

F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

EMERGENCY RESPONSE AIR SAMPLING SYSTEM DIGITAL FLOW METER TECHNOLOGY F&J Model DFCB-MINI-400L-SLI

NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
 - External On-board Battery Power (Warm Swap)
 - Line Power (100V-240V) (IEC-320-C13 Plug)
- Lightweight - 8.5 lbs. (3.9 kg) without battery
- Maximum Flow 385 SLPM with FP40M Filter Paper
- Bright OLED Display; 8 Line x 21 characters
- Automatic Flow Control Feature
- Flowrate and Volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
- Auto shut-off on time or volume
- Delayed Start Feature
- Internal Data Storage Downloadable as (.csv) file
- Data download via Type C USB port wired connection or through Bluetooth with the optional Bluetooth Dongle for PC Device



**Shown with standard 4in (102mm)
Diameter filter holder**

GENERAL DESCRIPTION:

The F&J Model **DFCB-MINI-400L-SLI** is a lightweight, compact, AC/DC-powered air sampling system that operates using either (1) a 20VDC rechargeable battery; that can be warm swapped with a replacement battery or (2) the 100-240 VAC system power input.

The DFCB-MINI-400L-SLI is ideally suited for low-volume air sampling applications and emergency response sampling operations.

Equipped with F&J's 2nd Generation Digital Flowmeter technology and automatic flow control, the sampler maintains the user-selected flow rate throughout the sampling period, automatically compensating for changes in filter loading without operator intervention. This ensures consistent sample collection and reliable performance under varying field conditions.

The air sampler is housed in a lightweight, rugged aluminum enclosure designed for demanding environments. Its compact footprint and integrated heavy-duty plastic carrying handle provide excellent portability for field use.

The typical operating flow range is **40 to 400 SLPM (1.41 to 14.13 SCFM)**, depending on the air flow resistance characteristics of the sampling configuration. Refer to Page 5 for maximum flow rates with various filter media types and diameters.

The sampler is equipped with an external battery adapter compatible with the ***DeWalt® 20V MAX** slide-pack battery platform.

**F&J's DFCB-MINI-XXXX-SLI air sampler series is an independent product and is not manufactured by, sponsored by, endorsed by, or affiliated with DeWalt. The DeWalt® name is used solely to indicate battery compatibility.*

An integrated internal data storage system records sampling data throughout operation. Data can be downloaded in **CSV (.csv)** format via a wired connection or wirelessly using Bluetooth® for convenient recordkeeping and analysis. An optional Bluetooth dongle is required for wireless data transfer.

REV: 21 September 2026

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DFCB-MINI-400L-SLI Battery Powered Air Sampler Specifications

Pump Type: High Efficiency Centrifugal Blower

Maximum Flowrate: 385 SLPM Typical
with FP40M Filter Media

Power Source:

External Battery - 20 VDC (varying capacity)

Internal Power Supply: 100-240 VAC; 50/60 Hz Power
Input (IEC-320-C13)

Current Draw: 5.0 A maximum on 20 VDC, 1.5A at
outlet of line power AC to VDC power supply

Filter Holder Fitting: Standard 4.0" Open-Face with
optional adapter for bayonet-style filter holders.

Handles: Durable Plastic Handle

Weight: 8.5 lbs. (3.9 kg) without battery; weight with
battery will vary depending on battery capacity.

Dimensions: 14.25"L × 7.00"W × 8.00"H
(36.2 × 17.8 × 20.3 cm)

Noise Level: 70 @ 1 meter

Operating Temperature Range: 14°F to 122°F
(-10°C to 50°C)

Display: Bright OLED (8 line x 21 character)

Elapsed Time: DD:HH:MM up to 168 hours

Flow Control:

Adjustable from keypad between 40 - 400 SLPM

Flow Accuracy: ± 4.0% of Full Scale

Factory Settable Reference T and P

Classical STP	0°C, 1 ATM
Normal T and P	20°C, 1 ATM
Modified Normal T and P	70°F, 1 ATM
Standard Ambient T and P	25°C, 1 ATM

OPTIONS:

- Bluetooth Dongle for PC Device (P/N: BTDG)
- 4in to 1.83 Female Thread Adapter (PN: HV1SAP)
- 4in to Bayonet for Particulate Only Filter Holder Adapter (PN: 4INADPNB-A)
- 4in to Bayonet for Particulate and Iodine gas collection Cartridge Filter Holder Adapter (PN: 4INADPNB-B)

Optional Large Diameter Filter Holders Available:

- FJ-130MM-HVP: Ø130mm Filter Holder; Plastic
- FJ-140MM-HVP: Ø140mm Filter Holder; Plastic
- FJ-150MM-HVP: Ø150mm Filter Holder; Plastic

Optional Combination Filter Holders Available:

*with F&J adapter PN: HV1SAP

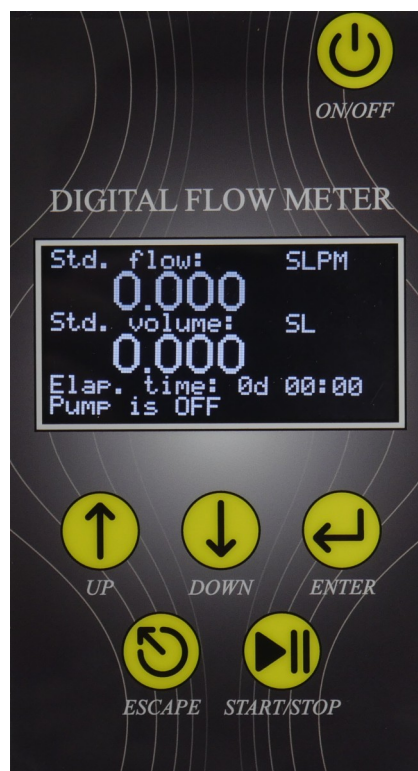
FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAMETER
FJ-19	F&J Model C	2" or 50 mm
FJ-27	F&J Model B	2" or 50 mm
FJ-34	F&J Model C	47 mm
FJ-39	F&J Model B	47 mm
FJ-52	F&J Model M	2" or 50 mm
FJ-54	F&J Model M	47 mm

(Note: Please contact F&J with information on your sampling flowrate and filter combination to ensure this model will meet your sampling requirements.)

