GLOBAL AIR SAMPLING SYSTEM
F&J MODEL GAS-604DTE-PUF

NOTABLE FEATURES:

- Precision machined DP flow sensor
- State-of-the-Art electronics
- Vacuum fluorescent display (VFD); 4 lines×24 characters
- Flow rate and Volume measurements corrected to operator selectable Reference Temperature and Pressure
- Automatic flow control
- Operator selectable units of measurement
- Dual RS-232 communication ports
- Flow rate accuracy: ±3.0% Full Scale
- Auto zero calibration feature of flow sensor
- Continuous or periodic sampling mode
- Multiple operator selectable data storage rates
- Display of Multiple on-board calculations
- Powerful 1100 Watt motor
- 220-240 VAC; 50/60 Hz, single phase

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GENERAL DESCRIPTION:

The GAS-604DTE-PUF Series Air Sampling Systems are designed for remote unattended continuous air sampling applications. The GAS-604DTE-PUF Series Air Samplers feature a brushless motor with electronic motor speed control that maintains a user selectable flow rate. The GAS-604DTE-PUF Series design accommodates rapid field service and component replacement.

For durability and weather resistance, the system is housed in a freestanding powder coat painted aluminum enclosure. The sample air is drawn in under the eaves of the hinged lid from all four sides and is exhausted near the bottom of the enclosure. The locking swing door on the enclosure provides convenient access for servicing the equipment inside. A lockable latch on the top cover restricts unauthorized tampering with the filter holder.

The electronic flow control measurement sub-system of the GAS-604DTE-PUF Series provides an operator selectable reference standard corrected flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined DP sensor. The controller can be readily set to any sampling flow rate between 56 - 400 SLPM (2 – 14 SCFM). The bright VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The GAS-604DTE-PUF standard model utilizes a 4”D (102 mm) particulate filter in combination with PUF filter cartridges. Optional software is available to download air-sampling data via an RS-232, or USB port. The software provides a monitoring report, file creation and setup via a laptop computer.

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GAS-604DTE-PUF Global Air Sampling System (220—240 VAC)

Performance:
Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 56 - 400 SLPM (2 – 14 SCFM). The standard filter holder has the dimensions 4”D (102 mm).

Technology: Microprocessor controlled state of the art electronics

Operating Temperature Range: 11ºF to 122ºF (-10ºC to 50ºC)

Typical Flow Rate Range:* 56 - 400 SLPM (2 – 14 SCFM).

Ultimate Vacuum: 22.2 kPa (89.21 inches H_2O)

Motor: Brushless: 1.5 H.P. (1100 Watt) motor with electronic motor speed control

Power Requirements: 220-240 VAC; 50/60 Hz; 6 amperes; single phase.

Housing: Powder coat painted aluminum
Removable hinged cover
Locking hinged cover
Locking swing door with key

Dimensions: 57.5”H × 21.5”W × 21.5”D (146H × 54,6W × 54,6 cm D)

Weight: Approximately 98 lbs. (44,5 kg)
Shipping Weight: Approximately 150 lbs. (68,2 kg)

Installation Category: Pollution Degree 3

Enclosure Rating: IPX3

Automatic Flow Control:
The system microprocessor monitors flow rate relative to the operator selectable preset Reference T and P corrected flow rate established during the setup procedure and electronically adjusts the electronic motor speed adjustment, if necessary, to maintain the flow within ± 3.0% of setting. The microprocessor computes the Reference flow rate by correcting the measured values of temperature and pressure to the reference values.

On-Board Measurement, Calculations and Other System Features

Measurements:
- Temperature of air flow through system
- Inlet pressure to the flow sensor
- Differential Pressure of the flow sensor
- Ambient pressure

Calculations/Determinations:
- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time
- Selectable ambient flow rate and volume

Optional Items:
- Optional data communications software to download data from instrument to PC after completion of sampling activity

Other System Features:
- Display of data in English or metric units by selection
- Automatic shut off of system on totalized volume or elapsed time
- Real time clock with battery backup
- Various data storage options
- Dual password protection
  Operator password
  System Administrator password
- Dual RS-232 communication ports
- Periodic sampling scenario based on periods within a week selectable by the user
- Vacuum Fluorescent Display; 4lines × 24 characters
- Operator Selectable Temperature & Pressure for data correction to standard condition.
- Utilization of 102mm D filter in combination with PUF filter cartridges