

# F&J SPECIALTY PRODUCTS, INC.

# BRUSHLESS AC/DC LOW FLOW AIR SAMPLING SYSTEM

Digital Flowmeter Technology —
 F&J Model DF-1L-BL-8

#### **NOTABLE FEATURES:**

- > State-of-the-Art Electronics
- Operating Modes
  - Line Power (100VAC 250VAC)
  - On-Board Batteries
  - Automobile Cigarette Lighter
- ➤ Long-lasting Nickel Metal Hydride Batteries
- ➤ Battery Charging Circuit operable from Line Power Input
- $\triangleright$  Lightweight ~7 lbs. (3.2 kg)
- ➤ High Flow ~ 1 LPM Maximum
- 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-1L-BL-8 is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) on-board 4500 mAH NiMH batteries, (2) line power, or (3) automobile cigarette lighter socket.

The DF-1L-BL-8 is well suited for low flow rate air sampling activities where users do not know whether line power will be available. Typical operating time from on-board batteries is greater than 8 hours when utilizing FP47M 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.

Typical flow range is 0.2 - 1.0 SLPM (200 - 1000 sccm).

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## **DF-1L-BL-8 Battery Powered Air Sampler Specifications**

**Pump Type:** Diaphragm high efficiency **Maximum Flowrate:** ~ 1.0 LPM

**Standard Combination Filter Holders Available:** 

#### **Power Source:**

Internal –

12VDC Battery Pack

NiMH; 12VDC/4500 mAH

External -

Line Power; 100VAC to 250VAC Automobile Cigarette Lighter – 12VDC

#### **Battery Charging System:**

Internal System which charges from line Power.

**Operating Time on Batteries:** ~ 8 hours

Fuse Protection: 2A

**Current Draw:** 1.0 A maximum

Filter Holder Fitting: 3/8 FNPT quick disconnect

**Handle:** Durable metal

Weight: 7 lbs. (3.2 kg)
Operating Temperature Ranges:

0° - 122°F -18° - 50°C

**Dimensions:**  $9"\times10"\times10"$  (23 × 25 × 25 cm)

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

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

**Flow Control:** 

Adjustable from keypad between 0.2 - 1.5 LPM

Flow Accuracy:  $\pm 4.0\%$  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:**

➤ Data Storage Device (P/N: 232FCDSD)

➤ 2 GB Secure Digital Card (P/N: 372239)

Flash card Reader (P/N: SDDR-199-A20)

<b>FILTER</b>	CHARCOAL	PARTICULATE
HOLDER	CARTRIDGE	PAPER
MODEL	<b>DIMENSIONS</b>	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

#### Digital Flowmeter Keypad/Display



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