F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

AIR FLOW CALIBRATORS
SINGLE SENSOR DESIGNS
100 — 240 VAC

World Calibrator
PC Version

World Calibrator
VFD Version

World Calibrator
Multi-Sensor Series

Compact Digital
Calibrator

Benchtop Calibrator

Mini Calibrator

Rev: 01 June 2022

Tel: 352.680.1177 fandj@fjspecialty.com www.fjspecialty.com

WORLD CALIBRATOR
Displayless PC Version

Notable Features:

- PC Interface program:
  Western or Asian Languages
- Operator Selectable Options
  — Multiple language options; European or Asian Version
  — Multi gas option
  — Volumetric or mass flow
  — At Reading or Full Scale Accuracy Calibration Type
  — Reference T and Reference P
  — Engineering units for all reported parameters
- Semi-Automatic calibration-verification when used with F&J digital air samplers
- Customizable calibration report
- Standard Accuracy: ± 1.0% Full Scale (F.S.)
- Customizable to 1% of Reading Accuracy
- Two Year Warranty
- Complementary Storage Case

WORLD CALIBRATOR
Vacuum Fluorescent Display (VFD) Version

Notable Features:

- Vacuum Fluorescent Display:
  (4 lines×24 characters)
- 4 button key pad for stand alone operation
- Mass flow or Volumetric flow
- Volume Totalization Feature
- Operator selectable Reference T and P
- Operator selectable engineering units
- Multi gas option
- Standard Accuracy: ± 1.0% Full Scale (F.S.)
- Customizable to 1% of Reading Accuracy
- User customizable calibration report
- Semi-Automatic calibration-verification when used with F&J digital air samplers
- PC Interface program:
  Western or Asian languages
- Two Year Warranty
- Complimentary Storage Case

MEASUREMENT PRINCIPLE

Flow Sensor:	Differential Pressure Sensor
Standardization:	Operator selectable values for reference temperature and pressure
Flow Curve linearization:	Individually calibrated and software corrected

MEASUREMENT RANGES

Air flow:	Various flow ranges available
Temperature:	-40º - 122º F (-40º - 50º C)
Barometric pressure:	30 - 22 In-Hg (760 - 559 mm-Hg); (101.325-74.5 kPa) approx. Sea level to 5900 ft. (1800 m) elevation above sea level Optional low range to 10 In-Hg (254 mg) (33.86 kPa)

MEASUREMENT ACCURACY

Air flow:	Standard ± 1.0% of full scale; custom ± 1% of Reading available as an option
Temperature (Typical):	± 1ºC over range –20ºC to 50ºC
Barometric pressure:	± 1% of reading over measurement range of 22.00-30.00 “Hg

STANDARD TEMPERATURE and PRESSURE CHOICES:

Temperature	32ºF (0ºC) 59ºF (15.0ºC) 68ºF (20.0ºC) 70ºF (21.1ºC) 77ºF (25.0ºC)
Pressure	29.92”Hg (1 atm, 760mm Hg, 1.013 bar, 101.325 kPa) 1 bar, (100kPa, 750mm Hg, 0.987 atm 29.53”Hg)

PARAMETERS and RESOLUTIONS DISPLAYED on the PC SCREEN

	Parameter	Engineering Unit	Resolution	
Flow Options:	CFM	Cubic feet per minute	0.01	CFM
	LPM	Liter per minute	.1	LPM
	m^3/min	Cubic meter per minute	0.0001	m^3/min
	m^3/hr	Cubic meters per hour	0.001	m^3/hr
	cc/min	Cubic centimeter per minute	1	cc/min
Temperature:	F	Degree Fahrenheit	0.1	Degree F
	C	Degree Celsius	0.1	Degree C
Pressure:	In-Hg	Inches of Mercury	0.01	In-Hg
	mm-Hg	Millimeters of Mercury	0.1	mm-Hg
	kPa	Kilo pascals	0.1	kPa
	atm	atmospheres	0.001	atm
	bar	bar	0.001	bar

