

Ambient Air Monitoring Systems 110 Volt





**DH-604V.2** 









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# DIGITAL AIR MONITORING SYSTEM MODEL DH-60810V.2

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- Flow rate accuracy with  $\pm 3\%$  of full scale
- Auto zero calibration feature of flow sensor
- Various sampling modes to select from
- Data storage up to 10,20,30 or 60 days
- Multiple on-board calculations with display
- ➢ Filter Holder 8"×10" (20.3cm ×25.4cm)
- ➤ 110 120VAC, 50/60Hz; single phase
- Vacuum Fluorescent Display; 2×24 characters
- Wide temperature range electronics





## **GENERAL DESCRIPTION:**

The DH-60810V.2 Series Air Sampling Systems are designed for remote unattended continuous air sampling applications. The DH-60810V.2 Series Air Samplers feature a brushless motor with electronic motor speed control that maintains a user selectable flow rate. The flowrate range attainable through the filter media is dependent upon the air porosity of the filter media. The DH-60810V.2 Series design accommodates rapid field service and component replacement.

The basic components of the system are assembled in a modular fashion so that each component can be readily and independently removed for service.

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 DH-60810V.2 Series provides a standard flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined venturi. The controller can be readily set to any sampling flow rate between 20 and 70 CFM (560-1980 LPM) depending on the filter paper air resistance and dimensions. The bright VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The filter holder can be custom designed to accommodate any filter size and type. The DH-60810 model utilizes an  $8^{"}\times10^{"}$  (20.3×25.4cm) filter. Optional software is available to download air-sampling data via an RS-232 port. The software provides a monitoring report, file creation and setup via a laptop computer.

Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 20 and 70 CFM (560 and 1980 LPM). Filter holder is a 8"×10 (20.3×25.4cm) diameter standard.

Technology: Microprocessor contr		olled state of the art electronics		
<b>Operating Temperature Range:</b>		-31°F to 122°F (-35°C to 50°C)		
Typical Flow Rate Range:		20 – 70 CFM (560 to 1980 LPM) (Depending on filter paper dimensions and air resistance)		
Motor:	Brushless: 1 H.P.(800 Watt) motor with electronic motor speed control			
Power:	110-120VAC; 50/60Hz; 5 amperes; single phase.			
Housing:	Powder coat painted aluminum Removable hinged cover		Locking hinged cover Locking swing door with key	
Dimensions:	$57.5"H \times 21.5"W \times 21.5"D$		(146cmH×54.6cmW×54.6cmD)	
Weight:	Approximately 98 lbs. (44.5 Kgs.)			
Shipping Weight:	Approximately 150 lbs. (68.2 Kgs.)			
Installation Category	y: Polluti	on Degree 3		
<b>Enclosure Rating:</b>	IPX3			

#### **Automatic Flow Control:**

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the electronic motor speed adjustment, if necessary, to maintain the flow within  $\pm$  3% of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure.

## **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

#### **Calculations/Determinations:**

- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time

#### **Optional Items:**

- Optional data communications software to download data from instrument to PC or PDA after completion of sampling activity
- Reusable wooden transportation crate

#### **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
- Records up to 10, 20, 30 and 60 days of sampling data
- Dual password protection Operator password System Administrator password
- ▶ RS-232 port for communication with computer
- Periodic sampling scenario based on periods within a week selectable by the user
- ➢ Utilization of 8"×10" (20.3×25.4cm) diameter filters
- Vacuum Fluorescent Display; 2×24 characters



## **F&J SPECIALTY PRODUCTS, INC.** *The Nucleus of Quality Air Monitoring Programs*

# DIGITAL AIR MONITORING SYSTEM DH-604V.2

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- > Flow rate accuracy with  $\pm$  3% of full scale
- Auto zero calibration feature of flow sensor
- Various sampling modes to select from
- Data storage up to 10,20,30 or 60 days
- Multiple on-board calculations with display
- ➢ Filter Holder 4" (102mm) diameter
- ➤ 110 120VAC, 50/60Hz; single phase
- Vacuum Fluorescent Display; 2×24 characters
- Wide temperature range electronics

## **GENERAL DESCRIPTION:**

The DH-604V.2 Series Air Sampling Systems are designed for remote unattended continuous air sampling applications. The DH-604V.2 Series Air Samplers feature a brushless motor with electronic motor speed control that maintains a user selectable flow rate. The flowrate range attainable through the filter media is dependent upon the air porosity of the filter media. The DH-604V.2 Series design accommodates rapid field service and component replacement.

