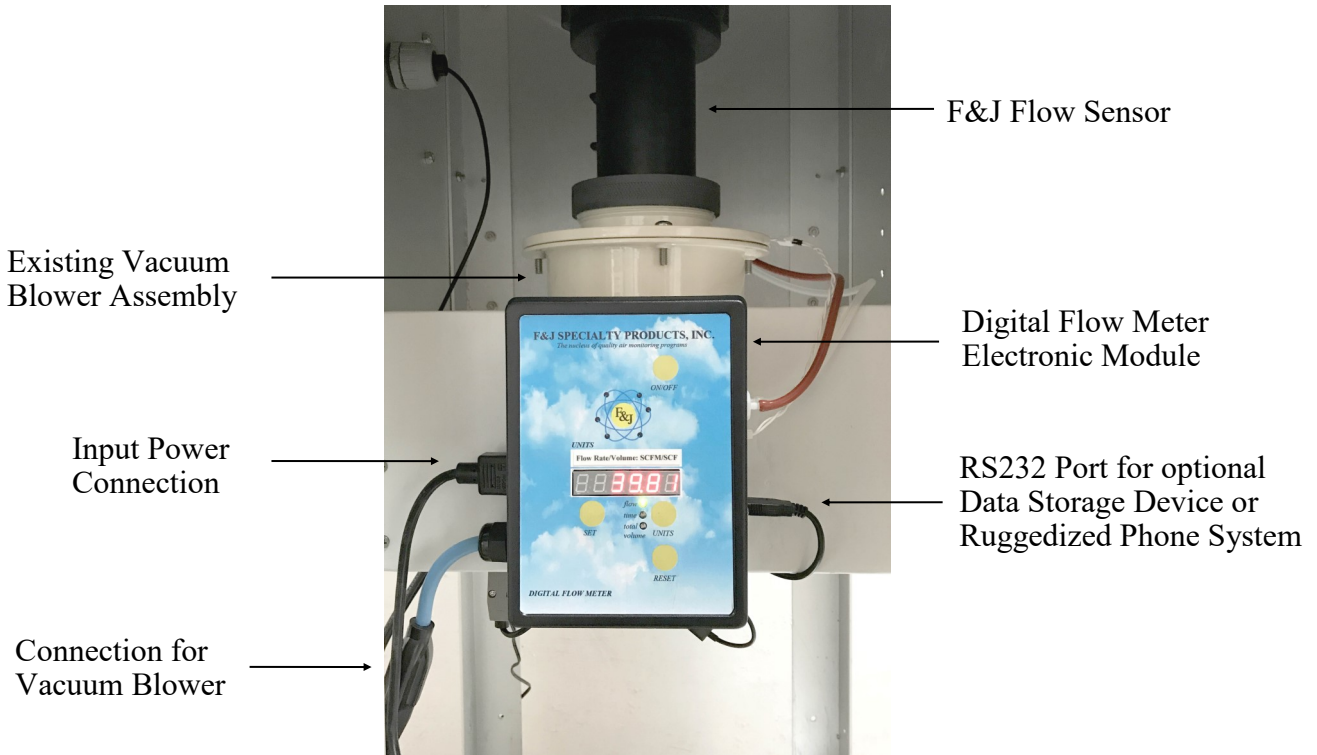


F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

DIGITAL FLOW METER KIT FOR ANALOG HIGH VOLUME TSP AIR SAMPLERS F&J Model DF-HKUPG



GENERAL DESCRIPTION:

The DF-HKUPG series upgrade kits are designed to upgrade existing analog high volume air sampling stations currently utilizing chart recorders and electromechanical timers. The DF-HKUPG upgrade kit eliminates the need to purchase an entirely new air sampling system.

The Installation of the DF-HKUPG upgrade kit will provide the following benefits:

- (1) Automatic Normalization of flow rates and air sample volumes to an internationally recognized Reference Temperature and Pressure Standard
- (2) Automatic electronic flow control
- (3) Accurate elapsed time measurement
- (4) RS232 communications port for integration with the F&J Data Storage Device, or F&J ruggedized cellular phone system for remote and unattended air samplers.

The typical operating flow rates can vary from the standard 20 to 120 m³/hr, or another more appropriate flow range to conform to the customer requirements.

REV: 06 Sept. 2018

Digital Flow Meter Features

Operator Selectable Options

Shut off Type

On Time 1 min to 168 hours
On Volume .01 to 9.99×10^{99} Sm³/hr
(minimum volumen varies depending on flow range and flow units)

RS232 Output Frequency 1/sec, 1/min, 1/6min, 1/hr

Automatic Flow Control: Operator selectable within the instrument's operating flow range

Selection of Reference T and P or Ambient flow reporting conditions

Factory Settable Options

Flow/Volume units Sccm/scc, SLPM/SL, SCFM/SCF, Sm³/hr, Sm³/min

Temperature units °C, °F

Pressure units inHg, mmHg, kPa

Reference Temperature 0°C, 20°C, 70°F, 25°C

Reference Pressure 29.92 inHg (760 mmHg)

