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

F&J Flow Sensor

Existing Vacuum Blower Assembly

Input Power Connection

4-Pin Connection for Brushless Vacuum Blower

Digital Flow Meter Electronic Module

RS232 Port for optional Data Storage Device or Ruggedized Phone System
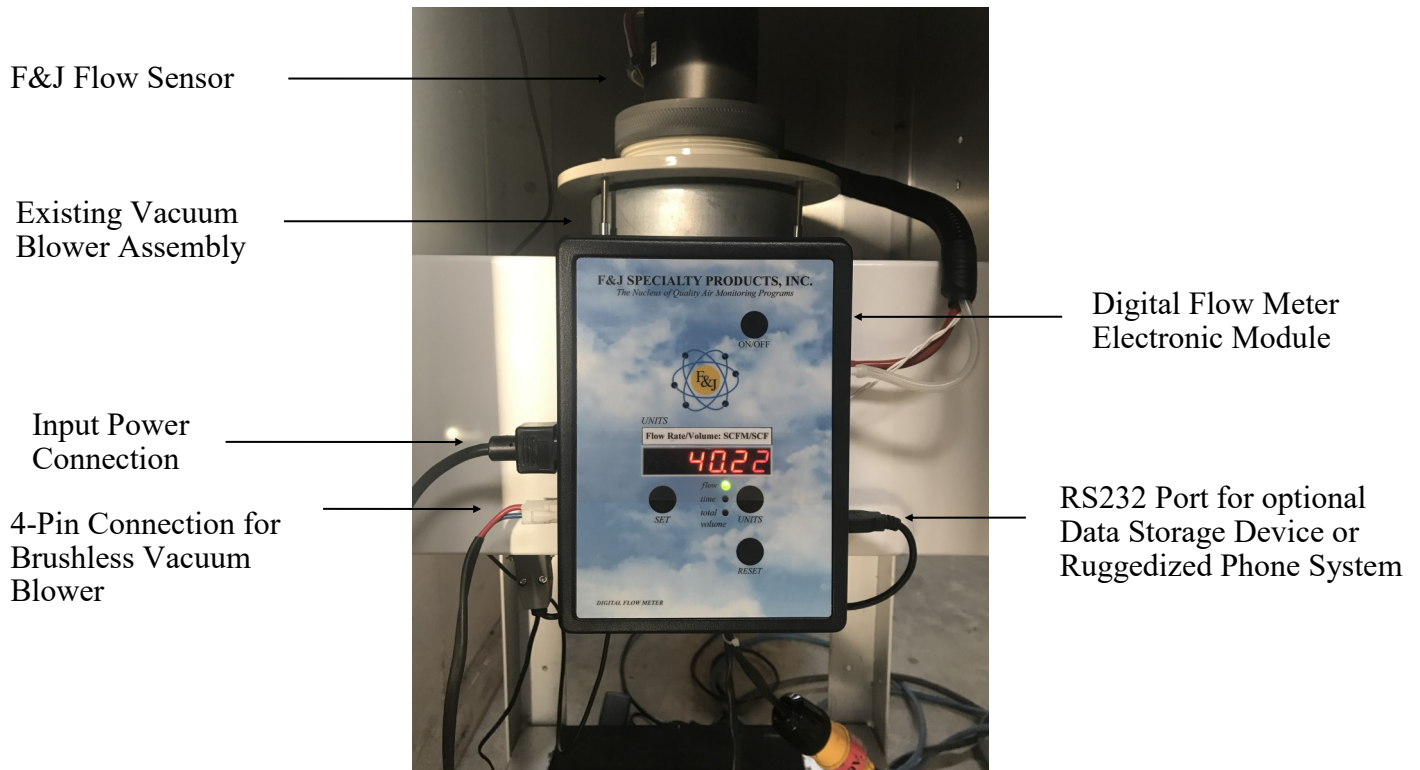
GENERAL DESCRIPTION:

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

The Installation of the DF-HKUPG-BL 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 m^3/hr, or another more appropriate flow range to conform to the customer requirements.