GENERAL SPECIFICATIONS

Power requirements:	Max 0.6A; 100–120 VAC;50/60Hz	Max 0.3A; 220–240 VAC;50/60Hz
Operating temperature:	-4ºF to 122ºF	-20ºC to 50º C
Storage temperature:	-20ºF to 158ºF	-29ºC to 70º C
Dimension (L×W×H)	8.625”×3.75”×8.375”	219×95.25×213mm
Weight:	8 lbs. 6 oz.	3.8 Kgs.
Installation Category:	Pollution Degree 2	
Enclosure Rating:	IPXO	
Communications Ports:	Dual RS232, one Mini-USB Connector, two DB-9	
PO OS:	Windows 98, Windows XP, Vista, Windows 7 and Windows 10 operating systems	

WORLD CALIBRATOR
Displayless Version
Typical Flow Range

STANDARD FLOW MODELS

100-120 VAC		220-240 VAC	
Model	**CFM (SLPM)**	**Model**	**CFM (SLPM)**
WC-801-PC	.15 to 1 (4 - 28)	WC-801E-PC	.15 to 1 (4 - 28)
WC-802-PC	.25 to 2 (7 - 56)	WC-802E-PC	.25 to 2 (7 - 56)
WC-812-PC	.5 to 4 (14 - 115)	WC-812E-PC	.5 to 4.0 (15 – 115)
WC-828-PC	1 to 9 (28 - 255)	WC-828E-PC	1 to 9 (28 – 255)
WC-814-PC	2 to 14 (56 - 400)	WC-814E-PC	2 to 14 (56 – 400)
WC-530-PC	5 to 30 (142 - 850)	WC-530E-PC	5 to 30 (150 – 850)
WC-1000-PC	5 to 40 (142 - 1132)	WC-1000E-PC	5 to 40 (142 - 1132)
WC-550-PC	6 to 50 (170 - 1415)	WC-550E-PC	6 to 50 (170 - 1415)
WC-870-PC	10 to 70 (283 - 1980)	WC-870E-PC	10 to 70 (283 - 1980)

HIGH FLOW MODELS

100-120 VAC		220-240 VAC	
Model	**CFM (m^3/hr)**	**Model**	**CFM (m^3/hr)**
WC-890-PC	15 to 90 (26 - 153)	WC-890E-PC	15 to 90 (26 - 153)
WC-125-PC	30 to 125 (51 - 212)	WC-125E-PC	30 to 125 (51 - 212)
WC-150-PC	40 to 150 (68 - 255)	WC-150E-PC	40 to 150 (68 - 255)
WC-200-PC	50 to 200 (85 - 340)	WC-200E-PC	50 to 200 (85 - 340)
WC-300-PC	60 to 300 (102 - 510)	WC-300E-PC	60 to 300 (102 - 510)
WC-400-PC	70 to 400 (119 - 680)	WC-400E-PC	70 to 400 (119 - 680)
WC-600-PC	100 to 600 (170 - 1020)	WC-600E-PC	100 to 600 (170 - 1020)

BATTERY MODEL PART NUMBERS *

100-120 VAC		220-240 VAC	
WC-801B-PC	WC-890B-PC	WC-801BE-PC	WC-890BE-PC
WC-802B-PC	WC-125B-PC	WC-802BE-PC	WC-125BE-PC
WC-812B-PC	WC-150B-PC	WC-812BE-PC	WC-150BE-PC
WC-828B-PC	WC-200B-PC	WC-828BE-PC	WC-200BE-PC
WC-814B-PC	WC-300B-PC	WC-814BE-PC	WC-300BE-PC
WC-530B-PC	WC-400B-PC	WC-530BE-PC	WC-400BE-PC
WC-550B-PC	WC-600B-PC	WC-550BE-PC	WC-600BE-PC
WC-870B-PC		WC-870BE-PC	

