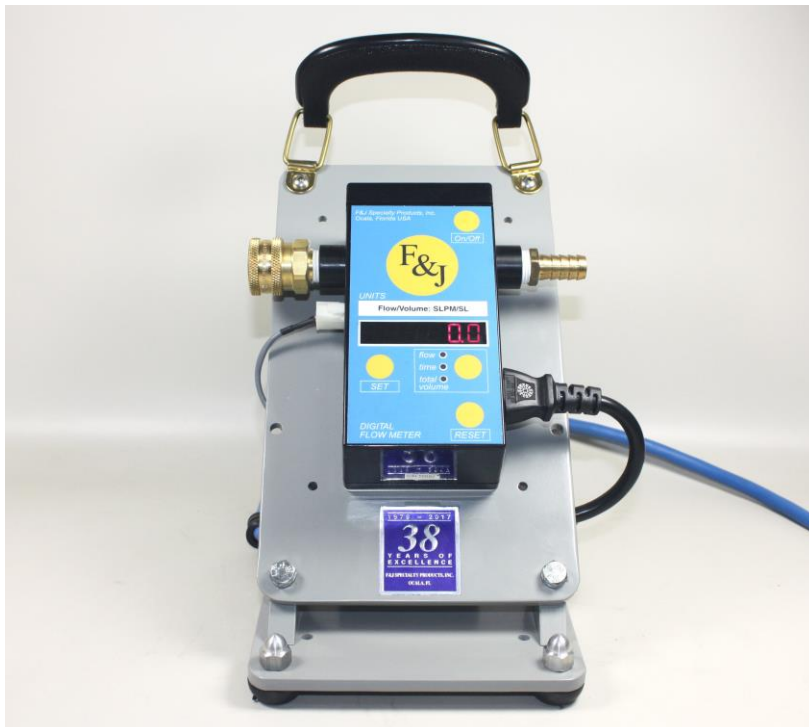


**PORTABLE HEAVY DUTY DIGITAL
FLOW METER KIT for ENVIRONMENTAL
STYLE AIR SAMPLERS
DF-100HDE-XX**



GENERAL DESCRIPTION:

The DF-100HDE Series heavy duty portable flow meter upgrade kits are designed to upgrade existing low volume analog air sampling systems utilizing motors of 1/3 HP or less. The DF-100HDE Series units are connected in-line between the pump inlet and the filter holder. The DF-100HDE Series upgrade eliminates the need to engage in expensive conversions of equipment or the need to purchase new air sampling systems.

The typical maximum operating flow ranges vary from 1 CFM to 9 CFM (30 – 255 LPM). Custom higher flow ranges with exterior mounted flow sensors are available upon request.

OPTIONS:

Data Storage Device	(P/N: 232FCDS)
2+ GB Secure Digital Card	(P/N: 372239)
Flashcard Reader	(P/N: SDDR-199-A20)

DF-100HDE-XX Heavy Duty Digital Flow Meter Kit

NOTABLE FEATURES:

- Display in English or metric units set at factory
- Choices of flow/volume units:
 - sccm scc
 - SLPM SL
 - SCMH SCM
 - SCFM SCF
- State-of-the-Art microprocessor electronics
- Flowrate and volume totalizations displayed are corrected to a factory settable Reference Temperature and Pressure (4 options available)
 - Classical STP 0°C, 760 mmHg
 - Normal T and P 20°C, 760 mmHg
 - Modified Normal T and P 21,1°C, 760 mmHg
 - Standard Ambient T and P 25°C, 760 mmHg
- Elapsed time meter
- Auto zero calibration feature of flow sensor
- Bright LED display
- Flow rate accuracy within $\pm 4\%$ F.S.
- RS-232 Communication Port w/Operator selectable download frequency for real-time data
- Auto Shut-off on time or volume
- **DF-100HDE-XX:**
 - 220 – 240VAC, 50/60Hz; single phase; < 3.24 FLA*

* FLA = Full Load Amps



F&J SPECIALTY PRODUCTS, INC.

