

3M™ Multi-Gas Detector 950 Series

Versatile Safety

The 3M™ Multi-Gas Detector 950 Series helps take the worry out of workplace monitoring by providing fast, reliable information on the selected target gases. The 3M 950 detector can detect up to five gases simultaneously, and can be used with the powerful 3M Know Your Air software - the software can be used to customize the detector setting to your specific application, download, analysis, and generate reports for up to 5 months of stored data.

Speed and Convenience

The 3M 950 detector allows the user to instantly install any 5 of the 18 available sensors, reducing the need for purchasing and maintaining more gas detectors. With the ability to accept any of 18 3M Smart sensors in just seconds, it can help save time and money, and increases your ability to adapt to changing conditions fast.

Portable and Tough

The 3M 950 detector is ideal for industrial work sites or confined spaces where monitoring air quality is the first priority.

- Measures over 100 different gases (with the inclusion of the PID Smart Sensor)
- Available with built-in pump for remote air sampling
- Sensors may be “plugged” into any sensor port or socket
- Large LCD readout for 5 sensors
- LCD includes “Information Section”
- ABS plastic case with a “rubber” over-mold that helps absorb everyday impacts and protects internal components from contaminants



HCN

Cl₂

O₂

CO

PH₃

H₂S

NH₃

3M™ Multi-Gas Detector 950 Series

Power/Select Yes Button

1

Used for turning the 3M 950 Detector ON and OFF, accessing download menu, silencing alarms, warnings and responding "YES" to questions.

Calibrate/No/Up Arrow Button

2

Used for starting calibration and "down" arrow when changing settings.

Peaks/Down Arrow Button

3

Used for accessing Peak menu and "down" arrow when changing settings.

Power Jack

4

Uses universal 110 V AC power supply or 12 Volt Vehicle Wiring Kit.

LCD Readout

5

Large easy to read digital display.

IR Window

6

Quickly transfers data logging information.

103 dBA Buzzer

7

Loud audible warning.

Dual Color LEDs

8

Brilliant red or amber light for visual warnings.

Pump Sampling Inlet

9

Used for collecting air sample.

Belt Fastener and Loop

10

Holds secure to clothing when worn on job sites. D-ring is used to lower unit into confined spaces.



ClO₂

CH₄

H₂

CH₃SH

C₅H₁₂

SO₂

MOS

PID

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Standard Features and Accessories

SPECIFICATIONS	
Display	Large LCD with designated line for each sensor reading
Battery	3M rechargeable Alkaline (AA batteries) or 3M rechargeable Nickel Metal Hydride (NiMH)
Operating Time	Alkaline: 24 hours (diffusion), 16 hours (with pump), NiMH: 16 hours (diffusion), 12 hours (with pump)
Alarms/Indicators	LED; Audible: 103 dB @ 1 ft.
Sensors	Electrochemical, Catalytic Bead, Metal Oxide Semiconductor, PID
Operating Temperature	-4 °F to 122 °F (-20 °C to 50 °C) – may vary depending on sensor
Operating Humidity	15% to 90% non-condensing
Hazardous Area Rating	Intrinsically safe – Class 1, Division 1, Groups A, B, C and D; T3; CSA Approved
Dimensions	5.94" x 5.2" x 2.8" (15.09 cm x 13.21 cm x 7.11 cm)
Weight	21 oz (550 g) without pump; 22.9 oz (650 g) with pump
Radio Frequency Protection	<10% deviation of alarm level when subjected to 450 MHz, 5 watt radio at 2 feet
Warranty	2 years on hardware and CO, OX, EX and HS sensors; 1 year on all other sensors

Accessories Included with Purchase

- Comprehensive printed and CD manual
- Heavy-duty belt clip
- Dual cal/pump hood
- 16 feet (4.88 meters) tubing (with pump models)
- Charger adapter (with NiMH models)
- Know Your Air PC software
- Replacement pump filters (with pump models)

Other options available.