The basic components of the system are assembled in a modular fashion so that each component can be readily and independently removed for service.

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 DH-604V.2 Series provides a standard flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined venturi. The controller can be readily set to any sampling flow rate between 20 and 50 CFM (560-1415 LPM) depending on the filter paper air resistance and dimensions. The bright VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The filter holder can be custom designed to accommodate any filter size and type. The DH-604 model utilizes a 4" (102mm) diameter filter. Optional software is available to download air-sampling data via an RS-232 port. The software provides a monitoring report, file creation and setup via a laptop computer.



Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 20 and 50 CFM (560 and 1415 LPM). Filter holder is a 4" (102mm) diameter standard.

Technology: Mic		Microprocessor contro	Aicroprocessor controlled state of the art electronics		
<b>Operating Temperature Range:</b>		-31°F to 122°F (-35°C to 50°C)			
Typical Flow Rate Range:		20 – 50 CFM (560 to 1415 LPM) (Depending on filter paper dimensions and air resistance).			
Motor:	Brushless: 1 H.P. (800 watt) motor with electronic motor speed control				
Power:	110-120VAC; 50/60Hz; 5 amperes; single phase.				
Housing:	Powder coat painted aluminum Removable hinged cover		Locking hinged cover Locking swing door with key		
Dimensions:	$57.5"H \times 21.5"W \times 21.5"D$		(146cmH×54.6cmW×54.6cmD)		
Weight:	Approximately 98 lbs. (44.5 Kgs.)				
Shipping Weight:	Approximately 150 lbs. (68.2 Kgs.)				
Installation Categor	y: Polluti	on Degree 3			
<b>Enclosure Rating:</b>	IPX3				

## Automatic Flow Control:

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the electronic motor speed adjustment, if necessary, to maintain the flow within  $\pm$  3% of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure.

# 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

## **Calculations/Determinations:**

- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time

## **Optional Items:**

- Optional data communications software to download data from instrument to PC or PDA after completion of sampling activity
- Reusable wooden transportation crate

- 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
- Records up to 10, 20, 30 and 60 days of sampling data
- Dual password protection
   Operator password
   System Administrator password
- ► RS-232 port for communication with computer
- Periodic sampling scenario based on periods within a week selectable by the user
- Utilization of 4" (102mm) diameter filters
- Vacuum Fluorescent Display; 2×24 characters



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# DIGITAL AIR MONITORING SYSTEM MODEL DH-50810V.2

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- > Flow rate accuracy with +/-4% of full scale
- Auto zero calibration feature of flow sensor
- Various sampling modes to select from
- Data storage up to 10, 20, 30 & 60 days
- Multiple on-board calculations with display
- ➢ Filter Holder: 8"×10" (20.3×25.4cm)
- > 100-120VAC; 50/60Hz; 7.2 Amp; single phase
- Vacuum Fluorescent Display(VFD): 2×24 characters



## **GENERAL DESCRIPTION:**

The DH-50810V.2 Series Air Sampling Systems are designed to provide reliable continuous air sampling. It features a controller that maintains the flow rate of sample air constant at a selectable value – typically 40 to 50 CFM through the filter medium. TheDH-50810 Series with optional heating systems are designed for subzero temperature operation at remote sampling locations.

The DH-50810V.2 Series design accommodates rapid field service and component replacement. The basic components of the system are assembled in a modular fashion so that each component can be readily and independently removed for service.

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. Also lockable latch on the top cover restricts unauthorized tampering with the filter holder.

The electronic flow control measurement sub-system of the DH-50810V.2 Series provides a standard flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined venturi. The controller can be readily set to any sampling flow rate between 20 and 70 CFM depending on the filter paper air resistance and dimensions. VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The filter holder can be custom designed to accommodate any filter size and type. The standard model is for commonly used 8"×10" filters. Optional software is available to download air-sampling data via a RS-232 port. The software provides a monitoring report, file creation and setup via a laptop computer.

Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 20 and 70 CFM (560 and 1980 LPM). Filter holder is 8"×10" (20.3cm×25.4cm)standard; The unit can be customized for other sizes.

