



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-ABM50-100L-20Li

NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
 - Line Power (100VAC – 250 VAC)
 - On-Board Battery (20 Ah Lithium FePo_4)
- External battery charging system operable from line power input
- Lightweight — 19.7 lbs. (8.9 kg)
- Maximum Flow 100 LPM with 521147 HEPA Glass Fiber Filter Paper
- Bright OLED Display; 4 Line x 32 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
- Internal Data Storage Downloadable as (.csv) file
- Data Download via Bluetooth with Optional Bluetooth Dongle for PC Device
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**Shown with optional
filter holder FJ-34**

GENERAL DESCRIPTION:

F&J Model DFCB-ABM50-100L-20Li is a lightweight, small footprint, DC voltage powered air sampling system operable from (1), or (2) line power.

The DFCB-ABM50-100L-20Li is well suited for emergency response sampling activities where users do not know whether line power will be available. Typical operating time from on-board battery is approximately 8 hours utilizing 521147 (47mm diameter) HEPA glass fiber filter medium.

The automatic flow control feature with the F&J Digital Flowmeter technology provides maximum flexibility for emergency response sampling responsibilities. The set flowrate is maintained automatically in case of dust loading and does not require operator attention. The air sampler is contained in a lightweight small dimensioned ruggedized steel enclosure which is water resistant. The unit can be carried very easily by its large, rugged handle.

Typical flow range is 15 - 100 SLPM (0.5 — 3.5 SCFM).

The air sampler is also equipped with internal data storage that allows user to download the sampling data as a .csv file for easy data analysis.

REV: 18 November 2024

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DFCB-ABM50-100L-20Li Battery Powered Air Sampler Specifications

Pump Type: High efficiency centrifugal blower

Maximum Flowrate: 100 LPM typical
with 521147 HEPA glass fiber media

Power Source:

Internal – Li FePO₄; 12.8 VDC/20 Ah Battery Pack
External – Line Power; 100VAC to 240VAC

Battery Charging System:

External system which charges from line power
(100 VAC to 240 VAC, 50/60 Hz)

Operating Time on Batteries: 5 to 10 hours on fully
charged battery

Current Draw: 8.0 A maximum on 12VDC
1.0 A on line power

Filter Holder Fitting: 1.83—12 U.N.F (Air Sampler)
1.80—12 U.N.M (Filter Holder)

Handles: Durable Metal Handle

Weight: 19.7 lbs. (8.9 kg)

Dimensions: 13.8”L × 9.5”W × 9.0”H
(35.0 × 24.1 × 22.8 cm)

Average Db: 70 @ 1 meter

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

Display: Bright OLED (4 line x 32 character)

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

Flow Control:

Adjustable from keypad between 15-100 LPM

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)

Standard Combination Plastic Filter Holders Available:

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

Available Engineering Units for Flow and Volume:

SLPM / SL
SCFM / SCF
SCMH / SCM

Digital Flow Meter Keypad/Display