Gas Sensor Options

Sensor	Type	Factory Set Alarm Point	Measuring Range	Resolution*	STEL Factory Set Alarm Point	TWA Factory Set Alarm Point
Ammonia	Electrochemical	25 ppm	0-100 ppm	1 ppm	35 ppm	25 ppm
Ammonia High Level	Electrochemical	25 ppm	0-999 ppm	1 ppm	35 ppm	25 ppm
Carbon Monoxide	Electrochemical	35 ppm	0-500 ppm	1 ppm	200 ppm	35 ppm
Carbon Monoxide High Level	Electrochemical	35 ppm	0-999 ppm	1 ppm	200 ppm	35 ppm
Chlorine	Electrochemical	0.5 ppm	0-50 ppm	0.1 ppm	1 ppm	0.5 ppm
Chlorine Dioxide	Electrochemical	0.1 ppm	0-1 ppm	0.01 ppm	0.1 ppm	0.3 ppm
Combustible	Catalytic Bead	10% LEL	0-100% LEL	1% LEL	N/A	N/A
Hydrogen	Electrochemical	100 ppm	0-1,000 ppm	10 ppm	999 ppm	999 ppm
Hydrogen Sulfide	Electrochemical	10 ppm	0-100 ppm	1 ppm	15 ppm	10 ppm
Mercaptan	Electrochemical	0.5 ppm	0-14 ppm	0.1 ppm	10 ppm	0.5 ppm
MOS	Metal Oxide Semiconductor	N/A	0-500 units	1 unit	N/A	N/A
Nitrogen Dioxide	Electrochemical	1 ppm	0-20 ppm	0.1 ppm	5 ppm	3 ppm
Nitric Oxide	Electrochemical	25 ppm	0-250 ppm	1 ppm	35 ppm	25 ppm
Oxygen	Electrochemical	19.5%; 23%	0-25%	0.1%	N/A	N/A
Phosphine	Electrochemical	0.3 ppm	0-1 ppm	0.01 ppm	1 ppm	0.3 ppm
PID 10.6 eV (VOC's)	Photoionization	500 ppm	0-1,999 ppm	0.1 ppm	N/A	N/A
Sulfur Dioxide	Electrochemical	2 ppm	0-90 ppm	0.1 ppm	5 ppm	2 ppm

Alarm set points can be custom set via Know Your Air™ software.
Hydrogen Cyanide Smart Sensor will be available early 2008.

PID Smart Sensor for The 3M™ Multi-Gas Detector 950 Series

The PID Smart Sensor's usability gives you the power to make quick, accurate decisions on over 90 specific gases – without wasting time and resources.



Increased Flexibility

As a multi-functioning detector, your 3M 950 detector can stay in the field should PID Smart Sensor require adjustments or servicing.

Easy Conversion

Any of the 3M 950 detector's five sensor slots may be used by simple insertion and removal of the 3M PID Smart Sensor.

Refined Tolerance

Advanced technology delivers increased tolerance to humidity, which minimizes the "quenched" effect common with most PID's.

Simple-to-Use Correction Factors

More than 90 correction factors are built into a user-friendly library database accessible via the Know Your Air™ PC Software or the 3M 950 detector.

Available Accessories

100 ppm Iso-butylene calibration gas kit, lamp cleaning kit, and replacement lamp.



