



F&J SPECIALTY PRODUCTS, INC.

PO Box 2888

Ocala, Florida 34478-2888

Tel: (352) 680-1177 • (352) 680-1178

Fax: (352) 680-1454

Email: fandj@fjspecialty.com **Internet:** www.fjspecialty.com

The Nucleus of Quality Air Monitoring Programs

DIGITAL FLOW METER HIGH VOLUME AIR SAMPLER F&J MODEL DFHV-1S

NOTABLE FEATURES:

- Display in English or metric units set at factory
- Choices of flow/volume units:
 - SLPM SL
 - SCMH SCM
 - SCFM SCF
- State of the Art microprocessor electronics
- Automatic Flow Control
- Auto Shut-off on time or volume
- Flowrate and volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
- Elapsed time meter
- Auto zero calibration feature of flow sensor
- Bright LED display
- Flow rate accuracy within $\pm 4.0\%$ F.S.
- RS-232 Communication Port w/Operator selectable download frequency for real-time data
- 110 – 120 VAC, 50/60Hz; single phase



GENERAL DESCRIPTION:

Model DFHV-1S digital high volume air samplers provide simplicity of operation and improved accuracy. This model features a motor cooling fan within the motor housing, digital flow measurement, elapsed time and accumulated volume measurement capability. It has a bright LED display and a four button keypad. The standard model has manual flow control. An optional automatic flow control feature is available.

Various flow and volume engineering units are available for selection.

The pump is mounted on a rigid base with non-skid rubber feet.

The air sampler is supplied with a 4 inch (102 mm) diameter filter holder. Options include an adaptor to convert from a 4 inch diameter opening to a 1.83 inch opening for standard combination filter holders (P/N: HV1SAP).

The DFHV-1S air sampling system is designed for periodic indoor use. Please consult the product specifications for the design temperature range and the installation category.

Rev: 24 Nov. 2015

DFHV-1S High Volume Air Sampler (110-120 VAC)

SPECIFICATIONS:

PUMP TYPE: Two-stage, dual ball-bearing, bypass type with an independent cooling system for the motor that provides thermal overload protection.

MAXIMUM MOTOR CAPACITY:
94 CFM at 29.92" Hg and 68°F (Free Air Flow)
Flow rate achievable will depend on the filter media utilized

HUMIDITY OPERATING RANGE: 0 – 95% RH (non-condensing)

TEMPERATURE OPERATING RANGE:
18°F to 122°F (-8°C to 50°C)

ULTIMATE VACUUM: 80" H₂O at standard temperature, pressure and zero flow restriction

POWER REQUIREMENTS: 110 – 120VAC;
50/60Hz at 6 amperes; single phase

CIRCUIT BREAKER PROTECTION: 8 amperes

ELECTRICAL CORD: All temp, 3 wire 16 gauge

FLOW CONTROL: Electronic motor speed control

HANDLE: Durable metal/plastic

DIMENSIONS: 10 ¾" L × 7 ¼" W × 9¾" H
(27,3 × 18,4 × 24,7 cm)

AVERAGE dB: 83.3

WEIGHT: Approx 12 lbs. (5,5 kg)

INSTALLATION CATEGORY: Pollution Degree 2

ENCLOSURE RATING: IPX2

DIGITAL FLOWMETER DISPLAYS:

Flowrate: Corrected to Ref. T and P
Elapsed Time: hhh:mm
Volume: Corrected to Ref. T and P

FLOW CALIBRATION:

Factory calibration or calibration check recommended once per year.

AVAILABLE FLOW/VOLUME UNIT COMBINATIONS:

| <u>FLOW</u> | <u>VOLUME</u> |
|--------------------|-----------------|
| SCFM | SCF |
| SLPM | SL |
| sm ³ /h | sm ³ |

NOTE:

Units are factory set. Specify desired units at the time the order is placed.

APPROXIMATE FLOW RATES THROUGH VARIOUS FILTER COMBINATIONS:

| PARTICULATE FILTER (102 mm) | FLOW RATE | |
|-----------------------------------|-----------|-------|
| | (CFM) | (LPM) |
| 213340 | 45 | 1274 |
| 521140 | 22 | 623 |
| FP4.0M | 45 | 1274 |
| FP40 | 23 | 650 |

OPTIONS:

Data Storage Device
2 GB Secure Digital Card
FlashCard Reader

P/N:

232FCDS
372239
SDDR-199-A20

Adaptor for 1.83" MPT Filter Holder:

P/N: HV1SAP

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 |