



Portable Calibration Equipment

Description

The General Monitors Portable Calibration Chamber and Portable Purge Calibrator are practical and safe instruments for field calibration of combustible gas monitoring systems.

Sensors do not need to be removed and a known gas/air mixture can be applied to the sensor, reducing the possibility of calibration error.

For calibrating to butadiene, butane, ethane, hydrogen, methane, and propane, we recommend the use of the Portable Purge Calibrator.

If a sensor guard is installed, e.g. Splash Guard or Dust Guard, this should be left in position when using either the Calibration Chamber or Purge Calibrator. Refer to the appropriate General Monitors Instruction Manual for calibration procedures.



Portable Purge Calibrator

The Portable Purge Calibrator is a compact, accurate and safe system containing no explosive gas. The lecture bottle is filled with a gas/air mixture below the Lower Explosive Limit. (Standard mixture is 50% LEL). Using a known gas/air mixture reduces the possibility of error in field calibration, and the hose and cup adapter permits calibration without removing sensors or their attachments.

Please refer to the appropriate General Monitors Instruction Manual for calibration procedures.

The following premixed calibration gases at approximately 50% LEL are available at 1200 psia, 8.3 MPa maximum pressure:

Butadiene (BD)	C_4H_6
Butane (B)	C_4H_{10}
Ethane (E)	C_2H_6
Hydrogen (H)	H_2
Methane (M)	CH_4
Propane (PR)	C_3H_8

Other gases and concentrations are also available. Please consult your local General Monitors representative for further information.

Order Information

	Part No.
Complete Unit	1400150-X
Spare gas bottles	1400155-X

(Methane and hydrogen bottles may be returned for refilling; please specify gas required by abbreviation listed to the left. X = Specify gas required.)

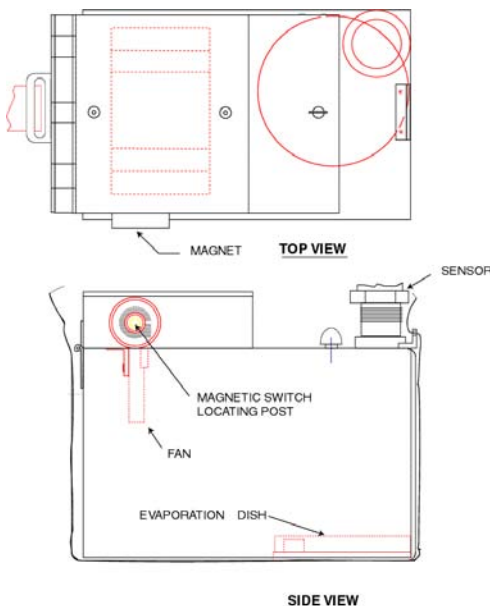


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Portable Calibration Chamber

The Portable Calibration Chamber is a 3 liter sample chamber with an intrinsically safe battery powered mixing fan. A porthole allows the chamber to be placed on the sensor for calibration. A syringe is included for accurate measurement of the volatile test liquid. After injection onto the evaporation dish, the lid is fastened quickly to contain vapors in the chamber. Placing the round General Monitors magnet onto the start switch locating post operates the fan. Please refer to the appropriate General Monitors Instruction Manual for Calibration Procedures.

Sensors should be calibrated to a specific vapor for greatest accuracy. A hydrocarbon sensor calibrated for 50% LEL Acetone, for example, will detect all hydrocarbons and most combustible solvent vapors. It will ONLY accurately read the % LEL of Acetone. The indicated measures of volatile liquids in the following table produce 50% LEL vapor mixtures at 25°C temperature and standard pressure when mixed with air in the Portable Calibration Chamber.



To prevent ignition of a hazardous atmosphere, batteries must be changed in an area known to be non-hazardous. The following "C" batteries are approved for replacement purposes:

	Mfg. Part #
Duracell	MN1400
Panasonic	AM2X

Liquid/Vapor	Formula	50% LEL
Acetaldehyde	C ₂ H ₄ O	136µL
Acetone	C ₃ H ₆ O	112µL
Amyl Acetate	C ₇ H ₁₄ O ₂	100µL
Amylamine	C ₅ H ₁₃ N	156µL
Butyl Acetate	C ₆ H ₁₂ O ₂	137µL
Butyl Alcohol	C ₄ H ₁₀ O	78µL
Butyl Cellosolve	C ₆ H ₁₄ O ₂	88µL
Cyclohexane	C ₆ H ₁₂	86µL
Diethyl Benzene	C ₁₀ H ₁₄	96µL
Diisobutyl Ketone	C ₉ H ₁₈ O	82µL
Ether, Ethyl	C ₄ H ₁₀ O	120µL
Ethanol (Ethyl Alcohol)	C ₂ H ₆ O	118µL
Ethyl Acetate	C ₄ H ₈ O ₂	119µL
Ethylbenzene	C ₈ H ₁₀	60µL
Gasoline 100 Oct.	C ₇ H ₁₆	107µL
Heptane, Normal	C ₇ H ₁₆	94µL
Hexane, Normal	C ₆ H ₁₄	86µL
Isopropyl Ether	C ₆ H ₁₄ O	120µL
JP-4 Jet Fuel		183µL
MEK	C ₄ H ₈ O	76µL
Methanol	CH ₃ OH	148µL
Naptha (Petr. Ether)		96µL
Pentane, Normal	C ₅ H ₁₂	105µL
Propanol	C ₃ H ₆ O	100µL
2-Propanol	C ₃ H ₈ O	93µL
Propyl Acetate	C ₅ H ₁₀ O ₂	107µL
Propylamine	C ₃ H ₉ N	103µL
Propylbenzene	C ₉ H ₁₂	68µL
Styrene	C ₈ H ₈	63µL
Tetrahydrofuran	C ₄ H ₈ O	99µL
Tetrahydrofurfuryl alcohol	C ₅ H ₁₀ O ₂	89µL
Toluene	C ₇ H ₈	78µL
Triethylamine	C ₆ H ₁₅ N	102µL
Vinyl Ethyl Ether	C ₄ H ₈ O	99µL
Xylene	C ₈ H ₁₀	68µL

Order Information

Item	Part No.
Complete Unit	10543-1
Lid/Motor Assembly	10542-1
Grommet	14-00-206
Fan Blade	14-00-207
Carrying Strap	914-035
Dish	928-700
250 ml syringe	928-715
Magnet	30060-1

Specifications subject to change without notice.

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