**Technology:** Microprocessor controlled state of the art electronics

Temperature Operating Range:		-31° to 122°F	(-18 to 50°C)	
Storage Temperature Range:		0 to 158°F	(-18 to 70°C)	
Typical Flow Rate Range:		20 – 70 CFM (Depending on	(560 – 1980 LPM) filter paper dimensions and air resistance).	
Motor:	Brushless regenerative blower. 1 H.P. motor			
Power:	100-120VAC; 50/60Hz; 7.2 amperes; single phase. A 40-amp breaker is recommended for startup of the motor.			
Housing:	Powder coat painted aluminum Removable hinged cover		uminum er	Locking swing door with key Locking hinged cover
Dimensions:	48"H × 3	30''W × 20''D	(122cr	mH×76.2cmW×50.8cmD)
Weight:	Approximately 190 lbs. (96.4 Kgs.)			
Shipping Weight:	Approximately 300 lbs. (136 Kgs.)			
Installation Categor Enclosure Rating:	y: I	Pollution Degr PX3	ree 3	

#### **Automatic Flow Control:**

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the position of the bypass valve, if necessary, to maintain the flow within  $\pm 4\%$  of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure. Utilization of a bypass valve flow control system enables the motor to always pump the maximum flow through the system without voltage reduction to the motor, which promotes longer motor life.

## **On-Board Measurements, Calculations and other System Features**

#### **Measurements:**

- > Temperature of air flow through system
- ➢ Inlet pressure to the flow sensor
- Differential Pressure of the flow sensor

#### **Calculations/Determinations:**

- Totalized volume, STP
- ➢ Current flow rate, STP
- $\geq$ Minimum and maximum temperature
- $\geq$ Minimum and maximum inlet pressure
- ➢ Elapsed time

### **Optional Items:**

- Optional data communications software to download data from instrument to PC after completion of sampling activity
- > Thermostatically controlled ceramic heater for enclosure
- Reusable wooden transportation crate
- Adapter to convert 8"×10" filter geometry to 4"  $\geq$

## **Other System Features:**

- Display of data in English or metric units by  $\triangleright$ selection
- $\geq$ Automatic shut off of system on totalized volume or elapsed time
- $\triangleright$ Real time clock with battery backup
- Records up to 10,20,30 or 60 days of sampling  $\geq$ data
- Dual password protection Operator password System Administrator password
- ▶ RS-232 port for communication with computer
- > Periodic sampling scenario based on periods with an hour or within a week selectable by the user
- Utilization of 8"×10" (20.3cm×25.4cm) filters  $\geq$
- Thermostatically controlled dual 250 cfm exhaust  $\geq$ fans
- ► Vacuum Fluorescent Display: 2×24 characters

# (102mm) diameter geometry. **F&J SPECIALTY PRODUCTS, INC.** TEL: 352/680.1177 / FAX: 352/680.1454 / EMAIL: fandj@fjspecialty.com



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# DIGITAL AIR MONITORING SYSTEM MODEL DH-504V.2

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- Flow rate accuracy with +/- 4% of full scale
- Auto zero calibration feature of flow sensor
- Various sampling modes to select from
- Data storage up to 10,20,30 or 60 days
- Multiple on-board calculations with display
- Filter Holder 4" (102mm) diameter
- ➤ 100 120VAC, 50/60Hz; single phase
- Vacuum Fluorescent Display (VFD): 2×24 characters

## **GENERAL DESCRIPTION:**

The DH-504V.2 Series Air Sampling Systems are designed to provide reliable continuous air sampling. It features a controller that maintains the flow rate of sample air constant at a selectable

value – typically 20 to 50 CFM through the filter medium depending on the air porosity of the filter media. The DH-504V.2 Series with optional heating systems are designed for subzero temperature operation at remote sampling locations.

The DH-504V.2 Series design accommodates rapid field service and component replacement. The basic components of the system are assembled in a modular fashion so that each component can be readily and independently removed for service.

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 DH-504V.2 Series provides a standard flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined venturi. The controller can be readily set to any sampling flow rate between 10 and 50 CFM depending on the filter paper air resistance and dimensions. VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The filter holder can be custom designed to accommodate any filter size and type. TheDH-504V.2 model utilized a 4" (102mm) diameter filter. Optional software is available to download air-sampling data via an RS-232 port. The software provides a monitoring report, file creation and setup via a laptop computer.



Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 20 and 50 CFM (560 and 1415 LPM). Filter holder is a 4" (102mm) diameter standard; the unit can be customized for other sizes.