PID Smart Sensor Gas List

ETHYLBENZENE	1,4-DIOXANE	1,2,3-TRIMETHYLBENZENE
1,2,4-TRIMETHYLBENZENE	1,2-DIBROMOETHANE	1,2-DICHLOROBENZENE
1,3,5-TRIMETHYLBENZENE	1-BUTANOL	1-METHOXY-2-PROPANOL
1-PROPANOL	METHYLACETATE	METHYLACRYLATE
METHYLACETOACETATE	METHYLBENZOATE	METHYLMETHACRYLATE
2-METHOXYETHANOL	2-PENTANONE	2-PICOLINE
n,n –DIMETHYLFORMAMIDE	n,n –DIMETHYLACETAMIDE	3-PICOLINE
4-HYDROXY-4-METHYL-2-PENTANONE	ACETALDEHYDE	ACETONE
ACETOPHENONE	ALLYLALCOHOL	AMYL ACETATE
BENZENE	BROMOMETHANE	BUTADIENE
BUTOXYETHANOL	BUTYLACETATE	TETRACHLOROETHYLENE
DICHLOROETHANE	TRICHLOROETHYLENE	ETHYLACETOACETATE
CHLOROBENZENE	CUMENE	CYCLOHEXANE
CYCLOHEXANONE	DECANE	DIETHYLAMINE
DIMETHOXYMETHANE	DIMETHYLFORMAMIDE	EPICHLOROHYDRIN
ETHANOL	ETHYLENEGLYCOL	ETHYLACETATE
ETHYLENE	ETHYLENE OXIDE	HEPTANE
HEXANE	HYDRAZINE	isoAMYLACETATE
isoPROPYL AMINE	isoPROPYL ETHER	isoBUTANOL
isoBUTYLENE	isoOCTANE	isoPHORONE
ISOPROPANOL	JET A FUEL	JP-5 FUEL
JP-8 FUEL	MESITYLOXIDE	METHYLBENZYL ALCOHOL
METHYLETHYLKETONE(MEK)	METHYL ISOBUTYL KETONE	MONOMETHYLAMINE
METHYLTERTIARYBUTYLETHER	meta-XYLENE	OCTANE
ortho-XYLENE	PHENOL	PHOSPHINE
PROPYLENE	PROPYLENE OXIDE	para-XYLENE
PYRIDINE	QUINOLINE	STYRENE MONOMER
TERTIARYBUTYLAMINE	TRISDICHLOROETHENE	TERT-BUTYL MERCAPTAN
TERTIARYBUTYLALCOHOL	TETRAHYDROFURAN	THIOPHENE
TOLUENE	TURPENTINE– CRUDE SULFATE	VINYL ACETATE
VINYL CHLORIDE	VINYLCYCLOHEXANE (VCH)	

3M™ Portable Calibration Gas Kits

MODEL NUMBER

933-000-026	3M™ Ammonia (AM) Calibration Kit 34L 25 PPM Ammonia, 0.5 LPM 715 Regulator
933-000-027	3M™ Chlorine (CL) Calibration Kit 34L 5 PPM Chlorine, 0.5 LPM 715 Regulator
933-000-031	3M™ Isobutylene Cal Kit, 34L 100 PPM Isobutylene, 0.2 LPM 713 Regulator
933-000-040	3M™ Methyl Mercaptan Cal Kit, 34L 10 PPM Methyl Mercaptan, 0.5 LPM 715 Regulator
933-000-023	3M™ Multi-Gas Calibration Gas Kit (Methane) 34L 10% LEL ME/35 PPM CO/10 PPM HS/18% OX 0.2 LPM 715 Regulator
933-000-202	3M™ Multi-Gas Calibration Gas Kit (Pentane) 34L 10% LEL PE/35 PPM CO/10 PPM HS/18% OX, 0.2 LPM 715 Regulator

MODEL NUMBER

933-000-029	3M™ Nitric Oxide (NO) Calibration Gas Kit 34L 25 PPM Nitric Oxide, 0.2 LPM 715 Regulator
933-000-030	3M™ Nitrogen Dioxide Calibration Kit 34L 5 PPM Nitrogen Dioxide, 0.2 LPM 715 Regulator
933-000-313	3M™ Phosphine (PH) Cal Kit, 34L 1 PPM Phosphine, 0.5 LPM 715 Regulator
933-000-028	3M™ Sulfur Dioxide (SO) Calibration Kit 34L 5 PPM Sulfur Dioxide, 0.2 LPM 715 Regulator
933-000-025	3M™ Hydrogen (HY) Calibration Gas Kit 103L 100 PPM Hydrogen, 0.2 LPM 715 Regulator
933-020-100	3M™ Propane Cal Kit, 34L 300 PPM Propane, humidifier kit, 0.2 LPM 713 Regulator