Tel: (352) 680-1177 / Fax: (352) 680-1454 / Email: fandj@fjspecialty.com

DF-100HDE-XX SERIES Portable Digital Flow Meter Flow Computer for Air Samplers

SPECIFICATIONS:

Flow Range Available:

Model	Flow Range	
	(CFM)	(LPM)
220-240 VAC		
DF-100HDE-01	0.1 – 1	3 – 30
DF-100HDE-02	0.2 – 2	6 – 60
DF-100HDE-04	0.5 – 4	14 – 115
DF-100HDE-09	1 – 9	30 – 255
DF-100HDE-14	2 – 14	56 – 400

Power Requirements:

DF-100HDE Series: 220 – 240 VAC, 47-63 Hz; 0.2 amperes

Maximum Motor Rating:

Model	HP	FLA
DF-100HDE	1/3	3.24

Fuse Protection (for plugged in sample): 8 amp, slow blow

Electrical Cord: 3 wire, 16 gauge

Dimensions: 10" L x 6" W x 10" H. (25,4L x 15,23W x 25,4 cm H)

Weight: 6.4 lbs. (2902 gms.)

Installation Category: Pollution Degree 2

ELECTRONIC SPECIFICATIONS:

Measurement Accuracy:

Air flow	± 4% of full scale
Temperature	± 2.0° F (1.1° C)
Barometric Pressure	2% over measured range

Operating Temperatures: 0° to 122° F (-17° to 50° C)

Storage Temperature: 0° to 158° F (-17° to 70° C)

Calibration: Calibration-Verification once per year

Communications Interface: RS-232 (comma delimited text file)

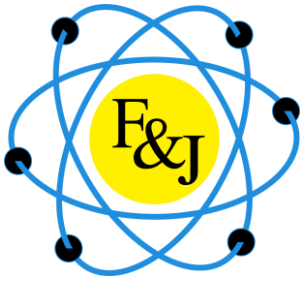
Display: LED; 6 character

On-Board Calculations:

- Flow calculation from differential pressure value using best-fit curve method.
- Flow correction for standard temperature and pressure
- Auto-zero correction utilizing electro-pneumatic method to compensate for offset and drift (automatic once every minute).

F&J SPECIALTY PRODUCTS, INC.

Tel: (352) 680-1177 / Fax: (352) 680-1454 / Email: fandj@fjspecialty.com



F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

PRODUCT PROFILE

Air Sampling Systems

- ❖ High Volume Air Samplers
 - Portable Grab Samplers
 - Environmental Systems
 - Enzyme Dust Samplers
 - PM10 Systems
- ❖ Continuous Air Samplers
 - Environmental Systems
 - Portable
 - Fixed Station
- ❖ Personal Air Samplers
- ❖ Emergency Response DC Powered Air Sampling Systems

Filter Paper

- ❖ Glass Fiber
- ❖ Cellulose
- ❖ Membrane
- ❖ Quartz

Filter Holders

- ❖ Open face
- ❖ In-Line
- ❖ PAS Filter Holders
- ❖ Materials
 - Plastic
 - Aluminum
 - Stainless Steel

Radon Detection Devices

- ❖ 2-Day Passive Charcoal Canisters
- ❖ 7-Day Passive Charcoal Canisters
- ❖ Continuous Radon Monitors

Tritium Detection Systems

- ❖ Portable and Fixed Station Collection Systems utilizing Silica Gel or Molecular Sieve Absorbents
- ❖ Continuous Tritium Monitors

New Products

- ❖ Global Air Sampling Systems
- ❖ Digital Flowmeter Air Samplers
- ❖ C-14 Collection Systems
- ❖ ELITE DIGITAL LIGHT (EDL) Air Samplers
- ❖ Isokinetic Air Sampling Systems
- ❖ MEGA High Volume Air Samplers
- ❖ ULTRA High Volume (CTBTO) Air Samplers

Radioiodine Collection Cartridges

- ❖ TEDA Impregnated Charcoal
- ❖ Silver Zeolite
- ❖ Custom Cartridges
- ❖ Bulk Silver Zeolite

Air Flow Calibrators

- ❖ World Calibrator Series
- ❖ Compact Digital V.2 Series
- ❖ Mini-Calibrator