

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

## **EMERGENCY RESPONSE SAMPLING SYSTEM**

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

### **NOTABLE FEATURES:**

- State-of-the-Art Electronics
- Operating Modes
  - Line Power (110VAC – 250VAC)
  - Automobile Cigarette Lighter
- Lightweight — ~13 lbs. (5,9 kg)
- Maximum Flow 5 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



### **GENERAL DESCRIPTION:**

F&J Model DF-AB-20L-AC is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) line power, or (2) a 12-15 VDC power source such as solar panels or other alternative energy sources.

The DF-AB-20L-AC is well suited for alternative energy air sampling activities where users do not know whether line power will be available. The unit may be operated from solar power or wind power source through either the AC input or DC input.

The automatic flow control feature with the F&J Digital Flowmeter technology provides maximum flexibility for emergency response air 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 watertight. Its large rugged plastic handle can carry the unit very easily.

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

**Rev.: 26 Jan 2010**

# DF-AB-20L-AC AC/DC Powered Air Sampler Specifications

**Pump Type:** Dual diaphragm high efficiency

**Maximum Flowrate:** 20 LPM typical  
with 47 mm glass fiber media (98% DOP efficiency)

**Power Source:**  
Line Power; 110VAC or 250VAC  
Vehicle Cigarette Lighter – 12VDC

**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 Range:** 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

**Flow Control:**  
Adjustable from keypad between 5 - 20 LPM

**Flow Accuracy:** ±4% 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:**

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

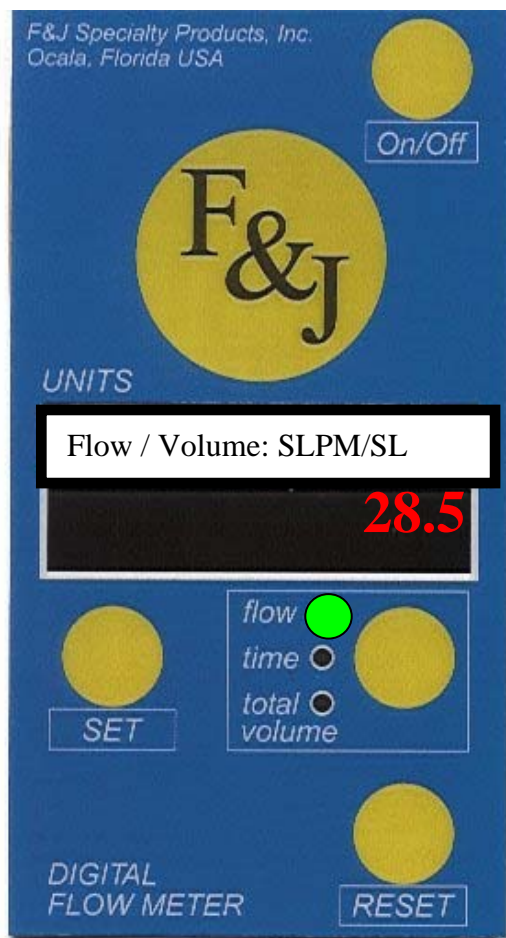
**Standard Combination Filter Holders Available:**

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**



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

**Tel:** 352/680-1177 • **Fax:** 352/680-1454 • **Email:** fandj@fjspecialty.com



**Front View**



**View of Inside**



**Side View**



**Cord Storage**

Cigarette Lighter Cord stores in  
Compartment accessible from outside.



Air Sampler on window bracket



Connection to vehicle cigarette lighter  
for 12VDC or sampling applications

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

**Tel: 352/680-1177 • Fax: 352/680-1454 • Email: [fandj@fjspecialty.com](mailto:fandj@fjspecialty.com)**