

JUNIOR ULTRA HIGH VOLUME GLOBAL AIR SAMPLERS GAS SERIES P/N: GAS-UHV300-4657-DTE (220 - 240 VAC)

F&J, the leader in advanced-technology air sampling systems for ambient environmental monitoring applications, is introducing a new technology product line of Junior ULTRA HIGH VOLUME AIR SAMPLERS!

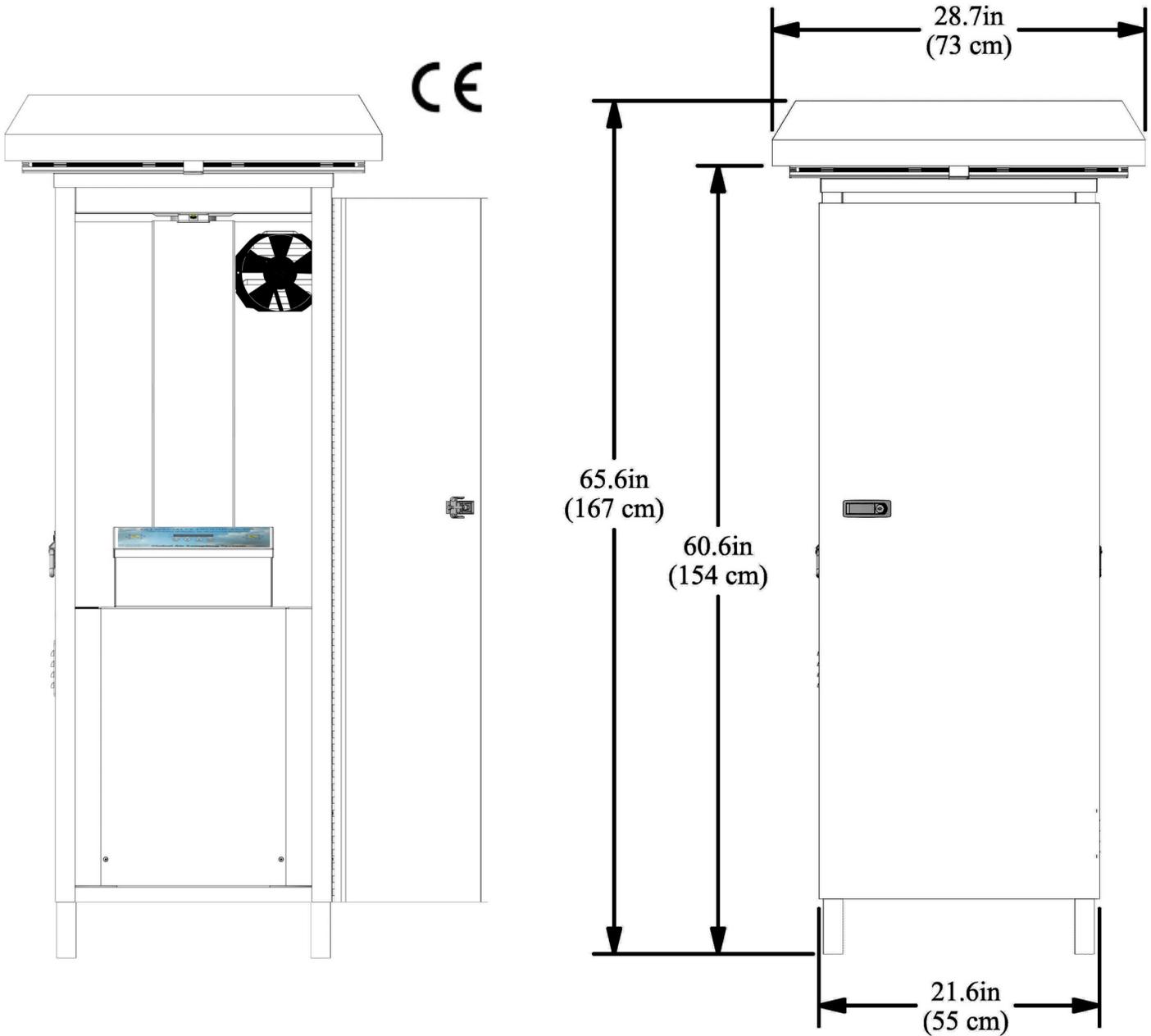
The Junior Ultra High Volume air samplers with Global Air Sampler (GAS) electronic flow management system technology brings forth the ultimate in end user customization and sampling mode options that has ever been combined into one reasonably priced commercial grade item. The flow rate accuracy is $\pm 3\%$ of Full Scale.



