



F&J SPECIALTY PRODUCTS, INC.
The Nucleus of Quality Air Monitoring Programs

“D” SERIES DIGITAL HIGH VOLUME AIR SAMPLERS (100 - 120 VAC)

F&J, the leader in advanced-technology air sampling systems for ambient environmental monitoring applications, is introducing a new technology product line of HIGH VOLUME AIR SAMPLERS!

The “D” Series High Volume Digital Flow Meter (DFM) Systems provide modern technology to automate the majority of the air sampling process.

Flow rates as high as 117 CFM (200 m³/hr) can be achieved through 8”×10” (20.3 cm × 25.4 cm) glass fiber filter paper. The “D” Series High Volume air samplers enable air monitoring specialists to attain lower levels of detection for trace metals and lower levels of airborne radioactivity concentrations. The “D” Series High Volume air samplers enable one to filter more than twice the air volumes per sample event than processed by the currently available high volume air samplers having a 60-70 CFM (100-120 m³/hr) maximum flow rate capacity.

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**Typical Maximum Flow Rates for DF-60810D
1100 watt Vacuum System (1 ½ " Piping)**

Filter Paper	Maximum Flow		
	CFM	LPM	M³/hr
8"x10"			
FP810	90.1	2550	153
FP810M	111.3	3150	189
GC508X10IN	80.2	2270	136
5211810	92.9	2628	158
GC908X10	89.0	2520	151
PG60	94.7	2680	161
FP810M2	116.3	3290	197
EPM2000	85.9	2430	146
GA558X10IN	83.4	2360	142
2064810	110.6	3130	188



DF-60810D Series

DF-60810D Specifications (100—120 VAC)

Technology:	Microprocessor controlled state of the art electronics	
Operating Temperature Range:	-20°F* to 122°F (-29°C* to 50°C) *warm start/continuous operation	
Operating Relative Humidity:	0 – 95% RH	
Motor:	Brushless: 1.5 H.P.(1100 Watt) motor with electronic motor speed control	
Power:	110-120VAC; 50/60Hz; 25 amperes; single phase.	
Housing:	Powder coat painted aluminum	Locking hinged cover
	Removable hinged cover	Locking swing door with key
Dimensions:	57.5”H × 21.5”W × 21.5”D	(146 H × 54.6 W × 54.6 cm D)
Weight:	Approximately 98 lbs. (44.5 kg)	
Shipping Weight:	Approximately 150 lbs. (68.2 kg)	
Installation Category:	Pollution Degree 3	
Enclosure Rating:	IPX3	

Automatic Flow Control:

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the electronic motor speed adjustment, if necessary, to maintain the flow within $\pm 4\%$ of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure.

On-Board Measurement, Calculations and Other System Features

Measurements:

- Temperature of air flow through system
- Inlet pressure to the flow sensor
- Differential Pressure of the flow sensor

Calculations/Determinations:

- Totalized volume, STP
- Current flow rate, STP
- Elapsed time

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

Other System Features:

- Automatic shut off of system on totalized volume or elapsed time
- RS-232 port for real-time data download
- Bright LED display
- Automatic flow control

OPTIONS:

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

**“D” SERIES HIGH VOLUME AIR SAMPLING SYSTEM
(100 - 120 VAC)**

Digital Flow Meter System

Criteria / Model	DF-604D	DF-60810D
Dimensions H×L×W (in)	57.5 × 21.5 × 21.5	57.5× 21.5 × 21.5
H×L×W (cm)	146×55×55	146×55×55
Weight lbs. (kg)	98 (44.5)	98 (44.5)
Maximum Flow	50 CFM (85m ³ /hr)	117 CFM (200m ³ /hr)
Max. Vacuum “H ₂ O (kPa)	90 (22)	90 (22)
Flow Regulator Type	Electronic	Electronic
Motor Power, Type	1100 watt, Brushless	1100 watt, Brushless
Voltage (AC), 1 Ph	100—120	100—120
Frequency (Hz)	50/60	50/60
Power Requirement (watts)	1100	1100
Operating Temperature °C (°F)*	-29* to 50 (-20 to 122)	-29* to 50 (-20 to 122)
*warm start/continuous operation only for low temperature value		
Storage Temperature °C (°F)	-35 to 70 (-31 to 156)	-35 to 70 (-31 to 156)
IPX Rating	IPX 3	IPX3
Installation Category	Pollution Degree 3	Pollution Degree 3
Enclosure Protection	Powder Coat Paint	Powder Coat Paint
Noise Level @ 1 m (db)	83	83