

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

The Nucleus of Quality Air Monitoring Programs

## EMERGENCY RESPONSE SAMPLING SYSTEM AC/DC POWERED AIR SAMPLER Digital Flowmeter Technology F&J Model DFRV-30L-12Li

#### **NOTABLE FEATURES:**

- State-of-the-Art Electronics
- Operating Modes
  Line Power (100VAC 250VAC)
   12 Ah LiFePO<sub>4</sub> Battery
- $\blacktriangleright$  Lightweight ~12 lbs. (5.4 kg)
- Maximum Flow 30 to 35 LPM with fiber glass filter media
- Bright OLED (4 line x 32 character)
- Automatic Flow Control Feature
- Flowrate and Volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options)
- Auto shut-off on time or volume
- Battery Life Indicator
- Long-lasting Lithium FePO<sub>4</sub> Battery (>2000 discharge/charge cycles)
- Brushless motor (12 VDC)

#### **GENERAL DESCRIPTION:**

F&J Model DFRV-30L-12Li is a lightweight, small footprint, brushless DC motor powered air sampling system operable from (1) on-board 5Ah Lithium FePO<sub>4</sub> batteries (2) line power, or (3) an external 12 VDC source such as a 12 VDC battery system.

The DFRV-30L-12Li is well suited for indoor air sampling from line power or for remote area air sampling activities where users do have line power available.

The automatic flow control feature with the F&J Digital Flowmeter technology provides maximum flexibility for emergency response or remote and unattended sampling responsibilities. The set flowrate is maintained automatically in case of dust loading and does not require operator attention.

Typical flow range is 5 - 35 SLPM. 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.

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Shown with optional filter holder FJ-34

### DFRV-30L-12Li AC/DC Powered Air Sampler Specifications

#### Pump Type: Mini rotary vane vacuum pump

Motor: Brushless motor 12 VDC

- Maximum Flowrate: Typical 30 35 LPM with 47 mm glass fiber media (98%DOP efficiency)
- Motor: Brushless motor 12 VDC

#### **Power Source:**

External - Line Power; 100VAC or 250VAC Internal - 12 Ah LiFePO<sub>4</sub> Battery

- **Operating time on batteries:** Depends on filter Media utilized and operating flow rate
- **Current Draw:** 5.0 A maximum

#### **Filter Holder Fitting:**

3/8 FNPT quick disconnect

- Handle: Durable metal
- Weight: 12 lbs. (5.4 kg)
- **Dimensions:**  $8"\times6"\times8"$  ( $20 \times 15 \times 20 \text{ cm}$ )

#### **Operating Temperature Range:**

14°F-122°F (-10°C to 50°C)

- **Display:** Bright OLED (4 line x 32 character)
- **Elapsed Time:** DD:HH:MM up to 168 hours

#### **Flow Control:**

Adjustable from keypad between 4-30 LPM

**Flow Accuracy:**  $\pm 4.0\%$  of Full Scale

#### **Factory Settable Reference T and P**

Classical STP	0°C, 760 mm Hg
Normal T and P	20°C, 760 mm Hg
Modified Normal T and P	21.1°C, 760 mm Hg
Standard Ambient T and P	25°C, 760 mm Hg

#### **OPTIONS:**

Bluetooth Dongle for PC Device (P/N: BTDG)

#### **Standard Combination Filter Holders Available:**

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
MODEL	DIMENSIONS	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 / SLP SCFM / SCF SCMH / SCM

#### **Digital Flowmeter Keypad/Display**