Display Dimming Function On or Off

Auto Shut-off Function On or Off

Flow Control On or Off

Sampling Mode Volumetric

Gas Type Air

Language Options for Label English, French

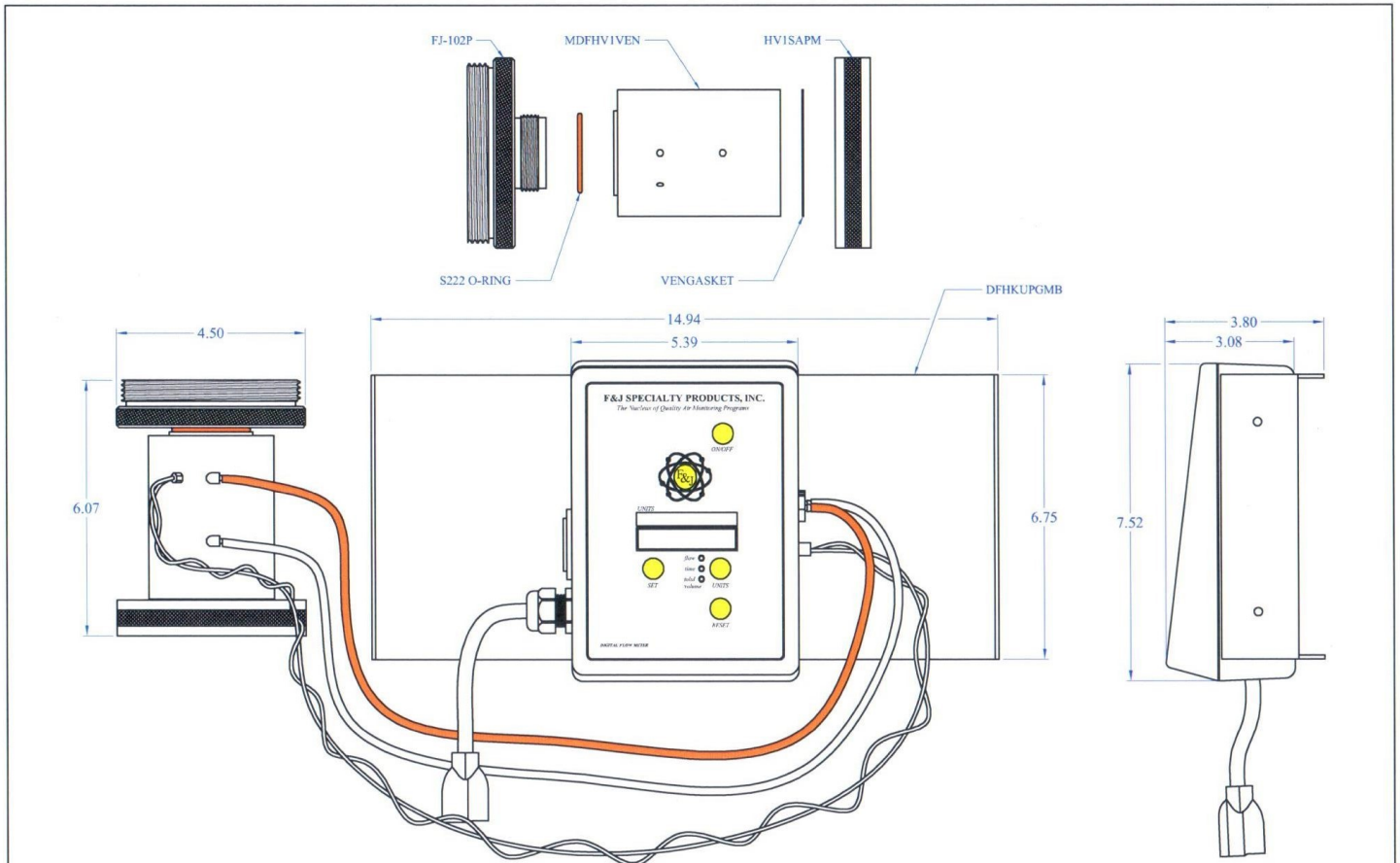
Options

(1) Data Logger System

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

(2) Ruggedized Cellular Phone System (P/N: CASRPS-DFM)

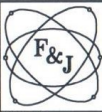
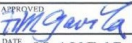
Pictures



NOTES:

- DIMENSIONS ARE FOR REFERENCE USE ONLY UNLESS OTHERWISE SPECIFIED.

REV	BY	DATE	DIR	DESCRIPTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ±1° 1 PLACE DECIMALS ±.1 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005	DRAWN	JOHN A.	 F&J SPECIALTY PRODUCTS, INC. P.O. BOX 2888 OCALA FL 34478-2888	
	DATE	08 AUG 17		
MATERIAL	REVISED		DIGITAL FLOW METER AIR SAMPLER MODULE USED FOR ANALOG TO DIGITAL UPGRADE	
	DATE			
N/A	APPROVED		USED ON PART NO DF-HKUPG DRAWING NO. FDFHKUPG-M01-R00 SCALE NONE SIZE A DO NOT SCALE DRAWING SHEET 1 OF 1	
	DATE	08 AUG 17		

Specifications

Flow Range Available:

Model	Sensor Flow Range
200-240 VAC	(m³/hr)
DF-HKUPG-120	20 to 120
DF-HKUPG-85	10 to 85
DF-HKUPD-50	8 to 50

Power Requirements: 100 to 240 VAC; 50/60 Hz, 1 PH

Fuse Protection: 8 Amp, slow blow

Electrical Cord: 3 wire, 16 gauge

Dimensions: 15.0”L x 7.8” H x 4.0”D (38.1cm L x 19.8cm H x 10.1cm D)

Weight: 5.5 lbs (2.4 kg)

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