



## LOW VOLUME AIR SAMPLING SYSTEM DIGITAL FLOW METER TECHNOLOGY F&J Model DFCEB-100L-400-12Li

### NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
  - Line Power (100VAC – 250 VAC)
  - 12 Ah/12VDC LiFePO<sub>4</sub> Battery
- Lightweight — 19 lbs. (8.6 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
- Brushless Motor
- High Speed Centrifugal Blower
- Internal Data Storage Downloadable as (.csv) file
- Data Download via Bluetooth with Optional Bluetooth Dongle for PC Device



**Displayed With an Optional  
Filter Holder FJ-34**

### GENERAL DESCRIPTION:

F&J Model DFCEB-100L-400-12Li is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) line power, or (2) 12 VDC LiFePO<sub>4</sub> battery.

The DFCEB-100L-400-12Li is well suited for standard low volume air sampling and emergency response sampling activities where users do not know whether line power will be available. Typical operating time from on-board battery is approximately 5 hours utilizing 521147 (47mm diameter) HEPA glass fiber filter media.

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 plastic enclosure which is water resistant. The unit can be carried very easily by its large, rugged handle.

Typical flow range is 13 - 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.

# DFCB-100L-400-12Li DC Air Sampler Specifications

**Pump Type:** Centrifugal blower; high efficiency

**Motor:** High Speed Brushless (12—15 VDC); 60,000 rpm

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

**Power Source:**  
External – Line Power; 100VAC to 240VAC  
Internal: On-board Battery; 12 Ah LiFePO<sub>4</sub>

**Current Draw:** 8.0 A maximum on 12.8 VDC  
1.0 A maximum on line power

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

**Handles:** Durable plastic; multiple handles

**Weight:** 19 lbs. (8.6 kg)

**Dimensions:** 16.8”L × 9.0”W × 14.0”H  
(42.7 × 22.9 × 35.6 cm)

**Average Db:** 70 @ 1 meter

**Operating Temperature Range:** 18°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 13-100 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:

- Combination Filter Holder with Rainhood  
47mm Particulate / C Geometry – FJ-47RH  
50mm Particulate / C Geometry – FJ-50RH
- Bluetooth Dongle for PC Device (P/N: BTDG)

## Optional 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 / SLP  
SCFM / SCF  
SCMH / SCM

## Digital Flow Meter Keypad/Display