REV: 22 May 2019

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} Sm^3/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   ºC, ºF
Pressure units   inHg, mmHg, kPa
Reference Temperature   0ºC, 20ºC, 70ºF, 25ºC
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
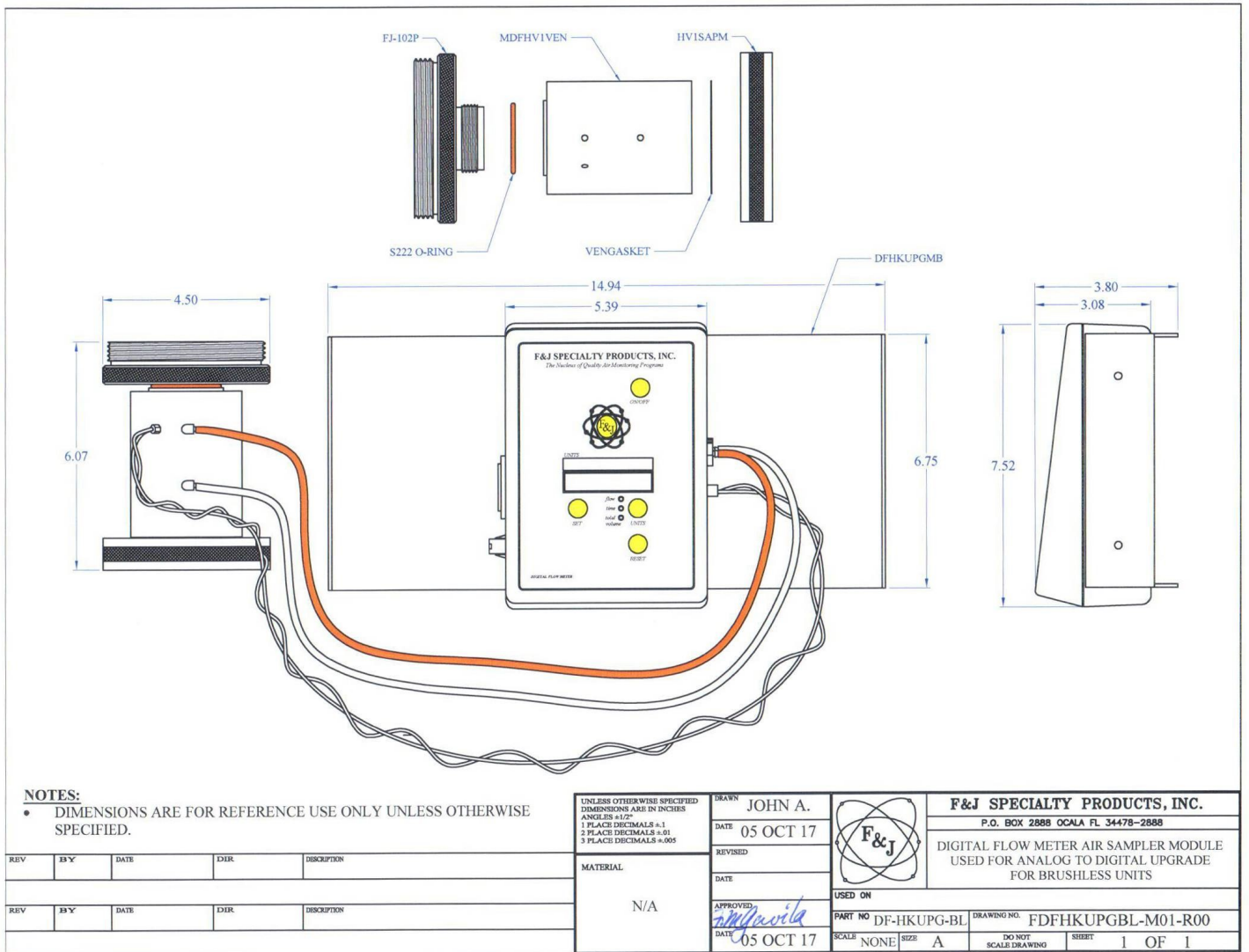Language Options for Label English, French

Options

(1) Data Logger System
    • Data Storage Device (P/N: 232FCDSD)
    • 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
REV	BY	DATE	DIR.	DESCRIPTION

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
ANGLES ±1/2°
1 PLACE DECIMALS ±.1
2 PLACE DECIMALS ±.01
3 PLACE DECIMALS ±.005

DRAWN JOHN A.
DATE 05 OCT 17
REVISED
DATE
MATERIAL N/A
APPROVED mJavila
DATE 05 OCT 17

F&J SPECIALTY PRODUCTS, INC.
P.O. BOX 2888 OCALA FL 34478-2888

DIGITAL FLOW METER AIR SAMPLER MODULE USED FOR ANALOG TO DIGITAL UPGRADE FOR BRUSHLESS UNITS

USED ON

PART NO DF-HKUPG-BL
DRAWING NO. FDFHKUPGBL-M01-R00
SCALE NONE SIZE A
DO NOT SCALE DRAWING
SHEET 1 OF 1

Specifications

Flow Range Available:

Model 100-240 VAC	Sensor Flow Range (m^3/hr)
DF-HKUPG-BL-120	20 to 120
DF-HKUPG-BL-85	10 to 85
DF-HKUPD-BL-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	± 2.0º F (1.1º C)
	Barometric Pressure	2% over measured range

Operating Temperatures:	0º to 122º F	(-17º to 50º C)
Storage Temperature:	0º to 158º F	(-17º to 70º C)
Calibration:	Calibration-Verification once per year	
Communications Interface:	RS-232 (comma delimited text file)	
Display:	LED; 6 character	