: 0-20.000 mA $\pm$ 0.1% of FS Drift Rate: N/A
Serial Port	RS-232
Power	12-24 VDC 65-33 mA 2 W
Compliances	CE Mark EN61326-1, FCC Part15 Class A, FCC Part 68, RoHS

Mesa Labs 10 Park Place Butler, NJ USA 07405



Tel: +1-973-492-8400 Toll Free: 800.663.4977 Fax: 303.484.4992 www.MesaLabs.com

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# Ш nhanced

# DryCal Pro Enhanced

DryCal Pro Enhanced software is designed for use with the Integrator Pro and Mesa Labs' Met Lab® Series of primary piston provers for the precise, high-speed calibration of most industry standard MFCs and MFMs.

## **DryCal Pro Enhanced**

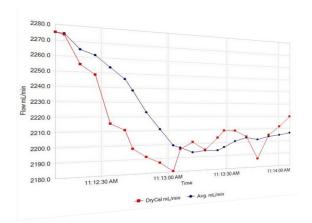
- DryCal Pro Enhanced requires operation with Mesa Labs' Integrator Pro
- Use DryCal Pro Enhanced to control all flow measurement and data collection options
- Perform automated flow verifications and calibrations of analog mass flow controllers (MFC) / mass flow meters (MFM)
- Perform manual data entry for the Device Under Test (DUT)
  - -Set MFC warm-up time
  - -Set point dwell point time
  - -Set individual readings per set point
- Export data to a calibration template to maintain a secure audit trail for individual devices
- ODBC data source population capability

Click to Download DryCal Pro!

DryCal Pro Enhanced Download Instructions

# **System Requirements:**

- Windows® XP, Windows® 7
- Microsoft Excel® 2003 and up
- RS-232 port, or if your PC does not have an RS-232 port you will need a USB to RS-232 adapter







The Butler, N.J. manufacturing facility (pictured above) is Mesa Labs NVLAP accredited ISO 17025 laboratory.

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MK03-54 RevC

www.MesaLabs.com