*** Battery models do not bear the CE mark or UL/CSA approvals**

WORLD CALIBRATOR
VFD Version
Typical Flow Range

STANDARD FLOW MODELS

100-120 VAC		220-240 VAC	
Model	**CFM (SLPM)**	**Model**	**CFM (SLPM)**
WC-801-VFD	.15 to 1 (4 - 28)	WC-801E-VFD	.15 to 1 (4 - 28)
WC-802-VFD	.25 to 2 (7 - 56)	WC-802E-VFD	.25 to 2 (7 - 56)
WC-812-VFD	.5 to 4 (14 - 115)	WC-812E-VFD	.5 to 4.0 (15 – 115)
WC-828-VFD	1 to 9 (28 - 255)	WC-828E-VFD	1 to 9 (28 – 255)
WC-814-VFD	2 to 14 (56 - 400)	WC-814E-VFD	2 to 14 (56 – 400)
WC-530-VFD	5 to 30 (142 - 850)	WC-530E-VFD	5 to 30 (150 – 850)
WC-1000-VFD	5 to 40 (142 - 1132)	WC-1000E-VFD	5 to 40 (142 - 1132)
WC-550-VFD	6 to 50 (170 - 1415)	WC-550E-VFD	6 to 50 (170 - 1415)
WC-870-VFD	10 to 70 (283 - 1980)	WC-870E-VFD	10 to 70 (283 - 1980)

HIGH FLOW MODELS

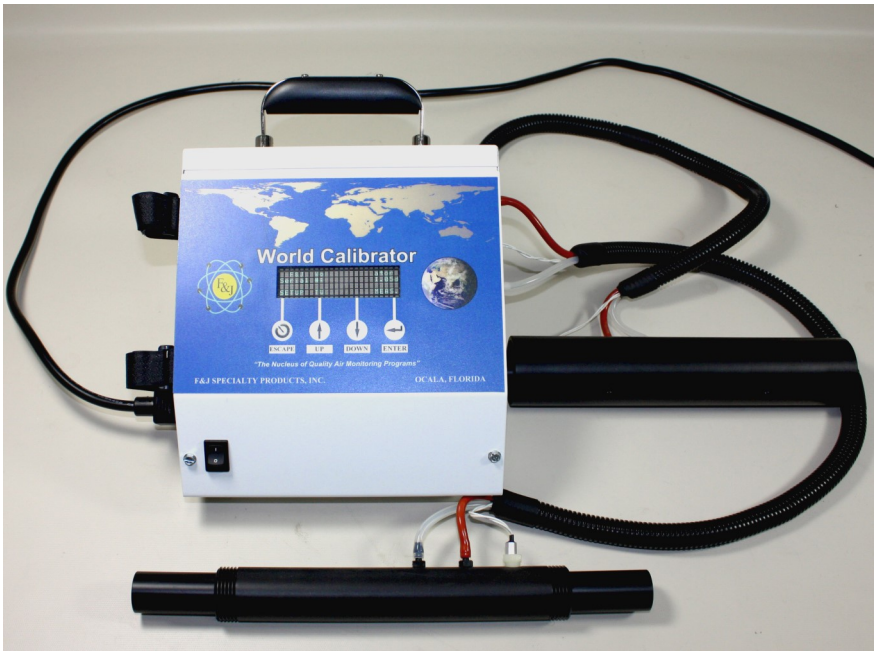
100-120 VAC		220-240 VAC	
Model	**CFM (m^3/hr)**	**Model**	**CFM (m^3/hr)**
WC-890-PC	15 to 90 (26 - 153)	WC-890E-PC	15 to 90 (26 - 153)
WC-125-PC	30 to 125 (51 - 212)	WC-125E-PC	30 to 125 (51 - 212)
WC-150-PC	40 to 150 (68 - 255)	WC-150E-PC	40 to 150 (68 - 255)
WC-200-PC	50 to 200 (85 - 340)	WC-200E-PC	50 to 200 (85 - 340)
WC-300-PC	60 to 300 (102 - 510)	WC-300E-PC	60 to 300 (102 - 510)
WC-400-PC	70 to 400 (119 - 680)	WC-400E-PC	70 to 400 (119 - 680)
WC-600-PC	100 to 600 (170 - 1020)	WC-600E-PC	100 to 600 (170 - 1020)