Technology:		Microprocessor controlled state of the art electronics	
<b>Operating Temperature Range:</b>		-31° to 122°F	(-35° - 50°C)
Storage Temperature Range:		0 to 158°F	(-18 – 70°C)
Typical Flow Rate Range:		20 – 50 CFM (560 – 1415 LPM) (Depending on filter paper dimensions and air resistan	
Motor:	Brushless regenerative blower. 1 H.P. motor		
Power:	100-120VAC; 50/60Hz; 9 amperes; single phase. A 40-amp breaker is recommended for startup of the motor.		
Housing:	Powder coat painted aluminu Removable hinged cover		m Locking swing door with key Locking hinged cover
Dimensions:	$48$ "H $\times$ 30"W	× 20"D	(122cmH×76.2cmW×50.8cmD)
Weight:	Approximately 175 lbs. (79.5 Kgs.)		
Shipping Weight: Installation Category	ht:Approximately 300 lbs. (136 Kgs.)tegory:Pollution Degree 3		
Enclosure Rating:	IPX3		

#### Automatic Flow Control:

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the position of the bypass valve, if necessary, to maintain the flow within  $\pm 4\%$  of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure. Utilization of a bypass valve flow control system enables the motor to always pump the maximum flow through the system without voltage reduction to the motor, which promotes longer motor life.

## **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

#### **Calculations/Determinations:**

- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time

#### **Optional Items:**

- Optional data communications software to download data from instrument to PC after completion of sampling activity
- Thermostatically controlled ceramic heater for enclosure
- Convertible to 8"×10" (20.3cm×25.4cm)filter holder > Vacuum Fluore sampling system
  F&J SPECIALTY PRODUCTS, INC.

#### **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
- Records up to 10, 20, 30 and 60 days of sampling data
- Dual password protection Operator password System Administrator password
- ▶ RS-232 port for communication with computer
- Periodic sampling scenario based on periods with an hour or within a week selectable by the user
- Utilization of 4" (102mm) diameter filters
- Reusable wooden transportation crate
- Vacuum Fluorescent Display; 2×24 characters

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# DIGITAL AIR MONITORING SYSTEM DH-804V.2 for Emergency

**Preparedness** 

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- Flow rate accuracy with  $\pm$  3% of full scale
- Auto zero calibration feature of flow sensor
- Various sampling modes to select from
- $\blacktriangleright$  Data storage up to 10,20,30 or 60 days
- Multiple on-board calculations with display
- ▶ Filter Holder 4" (102mm) diameter
- ▶ 110 120VAC, 50/60Hz; single phase
- Vacuum Fluorescent Display; 2×24 characters
- Wide temperature range electronics
- > Lightweight

## **GENERAL DESCRIPTION:**

A lightweight semi-portable environmental high volume air sampling system designed for emergency monitoring activities to determine ambient air pollutants. The unit is field assemblable after site location.

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 stainless steel rain cover 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 door restricts unauthorized tampering with the controls.

The electronic flow control measurement sub-system of the DH-804V.2 Series provides a standard flow measurement and a constant flow of air through the filter medium. The air velocity is measured by a precision-machined venturi. The controller can be readily set to any sampling flow rate between 20 and 50 CFM depending on the filter paper air resistance and dimensions. The bright VFD readout displays multiple air sampling information including current flow rate, average flow rate, current temperature and totalized volume. The filter holder can be custom designed to accommodate any filter size and type. The DH-804V.2 model utilized a 4" (102mm) diameter filter. Optional software is available to download air-sampling data to a PC or PDA via an RS-232 port. The PC software provides a monitoring report, file creation and setup via a laptop computer.

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Basic components of the system are modular and independently serviceable. Sample flow rate can be set between 20 and 50 CFM (560 and 1415 LPM). Filter holder is a 4" (102mm) diameter standard.

Technology:		Microprocessor controlled state of the art electronics		
<b>Operating Temperature Range:</b>		-31°F to 122°F (-35°C to 50°C)		
Typical Flow Rate Range:		20 – 50 CFM (560 – 1415 LPM) (Depending on filter paper dimensions and air resistance)		
Motor:	Brushless: 1 H.P. motor			
Power:	110-120VAC; 50/60Hz; 9 amperes; single phase.			
Housing:	Powder coat painted aluminum Locking swing door with key			
Dimensions:	$26"H \times 26.5"W \times 16"D$		(66cmH×67cmW×41cmD)	
Weight:	Approximately 60 lbs. (27.2 Kgs.)			
Shipping Weight:	Approximatel	y 100 lbs. (45.5 Kgs.)		
Installation Categor Enclosure Rating:	y: Polluti IPX3	on Degree 3		

#### **Automatic Flow Control:**

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the electronic motor speed adjustment, if necessary, to maintain the flow within  $\pm$  3% of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure of the air flowing through the venturi flow sensor.

