

FORMALDEMETER htV

PORTABLE DIRECT READING FORMALDEHYDE MONITOR



FEATURES

- Easy to use – minimal training required
- Rapid response time
- Small, hand-held instrument
- Light-weight
- Built-in sampling pump
- Standard 9V alkaline battery operation
- Temperature and humidity can also be displayed
- Reliable electrochemical sensor
- Simple in-field calibration
- Optional Base Unit for continuous monitoring

APPLICATIONS

Formaldehyde is a common contaminant found in new construction, residential housing and commercial buildings following renovation. It is used in many products, industries and other types of activities, including:

Textile treatment	Paper products
Medical labs	Biological
Laminated boards	Dye stuffs
Pharmaceuticals	Particle boards
Synthetic resins	Commercial buildings
Horticulture	Cosmetics
Paints	Residential construction
Mortuaries	Hospitals

The Formaldemeter htV offers a simple way to monitor levels of airborne formaldehyde in the environment. The instrument is easy to use with a simple four-button keypad and features an easy-to-read four-digit display. It employs a well-proven electrochemical formaldehyde sensor that will provide an immediate indication of formaldehyde levels. Unlike other formaldehyde monitoring devices, such as, color stain tubes and badges, the Formaldemeter htV is capable of measuring many samples consecutively without the need for inconvenient ancillary equipment. Real-time results also mean that potential overexposures can be identified as they occur, without the delay and expense associated with laboratory analysis.

Also available, the Glutaraldemeter 3, for glutaraldehyde monitoring.

SPECIFICATIONS

Sensor:	Electrochemical
Calibration:	In-field formaldehyde calibration standard
Display:	4-digit LCD
Sampling Frequency:	Typically once every 3 to 5 minutes depending on previous reading
Sample Volume:	Approx. 10 ml
Detection Range:	0.05-10 ppm (optional high range: 80 ppm)
Precision:	10% at 2 ppm level
Response Time:	<10 seconds
Temperature:	By key interrogation, displayed in degrees C
Humidity:	By key interrogation, displayed in % rH
Power:	9 volt alkaline battery
Enclosure:	ABS plastic
Weight:	Instrument: 10 ounces (310g) Complete Kit: 1.75 lbs. (795g)
Dimensions:	Instrument: 6 x 3.25 x 1.25 inches (150 x 80 x 32 mm) Carrying Case: 10.5 x 8.5 x 2 inches (265 x 215 x 50 mm)



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Sampling

- Press the ON-OFF button.
- The display will show "----" followed by "0.00" (sensor ready).
- Press the SAMPLE button.
- The display will show "run", followed by the sound of the pump sampling the air.
- The display indicates the measured concentration in approx. 10 seconds.
- Switch the instrument OFF. (Instrument will automatically shut OFF after 5 minutes).

High levels, i.e., over 1 ppm, can take at least 5 minutes to "clear" from the sensor. If formaldehyde is detected, wait 3-5 minutes before turning instrument ON for next sample. To take another sample, repeat the above steps.

Retrieval of Stored Data - instrument automatically stores the last ten readings.

- With the SAMPLE button depressed, press the ON-OFF button and then release.
- Instrument will display "HEAT" followed by the temperature in "C", alternating with humidity in "%rh".
- With the instrument in this mode, press both CAL buttons simultaneously until the display shows "dAtA".
- Release the buttons.
- The display will show "run0" followed by the result of the last sample.
- Scroll the last ten results using the CAL buttons.

CROSS SENSITIVITY CHART

Compound	ppm to = 1 ppm reading
Acetone	No Response
Acetaldehyde	8-12
Acetic acid	No Response
Ammonia	71000
Butanol	Note (2)
Carbon monoxide	100
Ethylene	160
Ethanol	12-20
Formaldehyde	1.0
Glutaraldehyde	7100 at 25° C, Note (3)
Methanol	50
Phenol	5, Note (1)
Propanol	Note (2)
Resorcinol	5, Note (1)

Notes:

- (1) Completely removed with filter provided
- (2) Interference above 60° C and 20 ppm
- (3) Monitor with Glutaraldehyde 3



Instrument Kit

ACCESSORIES AND REPLACEMENT PARTS

Phenol Filters (supplied with instrument kit)

These filters can be used, when necessary, for the removal of phenol and resorcinol.

Calibration Standard (supplied with instrument kit)

The calibration standard is a tube which produces a known concentration of formaldehyde vapor for testing and, if necessary, adjusting the accuracy of the monitor. The standard has a 100-sample capacity or a useful life of six months, whichever occurs sooner.

OPTIONS

AMS-2 Base Unit

The Base Unit automates operation of the Formaldemeter htV for semi-continuous sampling. Monitoring of all three parameters (formaldehyde, temperature, and humidity) is possible with the AMS-2, giving real-time data and alarm (TWA/STEL) levels. A built-in printer provides a record of the results. All data is stored and can be downloaded to a PC via RS-232 and available download software.

AMS-2/htV Download Software

Data logged into the AMS-2 can be viewed on the LCD and outputted to the integral printer. If required, the data can be downloaded to most PC based spreadsheets using the AMS-2/htV Download Software.

ORDERING INFORMATION

Part No.	Description
02700-100	Instrument Kit, with Formaldemeter htV, 10 phenol filters, thermometer, pen, calibration standard, instruction manual and case.
02710-000	Instrument Kit, with Glutaraldehyde 3, 10 phenol filters, thermometer, pen, calibration standard, instruction manual and case.
02700-251	Optional data logging station, Model AMS-2 Base Unit for htV
02700-256	Optional PC download software for AMS-2/htV
02700-001	Formaldehyde Calibration Standard, typical life 6 to 12 months
02710-001	Glutaraldehyde Calibration Standard, typical life 6 to 12 months
02700-002	Replacement Phenol Filters, pack of 10
02700-003	Replacement Formaldehyde Sensor, typical life 3-4 years

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

