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## **3M™ Multi-Gas 4-Sensor Detector 740-100-400, HS/OX/CO/EX (Methane), Li-Ion Battery 1 Case**



Detects potentially hazardous levels of carbon monoxide, hydrogen sulfide, oxygen, and combustible (%LEL) gases. CSA approved.

### **Additional Information**

**3M ID:** 70-0714-0220-3

**GTIN(UPC/EAN):** 0 00 51131 98583 4



**Packaging**

**3M ID:** 70-0714-0220-3

**Minimum Order Quantity:** 1 CASE

	<b>Imperial</b>	<b>Metric</b>
<b>Length</b>	9.750 INCH	0.248 MTR
<b>Width</b>	13.500 INCH	0.343 MTR
<b>Height</b>	4.750 INCH	0.121 MTR
<b>Gross Weight</b>	2.1750 LBS	0.9866 KG

## SPECIFICATIONS

Size	4.8 x 2.7 x 1.4 in. (12.2 x 6.9 x 3.6 cm)
Weight	10.4 oz. (292g)
Ingress Protection Rating	IP65
Sensor Pack	Up to four gases detected with electrochemical (CO, HS and OX) and catalytic bead (EX) sensors
Operating Humidity	15 – 90% (non-condensing)
Readout	Direct read LCD
Range	See table below
Alarm Indicators	Visual: Red LED Audio: 95 dBA @ 1 foot buzzer Tactile: Internal vibrator
Alarm Readings	Real time, Peaks, TWA, STEL
Alarm Settings	See table below
Reading Resolution	See table below
Sensor Replacement	Replaceable sensor pack (see MAINTENANCE section)
Intrinsic Safety	CSA - Class I, Div I, Group A, B, C, D, T4
Power	1 Li-ion or 3 AAA size alkaline batteries
Battery Life	Approximately 20 hours
Radio Frequency Protection	<10% deviation of alarm level when subjected to 450MHz, 5 watt radio @ 2 feet.
Data logging Memory	60,000 data points or 6 months of data at 1 minute intervals and 40 hours/week
Operating Temperature Range	See table below
PC Communication	IR Port – IrDA Compatible
Sensor Accuracy (After calibration)	<ul style="list-style-type: none"> <li>· Carbon Monoxide (CO) – Less than <math>\pm 25\%</math> of the displayed reading or 5 ppm, whichever is greater</li> <li>· Oxygen (OX) - Less than <math>\pm 0.5\%</math> vol/vol from 17% to 24% Oxygen</li> <li>· Hydrogen Sulfide (HS) - Less than <math>\pm 25\%</math> of the displayed reading or 2 ppm, whichever is greater</li> <li>· Combustible (EX) – Less than <math>\pm 3\%</math> of the displayed LEL reading up to 49% LEL and less than <math>\pm 5\%</math> of the displayed LEL reading between 50% to 100% LEL</li> </ul>
Non-contaminated environment	An environment containing less than 0.1 ppm of hydrocarbons, 0.5 ppm of CO, 0.2 ppm of H <sub>2</sub> S, 0.2 ppm of Ammonia, 0.5 ppm of Hydrogen and 0.2 ppm of other gases not normally found in the air.
Certified calibration gas	Refers to a calibration gas sold by 3M* or produced by an ISO 9001:2000 certified calibration gas manufacturer. The certified accuracy of the calibration gas components must be listed on the calibration gas container and traceable to National Institute of Standards and Technology (NIST) or a national measurement institute standard reference material.
Warranty	2 years on sensor pack and hardware (see WARRANTY sections of <i>User Instructions</i> )

\* A gas analysis certificate of the calibration gas is available if requested.

Sensor Symbol	Gas Read by Sensor	Display Range	Reading Resolution	Factory Default Calibration Gas Concentration*	Factory Default Alarm Level	Factory Default TWA Alarm Level	Factory Default STEL Alarm Level	Operating Temperature Range
CO	Carbon Monoxide	0 – 1500 ppm	1 ppm	35 ppm	35 ppm	35 ppm	200 ppm	-4 to 122 °F (-20 to 50 °C)
HS	Hydrogen Sulfide	0 – 200 ppm	1 ppm	10 ppm	10 ppm	10 ppm	15 ppm	-40 to 122 °F (-40 to 50 °C)
EX	Combustible Gases	0 – 100% LEL 0-5% v/v methane	1% LEL	0.5% v/v (10% LEL) methane	10% LEL	Not Applicable	Not Applicable	-4 to 122 °F (-20 to 50 °C)
OX	Oxygen	0 – 25%	0.1%	18%	19.5% (Low) 23.0% (High)	Not Applicable	Not Applicable	-4 to 122 °F (-20 to 50 °C)

