



# F&J SPECIALTY PRODUCTS, INC.

## DIGITAL LOW VOLUME AIR SAMPLING SYSTEM

### F&J Model GAS-75L-BL-AC

#### NOTABLE FEATURES:

- Precision machined DP flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume are corrected to an operator selectable Reference Temperature and Pressure
- Operator selectable engineering units
- RS-232 communication ports (2)
- Flow rate accuracy with  $\pm 3.0\%$  of full scale
- Auto zero calibration feature of flow sensor
- Continuous or Periodic sample modes
- Multiple operator selectable data storage and data transmission frequency rates
- 100 – 240VAC, 50/60Hz or 24VDC; single phase
- Vacuum Fluorescent Display; 4 line  $\times$  24 characters
- Wide temperature range electronics
- Optional Isokinetic sampling mode configuration



**ISOKINETIC SAMPLING OPTION  
AVAILABLE**

#### GENERAL DESCRIPTION:

F&J Model GAS-75L-BL-AC is a lightweight, AC/DC powered air sampling system operable from (1) line power or (2) a 24 VDC external power source.

Model GAS-75L-BL-AC air moving mechanism consists of a heavy duty brushless motor and a dual diaphragm pump. The air sampler electronics includes automatic air flow control and sophisticated software to perform multiple on-board calculations and an optional isokinetic sampling feature. The sophisticated instrument software permits many operator selectable engineering unit options for measured and calculated parameters, including the selection of a reference temperature and pressure standard for the reporting of flow and volume values. Alarm values for temperature, pressure and flow rate are operator selectable.

The basic components of the system are designed in a modular fashion so that each component can be readily and independently removed for service.

The GAS-75L-BL-AC air sampler can be configured with the optional isokinetic sampling mode feature.

Typical flow range is 15-75 SLPM (0.5 -2.6 SCFM).

**Rev.: 26 February 2013**

# **GAS-75L-BL-AC AC/DC Powered Air Sampler Specifications**

**Pump Type:** Dual diaphragm high efficiency

**Motor:** Brushless 24VDC

**Maximum Flowrate:**

75 LPM – Typical w/47 mm FP47M glass fiber media

**Power Source:**

Line Power; 100VAC to 240VAC

External 24 VDC Source

**Current Draw:** 4 A maximum

**Power Rating:** 90 Watts @ 4A

**Filter Holder Fitting:** 3/8 FNPT quick disconnect

**Handle:** Durable metal

**Weight:** 17 lbs. (7.7 kg)

**Dimensions:** 11"×11"×18" (28 × 28 × 46 cm)

**Operating Temperature Ranges:**

14°F to 122°F (-10°C to 50°C)

**Display:** Bright VFD (4 line × 24 characters)

**Flow Control:** Automatic Flow Control

Adjustable from keypad between 15-75 LPM

**Flow Accuracy:** ± 3.0% of Full Scale

**Operator Selectable Reference Values**

**Temperature**

0°C, (32°F)

15°C, (59°F)

20°C, (68°F)

21.1°C, (70°F)

25°C, (77°F)

**Pressure**

101.325 kPa (760 mmHg)

100 kPa (1 Bar)

**Standard Combination Filter Holders Available:**

<b>FILTER HOLDER MODEL</b>	<b>CHARCOAL CARTRIDGE DIMENSIONS</b>	<b>PARTICULATE PAPER DIAMETER</b>
FJ-05P	F&J Model B	2" or 50 mm
FJ-21P	F&J Model C	2" or 50 mm
FJ-35P	F&J Model B	47 mm
FJ-46P	F&J Model C	47 mm
FJ-51P	F&J Model M	2" or 50 mm
FJ-53P	F&J Model M	47 mm

**Available Engineering Units for Flow and Volume:**

sccm/ scc

SLPM / SLP

SCFM / SCF

SCMH / SCM

SCMM/SCM

**On-Board Measurement, Calculations and Other System Features**

**Measurements:**

- Temperature of air flow through system
- Barometric pressure and absolute pressure
- Differential Pressure of the flow sensor

**Calculations/Determinations:**

- Totalized sample volume
- Current and average flow rate
- Minimum and maximum temperature
- Minimum and maximum barometric pressure
- Elapsed time
- Flow and volume corrected to ambient T and P

**Optional Items:**

- Optional data communications software to download data from instrument to PC after completion of sampling activity including report manager and file archiving GAS-ASDA
- Isokinetic sampling mode configuration  
P/N: ISOKOPT

**Other System Features:**

- Display of data in English or metric units by operator selection
- Automatic shut off of system on totalized volume or elapsed time
- Real time clock with battery backup
- Operator selectable data record storage frequency
- Password protection
- Power outage report
- User selectable Reference T and P values
- RS-232 port for communication with computer
- Periodic sampling scenario based on periods within a week or hourly basis selectable by the user
- Operator selection of engineering units for measured and calculated parameters