

# F&J SPECIALTY PRODUCTS, INC.

# EMERGENCY RESPONSE SAMPLING SYSTEM

# Digital Flowmeter Technology — F&J Model DF-40L-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
- $\triangleright$  Lightweight ~13 lbs. (5,9 kg)
- Maximum Flow 30 to 35 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-40L-Li is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) on-board 20 Ah Li Ion batteries, (2) line power, or (3) vehicle cigarette lighter socket.

The DF-40L-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 batteries is approximately 10-12 hours 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 handle.

Typical flow range is 10 - 35 SLPM (0.3 -1.2 SCFM).

Rev.: 29 Feb. 2016



## **DF-40L-Li Battery Powered Air Sampler Specifications**

**Pump Type:** Dual diaphragm high efficiency

**Maximum Flowrate:** 35 LPM typical with 47 mm glass fiber media

**Power Source:** 

Internal – 14.8VDC Battery Pack Li Ion; 12VDC/20 Ah

External -

Line Power; 100VAC or 250VAC Vehicle Cigarette Lighter – 12VDC

**Battery Charging System:** 

Internal System which charges from line power.

**Operating Time on Batteries:**  $\sim 10$ -12 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:**  $8"L \times 9"W \times 12"H$  (20x23x30cm)

Average dB: 70.3

**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

**Flow Control:** 

Adjustable from keypad between 10 - ~40 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)

**Standard Combination Filter Holders Available:** 

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
<b>MODEL</b>	<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 SCMH / SCM

### Digital Flowmeter Keypad/Display



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