



# 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-ABM50-170L-20Li

### NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
  - Line Power (100VAC – 250VAC)
  - Automobile Cigarette Lighter
  - On-board 20Ah Lithium  $\text{Fe}(\text{PO}_4)$  battery
  - LIBATBANK-12V F&J 12V, 35Ah  $\text{LiFe}(\text{PO}_4)$  Battery Bank.
- Lightweight — 20 lbs. (9.1 kg)
- Maximum Flow 170L SLPM with fiber glass media (98% DOP efficiency)
- 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
- Brushless 12 VDC motor
- Internal Data Storage Downloadable as (.csv) file
- Data Download via Bluetooth with Optional Bluetooth Dongle for PC Device



**Shown with optional filter holder FJ-34**

### NOTABLE FEATURES:

F&J Model DFCB-ABM50-170L-20Li is a military grade lightweight, small footprint, AC/DC voltage powered air sampling system operable from (1) line power, (2) an external 12-15 VDC power source, (3) from the on-board 20Ah  $\text{LiFe}(\text{PO}_4)$ , or (4) an F&J 12V, 35Ah  $\text{LiFe}(\text{PO}_4)$  Battery Bank.

The DFCB-ABM50-170L-20Li is well suited for emergency response air sampling activities and where users do not know whether line power will be available. The unit may be operated from the on-board lithium ion battery, solar power, or a wind power source through the DC input connectors coupled to a battery bank charged from the alternative energy source.

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 rugged, metal, small dimensioned enclosure which is water tight. The unit can be carried very easily by its metal handle.

Typical flow range is 50 - 170 SLPM (1.8 – 6 SCFM).

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

REV: 15 August 2023

# DFCB-ABM50-170L-20Li AC/DC Powered Air Sampler Specifications

**Pump Type:** High speed centrifugal blower

**Motor:** Brushless 12 VDC

**Maximum Flowrate:** 170 LPM typical with glass fiber media (98% DOP efficiency)

**Power Source:**

Line Power; 100VAC or 250VAC  
 Vehicle Cigarette Lighter – 12VDC  
 On-board 20Ah Life(PO<sub>4</sub>)  
 LIBATBANK-12V Battery bank

**Current Draw:** 8.0 A maximum

**Filter Holder Fitting:** 1.80—12 U.N. Threaded

**Enclosure:** Steel

**Handle:** Durable metal

**Weight:** 20 lbs. (9.1 kg)

**Dimensions:** 13.8”L × 9.5”W × 9”H  
 (35.0 × 24.2 × 22.8 cm)

**Operating Temperature Range:**

18°F-122°F (-10°C-50°C)

**Display:** Bright OLED (4 Line x 32 Characters)

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

**Flow Control:**

Adjustable from keypad between 50-170 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)

**Optional**

**Standard Combination 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

Filter holders for 102 mm to 150 mm diameter filter media are available

**Available Engineering Units for Flow and Volume:**

SLPM / SL  
 SCFM / SCF  
 SCM<sup>3</sup> / SCM

**Digital Flow Meter Keypad/Display**