BATTERY MODEL PART NUMBERS *

100-120 VAC		220-240 VAC	
WC-801B-PC	WC-890B-PC	WC-801BE-PC	WC-890BE-PC
WC-802B-PC	WC-125B-PC	WC-802BE-PC	WC-125BE-PC
WC-812B-PC	WC-150B-PC	WC-812BE-PC	WC-150BE-PC
WC-828B-PC	WC-200B-PC	WC-828BE-PC	WC-200BE-PC
WC-814B-PC	WC-300B-PC	WC-814BE-PC	WC-300BE-PC
WC-530B-PC	WC-400B-PC	WC-530BE-PC	WC-400BE-PC
WC-550B-PC	WC-600B-PC	WC-550BE-PC	WC-600BE-PC
WC-870B-PC		WC-870BE-PC	

*** Battery models do not bear the CE mark or UL/CSA approvals**

WORLD CALIBRATOR
PC Interfaceable
Multi-Sensor Series



Notable Features:

- One Calibrator: Multiple Flow Sensors
- Vacuum Fluorescent Display (4 lines×24 characters)
- 4 button key pad for stand alone operation
- Mass flow or Volumetric flow
- Volume Totalization Feature
- Operator selectable Reference T and P
- Operator selectable engineering units
- Multi gas option
- ± 1.0% Full Scale (F.S.) Accuracy
- User customizable calibration report
- Semi-Automatic calibration-verification when used with F&J digital air samplers
- PC Interface program: Western or Asian languages
- Two Year Warranty
- Complimentary Storage Case

WORLD CALIBRATOR
VFD Version
Multi Flow Sensor Models

100-120 VAC	220-240 VAC
Model	**Model**
WCMT-VFD-2	WCMT-VFD-2E
WCMT-VFD-3	WCMT-VFD-3E
WCMT-VFD-4	WCMT-VFD-4E

Standard Flow Sensor Configuration Available	High Flow Sensor Configuration Available
CFM (SLPM)	**CFM (m^3/hr)**
.1 to 1 (3 - 30)	15 to 90 (26 - 153)
0.2 to 2.1 (6 - 60)	30 to 125 (51 - 212)
.5 to 4.0 (15 - 115)	40 to 150 (68 - 255)
1 to 10.6 (30 - 300)	50 to 200 (85 - 340)
1.4 to 14 (40 - 420)	60 to 300 (102 - 510)
5.3 to 30 (150 - 850)	60 to 400 (102 - 680)
4 to 35 (115 - 1000)	100 to 600 (170 - 1020)
5.3 to 50 (150 - 1400)	
8.5 to 70 (240 - 2000)	

All multi flow sensor World Calibrators are custom products. Submit the flow sensor ranges required for the world calibrator to the F&J sales department for proper pricing.

COMPACT DIGITAL AIR FLOW CALIBRATORS

NOTABLE FEATURES:

- Differential Pressure Flow Sensor
- Display of flow in CFM, LPM or M^3/min. 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+Battrery 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

*** Battery models do not bear the CE mark or UL/CSA approvals**

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	
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	F	Degree Fahrenheit	0.1	Degree F
5.5	C	Degree Celsius	0.1	Degree C
5.6	In-Hg	Inches of Mercury	0.01	In-Hg
5.7	mm-Hg	Millimeters of Mercury	1	mm-Hg

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

DIGITAL FLOW CALIBRATOR for AIR SAMPLERS
Regular Line Power and with Battery Powered Option

NOTABLE FEATURES:

- Flow measuring device: Venturi
- Display of flow in CFM, LPM or M^3/min. by operator selection (LED display)
- Standard accuracy: ±2% 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
- Ambient or Reference flow is selectable by the operator
- 1 year warranty