## **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

## **Calculations/Determinations:**

- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- ➢ Elapsed time

## **Optional Items:**

- Optional data communications software to download data from instrument to PC or PDA after completion of sampling activity
- Reusable wooden transportation crate

## **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
- Records up to 10, 20, 30 and 60 days of sampling data
- Dual password protection Operator password System Administrator password
- ▶ RS-232 port for communication with computer
- Periodic sampling scenario based on periods within a week selectable by the user
- Utilization of 4" (102mm) diameter filters
- Vacuum Fluorescent Display; 2×24 characters



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## MICROPROCESSOR CONTROLLED HIGH VOLUME AIR SAMPLING SYSTEM DH-30V.2

## **NOTABLE FEATURES:**

- Precision machined venturi flow sensor
- Microprocessor controlled electronics
- Flow rate measurement and volume corrected to STP
- Display in English or metric units
- Programmable chain of custody identification
- RS-232 communication port
- ► Flow rate accuracy with +/- 4% of full scale
- Auto-zero calibration feature of flow sensor
- Various sampling modes to select from
- Data storage up to 10 days
- > Multiple on-board calculations with display
- Filter Holder: Standard 15cm diameter enzyme dust sampling design
- ▶ 100-120VAC; 50/60Hz; single phase
- Vacuum Fluorescent Display; 2×24 characters
- Wide temperature range electronics



## **GENERAL DESCRIPTION:**

The model DH-30V.2 High Volume Enzyme Dust Air Sampling System incorporates a low maintenance single-phase 110VAC; 50/60Hz brushless regenerative blower and state-of-the-art microprocessor controlled electronics. It will perform measurements, automatically control flow rate, perform on-board calculations and automatically shut off the unit after a preset totalized sample volume has been collected or prescribed sampling time has elapsed. All flow rate and volume measurements are corrected to Standard Temperature and Pressure (STP).

The unit is mounted on a rugged portable stand and supplied with a cover plate and filter box designed for a 15cm diameter particulate filter. The DH-30V.2 system has the flexibility to be operated locally or via a PC through the RS-232 serial port. Remote communications with the system via a host PC is optional. Data may be downloaded via the RS-232 serial port to a PC or IPAQ PDA utilizing optional software including a report and graphical representation of the data on the PC. Local operation is implemented via a four-button keypad and a two line x 24-character VFD display.

Standard configuration is designed for Enzyme Dust Sampling applications. May be utilized for sampling of internal industrial air environment

Technology:	Microprocessor controlled state of the art electronics			
Temperature Operating Range:		0° to 122°F	(-18° to 50°C)	
Typical Flow Rate Range:		15 – 30 CFM; Dependent upon filter type and filter dimension being utilized		
Motor:	Brushless regenerative blower. 1 H.P. motor			
Power:	100-120VAC; 50/60Hz; 9 amperes; single phase A 40 amp breaker is recommended for start up			
Dimensions:	19"L × 17"W × 60"H (to top of particulate holder) [48.3 × 43.2 × 152 cm]			
Weight:	Approximatel	y 84 lbs.	(38.2 Kgs.)	
Shipping Weight:	Approximatel	y 120 lbs.	(54.5 Kgs.)	
Installation Categor	y: Polluti	ion Degree 2		

#### **Automatic Flow Control:**

The system microprocessor monitors flow rate relative to the preset STP flow rate established during the setup procedure and electronically adjusts the position of the bypass valve, if necessary, to maintain the flow within +/-4% of setting. The microprocessor computes the STP flow rate by correcting for temperature and pressure. Utilization of a bypass valve flow control system enables the motor to always pump the maximum flow through the system without voltage reduction to the motor, which promotes longer motor life.

## **On-Board Measurements, Calculations and other System Features**

#### **Measurements:**

- > Temperature of air flow through system
- Inlet pressure to the flow sensor
- Differential Pressure of the flow sensor

#### **Calculations/Determinations:**

- Totalized volume, STP
- Current flow rate, STP
- Minimum and maximum temperature
- Minimum and maximum inlet pressure
- Elapsed time

#### **Optional Items:**

- Optional data communications software to download data from instrument to PC after completion of sampling activity
- Convertible to 8"×10" filter holder sampling system

## **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
- Records up to 10,20,30 and 60 days of sampling data
- Dual password protection Operator password
   System Administrator password
- ▶ RS-232 port for communication with computer
- Periodic sampling scenario based on periods with an hour or within a week selectable by the user
- VFD Display; 2×24 characters
- Wide temperature range electronics

# **Fast & Friendly Customer Service**

Ordering by phone (352) 680-1177 / 680-1178



**For your convenience MasterCard, Visa & American Express** 





Ordering by Fax (352) 680-1454



Technical Assistance (352) 680-1177

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