



F&J SPECIALTY PRODUCTS, INC.

F&J ELITE DIGITAL LIGHT (EDL) GLOBAL AIR SAMPLING SYSTEM

Model GAS-EDL-300WE-HT (High Ambient Temperature Operation)

NOTABLE FEATURES:

- State-of-the-Art Electronics
- Lightweight: ~15 lbs. (6,8 kg)
- Powerful: Flow rate to 250 LPM*
- Very low maintenance
- Automatic Flow Control
- Precision machined DP flow sensor
- Vacuum Fluorescent Display (VFD);
4 line × 24 characters
- Dual RS-232 communication ports
- Flow rate accuracy: $\pm 3.0\%$ Full Scale
- Auto zero calibration feature of flow sensor
- Multiple operator selectable data storage and data
transmission frequency rates
- Wide temperature range electronics
- Brushless motor
- High ambient temperature rating to 140°F (60°C)



Shown with optional Filter Holder

* Depending on filter paper dimensions and air flow resistance

GENERAL DESCRIPTION:

F&J Model GAS-EDL-300WE-HT air sampler is a powerful small foot print light weight AC/DC powered air sampling system operable from (1) line power or (2) an optional 24VDC external power source. This powerful air sampler is the lightest weight low volume air sampler available. The HT model is designed for operation in ambient temperatures as high as 60°C (140°F)

The GAS-EDL-300WE-HT air sampler is well suited for various types of air sampling application such as REMP, plant emissions and work area monitoring programs. It can also be utilized in remote air sampling applications powered from solar panels or wind turbines. The Global Air Sampler software provides the ultimate in end user customization including operator selectable alarm settings, Reference T and P values and engineering units.

The F&J technology provides maximum flexibility, data integrity, automatic flow control and opportunities for control by a PC device through the RS232 communication port.

The typical operating flow range is 30 - 250 SLPM (1.1 – 8.8 SCFM). Actual flow range implemented will depend the filter(s) utilized by the customer.

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GAS-EDL-300WE-HT AC/DC Air Sampler Specifications

Pump Type: Centrifugal blower

Maximum Flowrate:

225 LPM - Typical w/47mm FP47M glass fiber media

300+ LPM – Free air flow capacity

Power Source:

Line Power; 200VAC to 240VAC

External DC Source – 24VDC

Current Draw: 14 A maximum

Filter Holder Fitting:

3/8 FNPT quick disconnect

Handle: Durable plastic

Weight: 18 lbs. (8.2 kg)

Dimensions: 10" × 11" × 14"
(26 × 28 × 36 cm)

Operating Temperature Range:
14°F to 140°F (-10°C to 60°C)

Display: VFD, 4×24 characters

Flow Control:

Adjustable from keypad between 30-250 LPM

Flow Accuracy: ±3.0% of Full Scale

Communication Interface: Dual RS-232

Operator Selectable Features

Language Options: English

Sampling Mode: Volumetric Flow or Mass Flow

Gas Type: Air, O₂, N₂, H₂, CO, CO₂, C₃H₆, He, NH₃

Engineering Units

Volumetric Flow: sccm, SLPM, SCFM, sm³/min, sm³/hr

Mass Flow: kg/hr, g/min, 1 lbs/hr

Temperature: °C, °F

Pressure: In, Hg, mm Hg, bar, atm, kPa, hPa

Reference T and P

Reference T: 0°C, 15°C, 20°C, 21.1°C (70°F), 25°C

Reference P: 101.325 kPa (760 mm Hg), 100 kPa (1 bar)

RS232 Data Output Frequency: 1 sec, 1 min, 10 min, 20 min, 30 min, 1 hr

Data Storage Frequency: 1 min, 10 min, 20 min, 30 min, 1 hr

Operating Mode: Continuous, Periodic

Periodic Sampling Options: 1 hr. (12 five minute periods), or weekly (24 one hour periods for 7 days)

Ending Mode: By time, By volume

Operator Selectable Passwords: 2 levels

Date and Time Setup: Input of real time and date

Standard Combination Filter Holders

Available:

FILTER HOLDER MODEL	CHARCOAL CARTRIDGE DIMENSIONS	PARTICULATE PAPER DIAMETER
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

Typical Maximum Flow Rates for Various Filter Media

Filter Media	Flow Rate (SCFM)	Flow Rate (SLPM)	Media D.P. ("Hg)	Media D.P. ("H₂O)
FP47	4.91	140	6.2	84.0
FP47M	7.91	224	4.3	58.8
FP47M2	10.4	296	3.0	40.2
FP47 & TE2C	3.71	105	6.9	93.5
FP47M & TE2C	5.47	155	6.1	83.0
FP47M & TE3C	5.90	167	6.6	90.0
FP47M2 & TE1C	7.81	221.1	3.8	51.40
FP20M	8.25	233.7	3.6	48.9
FP20M & TE2C	5.68	160.8	5.7	77.8
FP20M & TE3C	6.69	189.5	4.8	64.8
FP40M	10.47	390	1.9	25.09

Optional Items:

- Air Sampler Data Acquisition Program
P/N: GASdaq
- Isokinetic sampling mode configuration
P/N: ISOKOPT
- Ruggedized Cellular Phone System (P/N: CASRPS)

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