Models Available

Basic Line Power Models		Units w/Battery option *			
100 – 120VAC	220 – 240VAC	100 – 120VAC	220 – 240VAC	AIR FLOW RANGE	
MODEL NO.	MODEL NO.	MODEL NO.	MODEL NO.	CFM	LPM
D-801V.2	D-801EV.2	D-801BV.2	D-801BEV.2	.15 – 1	4 – 28
D-802V.2	D-802EV.2	D-802BV.2	D-802BEV.2	.25 – 2	7 – 56
D-812V.2	D-812EV.2	D-812BV.2	D-812BEV.2	.5 – 4	14 – 115
D-828V.2	D-828EV.2	D-828BV.2	D-828BEV.2	1 – 9	28 – 255
D-814V.2	D-814EV.2	D-814BV.2	D-814BEV.2	2 - 14	56 - 400

Options:

* Battery Powered Operation (Denoted by 'B' in model number)
1% F.S. accuracy units available (add '-1' to model number); example: D-812E-1

*** Battery models do not bear the CE mark or UL/CSA approvals**

1. MEASUREMENT PRINCIPLE

1.1	Flow Sensor:	Venturi Tube
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:	-4°F – 122 Degree F (-20°C – 50 Degree 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):	1°C over range -20°C to 50°C
3.3	Barometric pressure:	+/- 1% over measurement range

4. DISPLAY 6 Digit LED 0.4" high

5. DISPLAYED PARAMETERS and RESOLUTIONS

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

* A 0.1 LPM resolution applies to calibrators that have a maximum flow of 900 LPM

6. GENERAL

6.1	Power requirements:	100–120 VAC;50/60Hz	0.3 Amps max; 220-240 VAC/50Hz
6.2	Operating temperature:	-4°F – 122 Degree F	(-20°C – 50º C)
6.3	Storage temperature:	-20°F – 158º F	(-29°C – 70º C)
6.4	Dimension (L×W×H)	9.75"×8.25"×10.75"	(248 ×210 × 273 mm)
6.5	Weight:	8 lbs. 6 oz.	(3.8 Kg)
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 interface, including cable — All measured and calculated parameters are accessible through an RS-232 port to a computer.

8.2 Data acquisition and processing software is available upon request.

8.3 AC input of 230V, 50Hz is available upon request at no additional charge.

F&J MINI CALIBRATOR

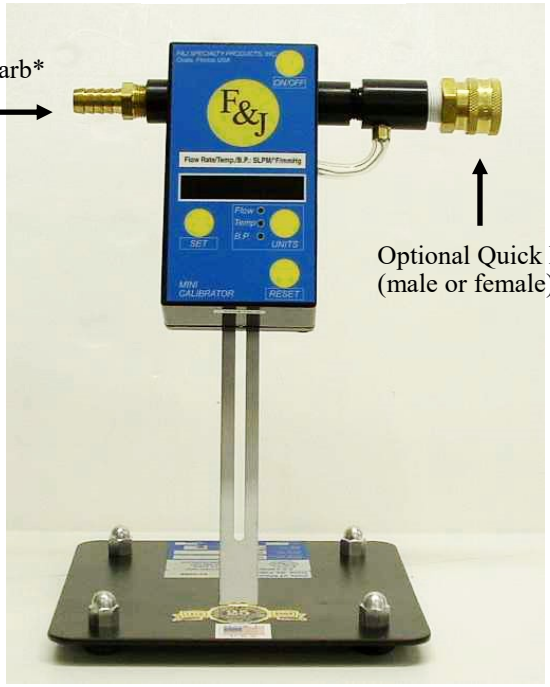
NOTABLE FEAURES:

- Various Flow Ranges Available
- Lightweight; 8 oz. (227 gms)
- Small Footprint
- Adjustable Height
- Flow rate displayed are corrected to an operator settable Reference Temperature and Pressure
  — Options Available:

Temperature	Pressure Options Available
20ºC	1 Atm
70ºF	1 Bar
25ºC	

- Flow rates displayed can also be corrected to the local ambient conditions of T and P by the operator
- Displays Airflow Temperature
- Displays Barometric Pressure
- Bright LED with large characters
- Operator Selectable Ambient Flow or Standard Flow
- English or Metric Engineering Units (set at factory) Selection:

Flow	Temperature	Barometric Pressure
SCFM	°F	Inches Hg
sccm	ºC	mmHg
SLPM		kPa
SCMH		Bar



* Additional Cost

MODEL SELECTION

110V	230V	SCFM	SLPM	sccm
MC-300CC	MC-300ECC		0.075 – 0.3	75 – 300 cc/m
MC-500CC	MC-500ECC		0.2 – 0.5	200 – 500 cc/m
MC-1L	MC-1LE		0.2 – 1	
MC-3L	MC-3LE		0.5 - 3	
MC-5L	MC-5LE	0.04 – 0.18	1 – 5	
MC-15L	MC-15LE	0.1 – 0.53	3 – 15	
MC-25L	MC-25LE	0.14 – 0.88	4 - 25	
MC-30L	MC-30LE	0.11 – 1.06	6 – 30	
MC-50L	MC-50LE	0.35 – 1.8	10 - 50	
MC-60L	MC-60LE	0.2 – 2	12 – 60	
MC-75L	MC-75LE	0.5 – 2.6	15 - 75	
MC-115L	MC-115LE	0.5 – 4	15 – 115	
MC-175L	MC-175LE	1.1 – 6.2	30 - 175	
MC-250L	MC-250LE	1.8 – 9	50 – 250	

F&J MINI CALIBRATOR

MEASUREMENT ACCURACY
Air Flow ± 2.0% of full scale
Temperature (Typical) ± 2ºF (1.1ºC)
Barometric Pressure ± 2% over measurement range

CALIBRATION
Factory calibration is recommended once per year.

OPTIONS
RS-232 interface, including cable.
All measured and calculated parameters are accessible through RS-232 port to a computer

GENERAL SPECIFICATIONS

Power Requirements (charging)	110 or 230VAC; 47-63 Hz; 0.1 amp maximum
Operating Temperature	40-104 Degree F (4-40 Degree C)
Storage Temperature	22-158 Degree F (-5-70 Degree C)
Dimension (L×W×H)	3.25" × 2.50" × 2.00" (82,6 mm × 140 mm × 50,8 mm)
Weight	8 ounces (227 g)

Parameter	Engineering Unit	Typical Resolution *
CFM	Cubic feet per minute	0.01 CFM
LPM	Liter per minute	0.1 LPM
M^3/hr	Cubic meter per hour	0.01 M^3/hr.
F	Degree Fahrenheit	0.1 Degree F
C	Degree Celsius	0.1 Degree C
In-Hg	Inches of Mercury	0.01 In-Hg
mm-Hg	Millimeters of Mercury	1 mm-Hg

* Actual resolution will depend on the flow sensor range.

Tel: 352.680.1177 fandj@fjspecialty.com www.fjspecialty.com

F&J MINI CALIBRATOR
(Battery Powered Version)

NOTABLE FEAURES:

- Various Flow Ranges Available
- Lightweight; 8 oz. (227 gms)
- Small Footprint
- Adjustable Height
- Flow rate displayed are corrected to an operator settable Reference Temperature and Pressure
  — Options Available:

Temperature	Pressure Options Available
20ºC	1 Atm
70ºF	1 Bar
25ºC	

- Flow rates displayed can also be corrected to the local ambient conditions of T and P by the operator
- Displays Airflow Temperature
- Displays Barometric Pressure
- Bright LED with large characters
- Operator Selectable Ambient Flow or Standard Flow
- Two cell lithium battery pack; 7.4V/1.4Ah
- Three color LED to show battery capacity
- AC to DC power adaptor for battery charging
- English or Metric Engineering Units (set at factory) Selection:

Flow	Temperature	Barometric Pressure
SCFM	°F	Inches Hg
sccm	ºC	mmHg
SLPM		kPa
SCMH		Bar

