F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

COMPACT DIGITAL AIR FLOW CALIBRATOR for AIR SAMPLERS

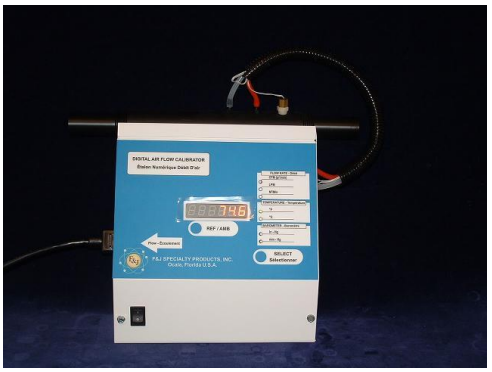
The most flexible calibrator design available for laboratory or field use. Mobile venturi tube feature eliminates difficult set up positions during calibrations.

NOTABLE FEATURES:

- Differential Pressure Flow Sensor
- Display of flow in CFM, LPM and M^3/min. or M^3/hr. by operator selection (LED display)
- Standard accuracy: ±2.0% Full Scale
- Flowrates displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)

Classical STP	0ºC, 1 Atm
Normal T and P	20ºC, 1 Atm
Modified Normal T and P	70ºF, 1 Atm
Standard Ambient T and P	25ºC, 1 Atm

- Display of barometric pressure in metric or English units
- Display of temperature in metric or English units
- Certified to UL, CSA and CE electrical safety standards for line power models
- NIST traceable calibration certificate
- Ambient or Reference flow is selectable by the operator
- 1 year warranty



Models Available

Basic Line Power Models and Units with Battery Option

110–120VAC	110V+Battery Option	220–240VAC	220V+Battery Option	Air Flow Range	
MODEL NO.	MODEL NO.	MODEL NO.	MODEL NO.	CFM	LPM
CD-801V.2	CD-801BV.2	CD-801EV.2	CD-801BEV.2	.15 – 1	4 – 28
CD-802V.2	CD-802BV.2	CD-802EV.2	CD-802BEV.2	.25 – 2	7 – 56
CD-812V.2	CD-812BV.2	CD-812EV.2	CD-812BEV.2	.5 – 4	14 – 115
CD-828V.2	CD-828BV.2	CD-828EV.2	CD-828BEV.2	1 – 9	28 – 255
CD-814V.2	CD-814BV.2	CD-814EV.2	CD-814BEV.2	2 - 14	56 - 400
CD-530V.2	CD-530BV.2	CD-530EV.2	CD-530BEV.2	5 – 30	142 – 850
CD-540V.2	CD-540BV.2	CD-540EV.2	CD-540BEV.2	5 – 40	142 – 1132
CD-550V.2	CD-550BV.2	CD-550EV.2	CD-550BEV.2	6 – 50	170 – 1415
CD-870V.2	CD-870BV.2	CD-870EV.2	CD-870BEV.2	10 – 70	283 - 1980

COMPACT DIGITAL AIR FLOW CALIBRATOR V.2

1. MEASUREMENT PRINCIPLE

1.1	Flow Sensor:	Differential Pressure Sensor
1.2	Standardization:	Correction for standard temperature and barometric pressure
1.3	Curve linearization:	Individually calibrated and software corrected

2. MEASUREMENT RANGES

2.1	Air flow:	See Table on front page
2.2	Temperature:	-4º – 122º F (-20º – 50º C)
2.3	Barometric pressure:	30 – 24 In-Hg (760 – 609 mm-Hg) approx. Sea level to 6000 ft. elevation above sea level

3. MEASUREMENT ACCURACY

3.1	Air flow:	± 2% of Full Scale
3.2	Temperature (Typical):	1ºC over range –20ºC to 50ºC
3.3	Barometric pressure:	± 1% of reading over measurement range of 22.00-30.00 “Hg

4. DISPLAY 6 Digit LED 0.4” high

5. DISPLAYED PARAMETERS and RESOLUTIONS

	Parameter	Engineering Unit	Resolution	Units of Measure
5.1	CFM	Cubic feet per minute	0.01	CFM
5.2	LPM	Liter per minute	.1 or 1	LPM*
5.3	M^3/m	Cubic meter per minute	0.0001	M^3/min
5.4	M^3/hr	Cubic meter per hr	0.1 or 0.01	M^3/hr**
5.5	F	Degree Fahrenheit	0.1	Degree F
5.6	C	Degree Celsius	0.1	Degree C
5.7	In-Hg	Inches of Mercury	0.01	In-Hg
5.8	mm-Hg	Millimeters of Mercury	1	mm-Hg

* A 0.1 LPM resolution applies to calibrators that have a maximum flow of 900 LPM
** A 0.01 m^3/hr resolution applies to calibrators that have a maximum flow rate of 54 M^3/hr.