Flow rates greater than 235 CFM (400 m³/hr) can be achieved through glass fiber filter paper depending upon the filter dimensions and the line power frequency. The Junior Ultra High Volume air samplers enable air monitoring specialists to attain lower levels of detection for trace metals and lower levels of airborne radioactivity concentrations. Junior Ultra High Volume air samplers enable one to filter more than 330% greater air volumes per sample event than processed by the typical currently available standard high volume air samplers having a 60-70 CFM (100-120 m³/hr) maximum flow rate capacity.

Rev: 20 February 2025

GAS-UHV300-4657-DTE



**GAS-UHV300-4657-DTE
Front View Opened Door
Filter Media: 46cm x 57cm**

**GAS-UHV300-4657-DTE
Front View
Filter Media: 46cm x 57cm**

Performance:

Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 50 and 235 CFM (85 and 400 m³/hr). The standard filter holder has the dimensions 46cm × 57cm.

Technology: Microprocessor controlled state of the art electronics

Operating Temperature Range: 0°F to 122°F (-17°C to 50°C)

Typical Flow Rate Range: 50 – 235 CFM (85 to 400 m³/hr)
(Depending on filter paper dimensions and filter media air resistance)

Motor: Dual Brushless: 2.4 H.P. (1800 Watt) motor with electronic motor speed control

Power: 200-240VAC; 50/60Hz; 18 amperes; single phase.

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

Dimensions: 65.1”H × 28.2”W × 24.2”D (165,3H × 71.6W × 61.5 cm D)

Weight: Approximately 140 lbs. (63.5 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 motors speed adjustment. The microprocessor computes the Reference flow rate by correcting the measured values of temperature and pressure to the Reference T and P selected by the operator.

On-Board Measurement, Calculations and Other System Feature

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, Reference T and P*
- Current flow rate, Reference T and P*
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time
- Ambient flow rate and volume

* Operator selectable REF T and P

Data Acquisition Software:

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

P/N: GASdaq

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
- Utilization of 46cm × 57cm rectangular filters
- Vacuum Fluorescent or OLED Display; 4lines ×24 characters
- Inline calibration system

GAS-UHV300-4657-DTE GAS AIR SAMPLING SYSTEM

Global Air Sampler System

Junior Ultra

Voltage (AC), 1 Ph	200-240
Dimensions H×W×D (in) H×W×D (cm)	65.1”H × 28.2”W × 24.2”D (165,3H × 71.6W × 61.5 cm D)
Weight lbs. (kg)	130 lbs (59.0 kg)
Filter Dimension in (cm)	46cm x 57cm
Maximum Flow ^(a)	~235 CFM (400 m ³ /hr)
Flow Rate Accuracy	± 3% of Full Scale
^{a)} The maximum flow is dependent upon the dimensions, the air flow resistance properties of the filter media and the line power frequency.	
Max. Vacuum “H ₂ O (kPa)	90 (22)
Flow Regulator Type	Electronic
Motor Power, Type	Dual 1800 watt, Brushless
Frequency (Hz)	50/60
Power Requirement (watts at 240 VAC)	4320
Operating Temperature °C* (°F)*	-20to 50 (-7 to 122)
*warm start/continuous operation only for low temperature value	
Storage Temperature °C (°F)	-35 to 70 (-31 to 156)
IPX Rating	IPX3
Installation Category	Pollution Degree 3
Enclosure Protection	Powder Coat Paint
Noise Level @ 1 m (dBA)	85 dBA