MODEL SELECTION

110V	230V	SCFM	SLPM	sccm
MC-300CC-DC	MC-300ECC-DC		0.075 – 0.3	75 – 300 cc/m
MC-500CC-DC	MC-500ECC-DC		0.2 – 0.5	200 – 500 cc/m
MC-1L-DC	MC-1LE-DC		0.2 – 1	
MC-3L-DC	MC-3LE-DC		0.5 - 3	
MC-5L-DC	MC-5LE-DC	0.02 – 0.18	1 – 5	
MC-15L-DC	MC-15LE-DC	0.07 – 0.53	3 – 15	
MC-25L-DC	MC-25LE-DC	0.14 – 0.88	4 - 25	
MC-30L-DC	MC-30LE-DC	0.11 – 1.06	6 – 30	
MC-50L-DC	MC-50LE-DC	0.18 – 1.8	10 - 50	
MC-60L-DC	MC-60LE-DC	0.2 – 2	12 – 60	
MC-75L-DC	MC-75LE-DC	0.26 – 2.6	15 - 75	
MC-115L-DC	MC-115LE-DC	0.5 – 4	15 – 115	
MC-175L-DC	MC-175LE-DC	0.63 – 6.2	30 - 175	
MC-250L-DC	MC-250LE-DC	1 – 9	50 – 250	

F&J MINI CALIBRATOR
(Battery Powered Version)

MEASUREMENT ACCURACY
Air Flow ± 2.0% of full scale
Temperature (Typical) ± 2ºF (1.1ºC)
Barometric Pressure ± 2% over measurement range

CALIBRATION
Factory calibration is recommended once per year.

OPTIONS
RS-232 interface, including cable.
All measured and calculated parameters are accessible through RS-232 port to a computer

GENERAL SPECIFICATIONS

Power Requirements (charging)	110 or 230VAC; 47-63 Hz; 0.1 amp maximum
Operating Temperature	40-104 Degree F (4-40 Degree C)
Storage Temperature	22-158 Degree F (-5-70 Degree C)
Dimension (L×W×H)	3.25" × 2.50" × 2.00" (82,6 mm × 140 mm × 50,8 mm)
Weight	8 ounces (227 g)

Parameter	Engineering Unit	Typical Resolution *
CFM	Cubic feet per minute	0.01 CFM
LPM	Liter per minute	0.1 LPM
M^3/hr	Cubic meter per hour	0.01 M^3/hr.
F	Degree Fahrenheit	0.1 Degree F
C	Degree Celsius	0.1 Degree C
In-Hg	Inches of Mercury	0.01 In-Hg
mm-Hg	Millimeters of Mercury	1 mm-Hg

* Actual resolution will depend on the flow sensor range.

Product Profile

Air Sampling Systems

- High Volume Air Samplers
  - — Portable Grab Samplers
  - — Environmental Systems
  - — Enzyme Dust Samplers
  - — PM10 Systems
- Continuous Air Samplers
  - — Environmental Systems
  - — Portable
  - — Fixed Station
- Personal Air Samplers
- Emergency Response DC Powered Air Sampling Systems

Tritium Detection Systems

- Portable and Fixed Station Collection Systems utilizing Silica Gel or Molecular Sieve Absorbents
- Continuous Tritium Monitors

Air Flow Calibrators

- World Calibrator Series
- Compact Digital V.2 Series
- Mini-Calibrator

New Products

- Global Air Sampler Systems
- Digital Flow Meter Air Samplers
- C-14 Collection Systems
- Isokinetic Air Sampling Systems
- ELITE DIGITAL LIGHT (EDL) Air Samplers
- MEGA High Volume Air Samplers
- ULTRA High Volume (CTBTO) Air Samplers

Radon Detection Devices

- 2-Day Passive Charcoal Canisters
- 7-Day Passive Charcoal Canisters
- Continuous Radon Monitors

Radioiodine Collection Cartridges

- TEDA Impregnated Charcoal
- Silver Zeolite
- Custom Cartridges
- Bulk Silver Zeolite

Filter Paper

- Glass Fiber
- Cellulose
- Membrane
- Quartz

Filter Holders

- Open Face
- In-Line
- PAS Filter Holders
- Materials
  - — Plastic
  - — Aluminum
  - — Stainless Steel

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