6. GENERAL

6.1	Power requirements:	100–120 VAC;50/60Hz	0.3 Amps max; 220-240 VAC/50Hz
6.2	Operating temperature:	-4ºF – 122ºF	(-20ºC – 50º C)
6.3	Storage temperature:	-20ºF- 158ºF	(-29ºC – 70º C)
6.4	Dimension (L×W×H)	8.625”×3.75”×8.375”	(219×95.25×213mm)
6.5	Weight:	8 lbs. 6 oz.	(3.8 Kgs.)
6.6	Installation Category:	Pollution Degree 2	
6.7	Enclosure Rating:	IPXO	

7. CALIBRATION

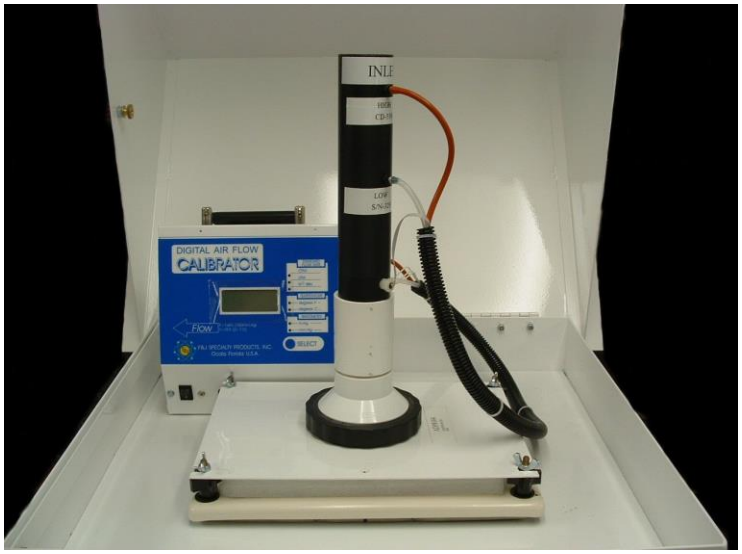
Factory calibration is recommended once per year

8. OPTIONS

8.1 RS-232 cable — All measured and calculated parameters are accessible through the RS-232 port to a computer.

8.2 Battery operable option with on-board charging system

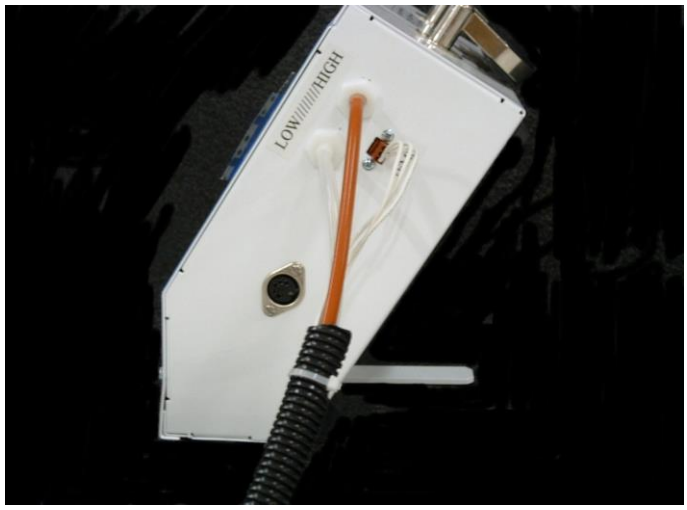
CALIBRATION SETUP ILLUSTRATIONS



Calibration Setup for High Volume Air Sampler with 8”×10” Filter Holder

Calibration Setup for Portable High Volume Air Sampler with 4” (102mm) D Filter Holder

Rear View Illustrating Support Mechanism



Side View of Calibrator Illustrating RS232 Port

Calibration Setup for F&J's Digital High Volume Air Sampler; Model DH-604V.2

Calibration Setup for Portable Low Volume Air Sampler with Small Diameter Filter Holder