



F&J SPECIALTY PRODUCTS, INC.

The Nucleus of Quality Air Monitoring Programs

F&J ELITE DIGITAL LIGHT (EDL) AIR SAMPLER

F&J MODEL DF-EDL-28B

NOTABLE FEATURES:

- Precision machined DP flow sensor
- State-of-the-Art electronics
- Flow rate and volume measurements corrected to factory settable Reference Temperature and Pressure
- Automatic electronic flow control
- Display in English or various metric units
- RS-232 communication port
- Flow rate accuracy: $\pm 4.0\%$ Full Scale
- Auto zero calibration feature of flow sensor
- Auto shut off on time or volume
- Brushless Motor
- Maintenance free vacuum system
- 100 – 120 VAC; 50/60 Hz, 1PH



GENERAL DESCRIPTION:

F&J Model DF-EDL-28B is a powerful small foot print light weight AC/DC powered air sampling system operable from a line power source. This powerful air sampler is light weight for a low volume air sampler available having similar flow rate capacity. The pump is mounted on a base plate within a weather resistant aluminum environmental enclosure having four rubber feet. Handles are provided on the enclosure to facilitate transportation. The enclosure rating is IPX3.

The DF-EDL-28B air sampler is well suited for various types of air sampling applications such as REMP, plant emissions and work area monitoring programs. It can also be utilized in remote air sampling applications powered from batteries charged by solar panels or wind turbines with an optional DC external power connector.

This unit is designed for continuous indoor or outdoor use. This unit can be adapted for tripod mounting if desired. Please consult the product specifications for the design temperature range and the installation category.

The typical operating flow range is 1 to 5 CFM (28 – 142 LPM). Actual flow range implemented will depend the filter(s) utilized by the customer.

DF-EDL-28B EDL Low Volume Air Sampler (100 – 120VAC)

SPECIFICATIONS

PUMP TYPE:	Centrifugal blower
MAXIMUM CAPACITY:	6.0 CFM (170 LPM) @ 0" Hg Pressure drop
ULTIMATE VACUUM:	40" H ₂ O (100mb) @ sea level
POWER REQUIREMENTS:	100-120VAC; 50/60Hz; 7 amperes, single phase
CIRCUIT BREAKER PROTECTION:	10 amperes
ELECTRICAL CORD:	All temperature, 3 wire, 14 gauge
THERMAL OVERLOAD PROTECTION:	Furnished as an integral part of the motor
DIMENSIONS:	19"L × 12.5"W × 13" H (48×30.5×33 cm)
WEIGHT:	19.8 lbs. (9 kg)
INSTALLATION CATEGORY:	Pollution Degree 3
ENCLOSURE RATING:	IPX3

ELECTRONIC SPECIFICATIONS:

AIR FLOW	± 4.0% of full scale
TEMPERATURE	± 0.9°F (0.5°C)
BAROMETRIC PRESSURE	1% over measured range
OPERATING TEMPERATURE:	0° - 122°F (-17° - 50°C)
STORAGE TEMPERATURE RANGE;	-20° - 150°F (-29° - 65°C)
CALIBRATION:	Operator calibration-verification 1 per year
COMMUNICATIONS INTERFACE:	Single RS-232
DISPLAY:	Bright LED (6 character, 1.2 cm H)

ON-BOARD CALCULATIONS:

Flow calculation from differential pressure value using best fit curve method

Flow correction to factory settable reference temperature and pressure

Auto-zero correction utilizing electro-pneumatic method to compensate for offset and drift (automatic, once every minute)

OPTIONS:

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

COMBINATION FILTER HOLDERS AVAILABLE:

Durable plastic combination filter holders for F&J Model B, C or M charcoal cartridges and 47 mm, 2" or 50 mm diameter particulate filter paper are available. All models have quick disconnect function.

FILTER HOLDER	CHARCOAL CARTRIDGE	PARTICULATE PAPER
MODEL	DIMENSIONS	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