



MEGA HIGH VOLUME GLOBAL AIR SAMPLERS GAS-60810-MHVE SERIES (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 MEGA HIGH VOLUME AIR SAMPLERS!

The Mega High Volume air samplers with Global Air Sampling (GAS) 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.

Flow rates as high as 170 CFM (289 m³/hr) can be achieved through glass fiber filter paper depending upon the filter dimensions. The Mega High Volume air samplers enable air monitoring specialists to attain lower levels of detection for trace metals and lower levels of airborne radioactivity concentrations. Mega High Volume air samplers enable one to filter more than 250% greater air volumes per sample event than processed by the currently available high volume air samplers having a 60-70 CFM (100-120 m³/hr) maximum flow rate capacity.

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Typical Maximum Flow Rates for GAS-60810-MHVE Series

Filter Paper (8" X 10")	Maximum Flow Rate (LPM)		Maximum Flow Rate (CFM)		Maximum Flow Rate (m ³ /hr)	
	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz
FP810	3099	2851	110	91.6	186	154.9
FP810M	4443	3701	157	130.7	267	222.4
GC508X10IN	2929	24.39	97	80.8	164	136.6
5211810	3540	2948	125	104.1	212	176.5
GC908X10	3240	2698	114	94.9	194	161.6
PG60	3297	2746	116	96.6	198	164.9
FP810M2	4817	4012	170	141.6	289	240.7
EPM2000	3212	2675	114	94.9	193	160.7
GA558X10IN	3901	3249	102	84.9	174	144.9
2064810	4437	3696	157	130.7	266	221.5



GAS-60810-MHVE Series



GAS-60810-MHVE Air Sampler Specifications

Performance:

Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 50 and 170 CFM (85 and 289 m³/hr). The standard filter holder has the dimensions 8"×10" (20.3×25.4 cm).

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 – 170 CFM (85 to 289 m³/hr)
(Depending on filter paper dimensions and filter media air resistance)

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

Power: 200-240VAC; 50/60Hz; 9 amperes; single phase.

Housing: Powder coat painted aluminum Locking hinged cover
Removable 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 ± 2.0% of setting for a flow range of 0.6 to 1.0 m³/min. The microprocessor computes the Reference flow rate by correcting the measured values of temperature and pressure to the

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

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 8"×10" (20.3×25.4 cm) rectangular filters
- Vacuum Fluorescent Display; 4lines ×24 characters

Data Acquisition Software:

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

MEGA HIGH VOLUME GAS AIR SAMPLING SYSTEM

Global Air Sampler System

	GAS-60810-MHVE
Voltage (AC), 1 Ph	200-240
Dimensions H×L×W (in)	74.5 × 28 × 28
H×L×W (cm)	189×71×71
Weight lbs. (kg)	98 (44.5)
Filter Dimension in (cm)	(20.3cm x 25.4cm)
Maximum Flow ^(a)	170 CFM (289 m ³ /hr)
^{a)} The maximum flow is dependent upon the dimensions and air flow resistance properties of the filter media.	
Max. Vacuum “H ₂ O (kPa)	90 (22)
Flow Regulator Type	Electronic
Motor Power, Type	1800 watt, Brushless
Frequency (Hz)	50/60
Power Requirement (watts)	1000
Operating Temperature °C (°F)*	-17 to 50 (0* 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 (db)	83