EMERGENCY RESPONSE SAMPLING SYSTEM
DIGITAL FLOW METER TECHNOLOGY
F&J MODEL DF-AB-40L

NOTABLE FEATURES:



- State-of-the-Art Electronics
- Operating Modes
  — Line Power (100VAC – 250VAC)
  — On-Board Batteries
  — Automobile Cigarette Lighter
  — BATBANK-12V
- Long-lasting Nickel Metal Hydride Batteries
- Battery Charging Circuit operable from Line Power Input
- 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

NOTABLE FEATURES:

F&J Model DF-AB-40L is a lightweight, small footprint, DC voltage powered air sampling system operable from (1) on-board 4500 mAh NiMH batteries, (2) line power, (3) vehicle cigarette lighter socket or (4) from the F&J BATBANK-12V.

The DF-AB-40L 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 6 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 plastic handle.

Typical flow range is 10 - 35 SLPM (0.3 -1.24 SCFM).

REV: 04/04/2019

DF-AB-40L Battery Powered Air Sampler Specifications

Pump Type: Dual diaphragm high efficiency

Maximum Flowrate: 35 LPM typical
with 47 mm glass fiber media (98% DOP efficiency)

Power Source:
Internal –
12VDC Battery Pack
NiMH; 12VDC/4500 mAh
External –
Line Power; 100VAC or 250VAC
Vehicle Cigarette Lighter – 12VDC
BATBANK-12V

Battery Charging System:
Internal System which charges from line power.

Operating Time on Batteries:
~ 6 hours w/FP47M glass fiber paper

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)

Noise Level: Average dB 64.3 @ 1 meter

Operating Temperature: 14ºF to 122ºF (-10ºC to 50ºC)

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

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

Flow Control:
Adjustable from keypad between 10-30 LPM

Flow Accuracy: ±4.0% of Full Scale

Factory Settable Reference T and P

Classical STP	0ºC, 1 ATM
Normal T and P	20ºC, 1 ATM
Modified Normal T and P	70ºF, 1 ATM
Standard Ambient T and P	25ºC, 1 ATM

OPTIONS:

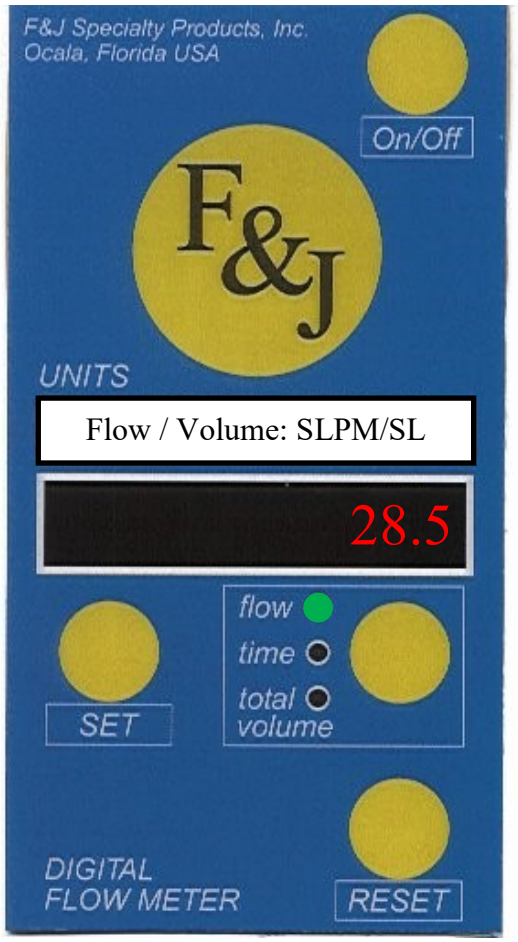
- Data Storage Device (P/N: 232FCDSD)
- 2 GB Secure Digital Card (P/N: 372239)
- Flash card Reader (P/N: SDDR-199-A20)

Standard Combination Filter Holders Available:

FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAM-ETER
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



DF-AB-40L Battery Powered Air Sampler Specifications



Front View



Inside View



Side View



Cord Storage
Cigarette Lighter Cord stores in
Compartment accessible from outside



Air Sampler Connected to a Portable Battery Bank



Connection to vehicle cigarette lighter for 12VDC or sampling applications

Portable 12V External Battery Bank for F&J AC/DC Air Samplers

Model BATBANK-12V

Battery Type:
- Sealed Lead Acid Battery
- 12V 36Ah Battery Pack
- Low Self discharge (~3% capacity/month)

Battery Charging System:
- Internal battery charging system operable from line power (100—240VAC, 50/60Hz)
- Short circuit / Reverse Polarity Protector

Enclosure: Rugged water tight plastic enclosure with a large durable handle

Weight: 33.6 lbs (~15.24 kgs)

Dimensions: 16.8”L x 9.0”W x 14.0”H
(42.7 x 22.9 x 35.6 cm)

Display: Bright digital and graphical LCD battery capacity indicator



BATBANK-12V Top View



Battery Bank Inside View



Battery Capacity Indicator View



Air Sampler Connected to a Portable Battery Bank