### WARNING

Using a certified gas for a sensor test or calibration with a concentration other than the one listed for this instrument and sensor will produce inaccurate readings. This means that higher levels of the gas being monitored may be present and could result in overexposure and **cause sickness or death**. For proper use, see supervisor or *User Instructions*, or call 3M in U.S.A., 1-800-243-4630. In Canada, call Technical Service at 1-800-267-4414.

**PRODUCTS, ACCESSORIES AND PARTS****▲ WARNING**

Never alter or modify this instrument. Substitution of components may impair intrinsic safety. Repair or replace parts only with the 3M components approved for this unit.  
**Failure to do so may adversely affect product performance and result in sickness or death.**

**740 Series Multi-Gas Detectors**

Part #	Description
740-100-400	3M™ Multi-Gas 4-Sensor Detector, HS/OX/CO/EX (Methane), Li-ion Battery
740-100-300	3M™ Multi-Gas 3-Sensor Detector, OX/CO/EX (Methane), Li-ion Battery
740-100-350	3M™ Multi-Gas 3-Sensor Detector, HS/OX/EX (Methane), Li-ion Battery
740-100-200	3M™ Multi-Gas 2-Sensor Detector, OX/EX (Methane), Li-ion Battery
740-100-100	3M™ Multi-Gas 1-Sensor Detector, EX (Methane), Li-ion Battery

**740 Series Replacement Sensor Pack**

Part #	Description
931-100-400	3M™ 4-Gas Sensor Pack Replacement (Methane), 740 Series, with HS, OX, CO, EX
931-100-300	3M™ 3-Gas Sensor Pack Replacement (Methane), 740 Series, with CO, OX, EX
931-100-350	3M™ 3-Gas Sensor Pack Replacement (Methane), 740 Series, with HS, OX, EX
931-100-200	3M™ 2-Gas Sensor Pack Replacement (Methane), 740 Series, with OX, EX
931-100-100	3M™ 1-Gas Sensor Pack Replacement (Methane), 740 Series, EX

**740 Series Replacement Parts and Accessories**

Part #	Description
921-020-201	3M™ Rechargeable Lithium (Li-ion) Battery
936-000-004	3M™ Vehicle 12V Wiring Kit
672-020-000	3M™ Soft Zipper Carrying Case
672-990-012	3M™ Deluxe Carrying Case for Calibration Kit
955-900-100	3M™ External Sampling Pump Kit
478-013-000	3M™ External Sampling Pump Filter, 0.45UM (quantity = 1)
920-030-100	3M™ External Sampling Pump Filter, 0.45UM (quantity = 5)
478-000-003	3M™ Sensor Pack Filter
929-000-009	3M™ Test Hood Assembly Kit, 740 Series
526-000-653	3M™ Test Hood, 740 Series
002-100-200	3M™ Test Hood Captive Screw, 740 Series
457-594-000	3M™ Vehicle Wiring Kit (Cigarette Adapter only)
671-034-002	3M™ Infrared PC Adapter (USB)
325-399-102	3M™ Sensor Pack Zebra Strip 740 Series
526-000-656	3M™ Housing Gasket 740 Series
457-221-005	3M™ Universal Power Adaptor
936-020-004	3M™ Data Manager CD 740 Series
512-020-220	3M™ Detector Vehicle Mount Clamp
512-020-240	3M™ Detector Personal Carry Clip
512-020-230	3M™ Detector Pump Tubing Velcro Strap Holder
921-030-000	3M™ AAA Alkaline Batteries (set of 3)
671-034-000	3M™ Infrared PC Adapter (Serial)

**Calibration Kits (includes specified gas, regulator, and case)**

Part #	Description
933-000-000	3M™ Carbon Monoxide (CO) Calibration Gas Kit 103L 35 PPM CO
933-000-001	3M™ Hydrogen Sulfide (HS) Calibration Gas Kit 58L 10 PPM HS