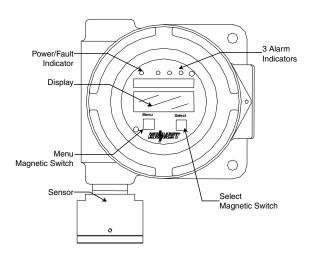
EX-5130

Sensor/Transmitter For Reactive Gases In Hazardous Locations

FEATURES

- **■** Three Alarm LEDs
- 24 VDC, 4-20 mA
- NEMA 4X and NEMA 7
 Transmitter Enclosure
- **■** Liquid Crystal Display
- **■** Non-intrusive Calibration
- Designed for Class I, Division 1, Groups B, C, & D



BASIC SPECIFICATIONS

Voltage: 24 VDC minimum, loop powered

Output: 4-20 mA
Display: Backlit LCD

Alarm Indicators: 3 LEDs at programmable set points

Menu/Calibration: Magnet-actuated switches

Sensor Type: Electrochemical Cell

Installation: 3-wire

Connection: 1/2 inch NPT, conduit

Weight: 5.5 lbs (2.5 Kg)

Design: Explosionproof transmitter enclosure, with

sensor connected to internal intrinsic safety

barrier





THE EX-5130* IS AVAILABLE FOR:

GAS	RANGE
Arsine, AsH ₃	0.50 ppm
Bromine, Br ₂	10.0 ppm
Chlorine, Cl ₂	10.0 ppm
Ethylene oxide, ETO	10.0 ppm
Hydrogen bromide, HBr	30.0 ppm
Hydrogen chloride, HCl	30.0 ppm
Hydrogen fluoride, HF	10.0 ppm
Ozone, O ₃	1.00 ppm

The EX-5130 Series Sensor/Transmitters utilize electrochemical type cells to detect the target gas. These cells consist of electrodes, electrolyte and an air/liquid separation barrier. To enable the reactive gases to reach the sensor, the normal sintered metal disk is removed from in front of the sensor. The sensor is connected to an internal intrinsic safety barrier. Gas molecules enter the cell and, as a result of an oxidation/ reduction reaction, generate an electrical current proportional to the gas concentration. This current is measured, conditioned, converted to the gas concentration, digitally displayed and transmitted as a 4-20 mA output signal. ENMET offers venturi-type gas samplers and a variety of multi-channel controller/alarm modules that provide the 24 VDC loop power and receive the 4-20 mA signal from the sensor/transmitters. These systems can also be connected to various computerbased instrumentation, PLCs, etc.

* It is recommended that a gas sampler be used with the sensor/ transmitter for detecting these gases.

EX-5130 Sensor/Transmitter For Reactive Gases In Hazardous Locations

SPECIFICATIONS

	Range	LED	LDL (1)	Typical
Gas	PPM	Alarms, PPM	PPM	Sensor Life
Arsine, AsH ₃ (2)	0.50	0.05, 0.1, 0.4	0.04	1-1.5 yrs
Bromine, Br ₂ (2)	10.0	0.5, 1, 5	0.4	1-2 yrs
Chlorine, Cl ₂ (2)	10.0	0.5, 1, 5	0.4	1-2 yrs
Ethylene oxide, ETO (3)	10.0	3, 5, 9	1.2	1-2 yrs
Hydrogen bromide, HBr (2)	30.0	5, 10, 20	8.0	1-2 yrs
Hydrogen chloride, HCI (2)	30.0	5, 10, 20	8.0	1-2 yrs
Hydrogen fluoride, HF (3)	10.0	3, 6, 9	8.0	1-1.5 yrs
Ozone, O ₃ (3)	1.00	0.1, 0.5, 0.75	0.04	1-1.5 yrs

- Lower Detectable Limit calculated from baseline noise level, thermal drift and interference data used to derive zero point deviation estimates.
- (2) For best performance, it is recommended that a sample draw system be used for monitoring these gases.
- (3) Monitoring of these gases requires the use of a sample draw system.

Sensor: Electrochemical cell, disposable, plug-in type

Temperature Range: -4° to 104°F (-20° to 40°C) **Humidity Range:** 5 to 90% rH, non-condensing

Pressure Range: Atmospheric $\pm 10\%$

Display: 8-character, single-line, backlit LCD
Alarm Indicators: 3 LEDs at programmable set points

Menu/Calibration: Magnet-actuated switches
Installation: 3-wire, typically 16 to 20 AWG,
depending upon distance

Max. loop resistance: 300 ohms @ 24 VDC Typical installation wire: 18 AWG (0.8 mm²)

Sensor Location: Up to 2,000 feet (600 m) from controller;

Consult factory for greater distance 24 VDC minimum, Loop powered

Output: 4-20 mA

Voltage:

Current Draw: 45 mA maximum

Connection: 1/2 inch NPT, conduit

Weight: 5.5 lbs (2.5 Kg)

Materials: Transmitter Enclosure: Polyester Coated

Aluminum.

Sensor Enclosure: Stainless Steel

Design: Transmitter enclosure is approved for Class I, Div. 1,

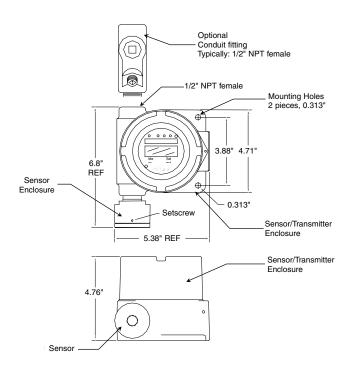
Groups B,C, & D

The electrochemical sensor is connected to an

internal intrinsic safety barrier.

NOTE: Loss of primary power renders continuous gas monitors inoperative. Contact factory for specifications and pricing for backup battery systems compatible with ENMET monitors.





ORDERING INFORMATION

Sensor/Transmitter supplied with magnet and instruction manual

Description	Part Number
EX-5130 Sensor/Transmitter, AsH ₃ See n	ote 10013-4001
EX-5130 Sensor/Transmitter, Br ₂ See n	ote10013-0100
EX-5130 Sensor/Transmitter, Cl ₂ See n	ote10013-0100
EX-5130 Sensor/Transmitter, ETOSee n	ote 10013-5200
EX-5130 Sensor/Transmitter, HBr See n	ote 10013-0400
EX-5130 Sensor/Transmitter, HCI See n	ote 10013-0400
EX-5130 Sensor/Transmitter, HF See n	ote 10013-0700
EX-5130 Sensor/Transmitter, O ₃ , See n	ote 10013-0800
NOTE: Gas samplers— contact ENMET	

Replacement Parts & Accessories

Sensor Sampling Adapter	03700-034
Replacement Magnet	50030-001
Instruction Manual	80003-093
Optional Sealing Fitting	73152-000

Replacement Sensors — See Price List

Calibration Equipment — See Price List

Gas Regulator Assembly for 34 liter Cylinders	02506-002
Calibration Adapter for Sensor	03700-034
Case – Holds Calibration Hardware and up to two	73083-000
34 liter Gas Cylinders	

Calibration Gas Cylinders, Ozone Generator and HF Permeation Tube Kits

— See Price List

Specifications subject to change without notice

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