

# **F&J SPECIALTY PRODUCTS, INC.**

## **EMERGENCY RESPONSE SAMPLING SYSTEM**

— Digital Flowmeter Technology —  
F&J Model DF-AB-20L-Li

### **NOTABLE FEATURES:**

- State-of-the-Art Electronics
- Operating Modes
  - Line Power (100VAC – 250VAC)
  - On-Board Batteries
  - Automobile Cigarette Lighter
- Long-lasting Lithium ion batteries
- Battery charging circuit operable from line power input
- Lightweight — ~13 lbs. (5,9 kg)
- Maximum Flow 17 to 20 LPM Maximum; typical
- Bright LED Display
- 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
- Battery Life Indicator



### **GENERAL DESCRIPTION:**

F&J Model DF-AB-20L-Li is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) on-board 20 Ah lithium ion battery, (2) line power, or (3) vehicle cigarette lighter socket.

The DF-AB-20L-Li 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 Lithium ion batteries is approximately 25hours utilizing 47 mm glass fiber filter paper.

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

Typical flow range is 5 – 20 SLPM (0.18 – 0.71 SCFM).

**Rev.:** 29 Feb. 2016

# DF-AB-20L-Li Battery Powered Air Sampler Specifications

**Pump Type:** Dual diaphragm high efficiency

**Maximum Flowrate:** 17-20 LPM typical  
with 47 mm glass fiber media

**Power Source:**

Internal – Li ion; 14.8 VDC/20 Ah Battery Pack

External –

Line Power; 100VAC or 250VAC

Vehicle Cigarette Lighter – 12VDC

**Battery Charging System:**

Internal system which charges from line power.

**Operating Time on Batteries:** ~ 25 hours

**Current Draw:** 0.6 A maximum

**Filter Holder Fitting:** 3/8 FNPT quick disconnect

**Handle:** Durable plastic

**Weight:** 13 lbs. (5,9 kg)

**Dimensions:** 14.5”L × 8”W × 10” H  
(36,8 × 20,3 × 25 4 cm)

**Operating Temperature:** 0°F to 122°F (-18°C to 50°C)

**Display:** Bright LED (6 character, 1,2 cm H)

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

**Timer Accuracy:** 0.1%

**Flow Control:**

Adjustable from keypad between 5 - 20 LPM

**Flow Accuracy:** ± 4.0% of Full Scale

**Volume Accuracy:** ± 3%

**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:**

- Data Storage Device (P/N: 232FCDS)
- 2 GB Secure Digital Card (P/N: 372239)
- Flash card Reader (P/N: SDDR-199-A20)

**Standard Combination Filter Holders**

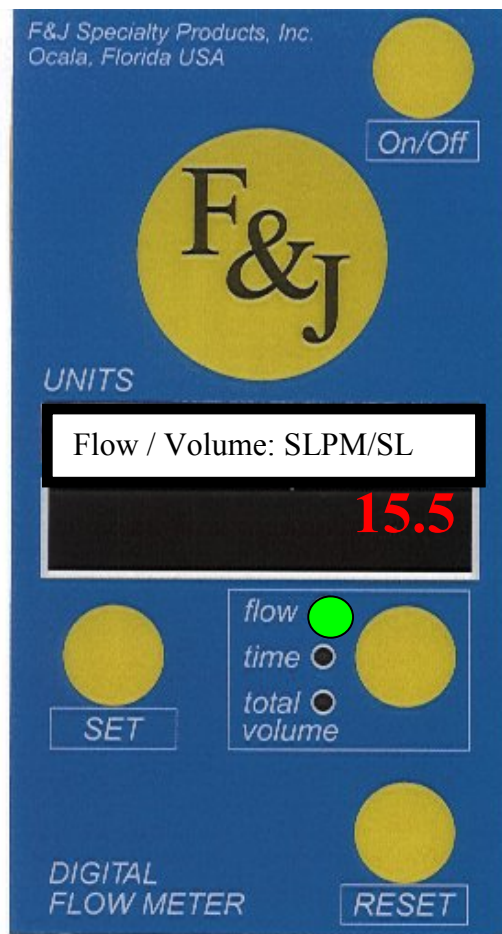
**Available:**

FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAMETER
FJ-05P	F&J Model B	2” or 50 mm
FJ-21P	F&J Model C	2” or 50 mm
FJ-35P	F&J Model B	47 mm
FJ-46P	F&J Model C	47 mm
FJ-51P	F&J Model M	2” or 50 mm
FJ-53P	F&J Model M	47 mm

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

- sccm / scc
- SLPM / SLP
- SCFM / SCF
- SCMH / SCM

**Digital Flowmeter Keypad/Display**



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