Available Engineering Units for Flow and Volume:

SLPM / SL
SCFM / SCF
SCMH / SCM

Digital Flow Meter Keypad/Display



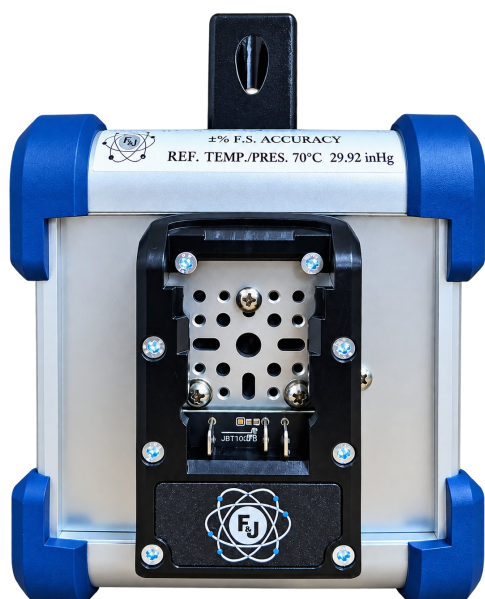
DFCB-MINI-400L-SLI Battery Powered Air Sampler Specifications



LEFT SIDE VIEW



RIGHT SIDE VIEW



REAR VIEW (BATTERY ADAPTER)



ANGLED VIEW
(PICTURED WITH WARM SWAPPABLE
DEWALT 20V –12AH BATTERY PACK)



F&J ADAPTER HV1SAP
(PICTURED WITH F&J FILTER HOLDER FJ-34)



F&J ADAPTER 4INADPNB-A
(PICTURED WITH F&J FILTER HOLDER FJ-NFH47)



F&J ADAPTER 4INADPNB-B
(THE PICTURED FILTER HOLDER IS NOT AN F&J
PRODUCT AND IS USED SOLELY TO INDICATE COM-
PATIBILITY)

DFCB-MINI-400L-SLI Battery Powered Air Sampler Specifications

Maximum Flow Rates with Different Filter Media

- Ambient Temperature at Time of Tests: 77.3 °F (25.2 °C)
- Ambient Barometric Pressure at Time of Tests: 29.80 inHg (100.9 kPa)
- All flows are recorded standardized to 70°F (21.1 °C) and one atmosphere (101.3 kPa)

Filter Media	Cartridge	Reference Flow Rate (sl/min)	DUT Flow Rate (sl/min)
Navy 48mm	None	271.3	270.5
FP47	None	-	95
	TE1C	-	95
	TE2C	-	74
	TE3C	-	86
	AGZC164	-	63
FP47M	None	-	180
	TE1C	-	154
	TE2C	-	104
	TE3C	-	125
	AGZC164	-	82
FP47M2	None	-	282
	TE1C	-	215
	TE2C	-	125
	TE3C	-	160
	AGZC164	-	95
521147	None	-	100
	TE1C	-	91
	TE2C	-	71
	TE3C	-	80
	AGZC164	-	60
FP20	None	110.3	111.4
	TE1C	-	102
	TE2C	-	78
	TE3C	-	89
	AGZC164	-	65
FP20M	None	-	207
	TE1C	-	170
	TE2C	-	110
	TE3C	-	134
	AGZC164	-	85
FP20M2	None	-	288
	TE1C	-	220
	TE2C	-	127
	TE3C	-	160
	AGZC164	-	95
521120	None	-	113
	TE1C	-	103
	TE2C	-	79
	TE3C	-	92
	AGZC164	-	66
FP40	-	342.9	344.2
FP40M	-	-	385
521140	-	-	342
WHATMAN41	-	-	336
FP102M2	-	-	400

WORLD CALIBRATOR PC INTERFACEABLE



**WORLD CALIBRATOR
Displayless Version**



**WORLD CALIBRATOR
Vacuum Fluorescent Display
(VFD) 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: $\pm 1.0\%$ Full Scale (F.S.)
- Customizable to 1% of Reading Accuracy
- Two Year Warranty
- Complementary Storage Case

Notable Features:

- Vacuum Fluorescent Display:
 - (4 lines $\times$ 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: $\pm 1.0\%$ 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

CONSUMABLES AND ACCESSORIES FOR AIR MONITORING PROFESSIONALS

Assorted Filter Paper



Filter Holders



Radioiodine Collection Cartridges



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
- Tritium Bubbler Collection Systems

Air Flow Calibrators

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

New Products

- Global Air Sampler Systems
- Generation 2 Digital Flow Meter Air Samplers
- C-14 Collection Systems
- Isokinetic Air Sampling Systems
- MEGA High Volume Air Samplers
- CTBTO ULTRA High Volume Air Samplers
- JUNIOR CTBTO Air Samplers

Radon Detection Devices

- 2-Day Passive Charcoal Canisters
- 7-Day Passive Charcoal Canisters

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

