



F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

EMERGENCY RESPONSE AIR SAMPLING SYSTEM DIGITAL FLOW METER TECHNOLOGY F&J MODEL DFRV-ABM50-40L-20Li

NOTABLE FEATURES:

- State-of-the-Art Electronics
- Operating Modes
 - Line Power (100VAC – 250VAC)
 - On-board LiFePO₄ 20 Ah battery
 - Automobile Cigarette Lighter (12 VDC)
 - LIBATBANK-12V Battery Bank
- Lightweight ~24.0 lbs. (10.8 kg)
- Maximum Flow 35 to 40 SLPM 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
- High vacuum rotary vane pump
- Brushless motor (12 VDC)
- Data Download via Bluetooth with Optional Bluetooth Dongle for PC Device



**Shown with optional
filter holder FJ-34**

NOTABLE FEATURES:

F&J Model DFRV-ABM50-40L-20Li is a lightweight, small footprint, rotary vane AC/DC powered air sampling system operable from (1) line power, (2) the on-board 20 Ah LiFePO₄ battery, or (3) an external 12-15 VDC power source.

The DFRV-ABM50-40L-20Li is well suited for alternative energy air sampling activities. The unit may be operated from solar power or a 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 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 rugged, metal, small dimensioned enclosure which is water tight. The unit can be carried very easily by its metal handle.

Typical flow range is 5 - 40 SLPM (0.2 –1.41 SCFM). This flow rate varies by the filter media utilized. If pressure drop across the filter media is not significant lower flow will not be achievable without bypass valve option.

The air sampler is also equipped with internal data storage that allows the user to download the sampling data as a .csv file for easy data analysis.

REV: 04 October 2023

DFRV-ABM50-40L-20Li AC/DC Powered Air Sampler Specifications

Pump Type: Rotary Vane

Motor: Brushless motor 12 VDC

Maximum Flowrate: 40 SLPM typical
with 47 mm glass fiber media (98% DOP
efficiency)

Power Source:

Line Power; 100VAC to 250VAC
On-board LiFePO₄ 20 Ah battery
Vehicle Cigarette Lighter – 12VDC
Battery Bank LIBATBANK-12V

Current Draw: 4.0 A maximum

Filter Holder Fitting:

3/8 FNPT quick disconnect

Handle: Durable metal

Weight: 24.0 lbs. (10.8 kg)

Dimensions: 13.8”L × 9.5”W × 9”H
(35.0 × 24.2 × 22.8 cm)

Operating Temperature Range:

18°F-122°F (-10°C-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 5-40 LPM
(Note: Achievable maximum flow rate depends on filter
media)

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:

- Bluetooth Dongle for PC Device (P/N: DSD-BT)

Standard Combination 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 / SL
SCFM / SCF
SCMH / SCM

Digital Flowmeter Keypad/Display

