

# 4-20 mA 2-Wire Gas Transmitters Carbon Monoxide

## **ToxyPoint**

### **BENEFITS:**

The ToxyPoint 2-wire transmitter provides continuous monitoring for carbon monoxide in ambient air. Engineered with field-proven industrial sensing and instrument technology, the ToxyPoint is maintenance-free.

- No calibration, no sensor replacement, no downtime
- · Low initial cost—competitively priced
- Lower electrical and heating bills with highly accurate electrochemical industrial sensor
- Security and reliability. Automatic full function sensor integrity test performed daily and on activation.
- Improved air quality (IAQ) with accurate, reliable detection of carbon monoxide
- Easy, fast installation. The 2-wire monitor fits into a standard, single-outlet electrical box.
- 2-wire, loop-powered. No extra transformer required. Power consumption only 50 mA.
- Unobtrusive design with rugged sintered stainless steel sensor screen.
- Industrial technology now available to the commercial market
- 3 year operational life; 2 year warranty

### **Ordering Information**

TP1-M:

3 year 4-20 mA Gas Transmitter with CO sensor and ToxyPoint mounting plate Fits into standard, single-outlet (1 gang) electrical box.

Specify special alarm setpoints, if required, at time of order.

Compatible with any 4-20 mA Control System (DDC, PLC, etc.)

Protecting your health and your environment.

# ToxyPoint *Carbon Monoxide*

### Three Year Disposable Zero-Maintenance 4-20 mA Gas Transmitter

ToxyPoint is designed to reduce the overall cost of ownership with a lower initial investment, eliminating maintenance costs and minimizing building electrical operating costs. Designed to meet the same high standards as the Vulcain gas detectors, ToxyPoint delivers accurate, reliable protection from carbon monoxide.

ToxyPoint provides an alternative to high-maintenance, solid-state sensors and standard electrochemical monitors, which require constant and often expensive maintenance.

- O Carbon monoxide detector (0-500 ppm)
- Wide supply voltage range: 10 to 28
   V<sub>DC</sub>, and a linear 4-20 mA output
- Two factory set alarm levels:
   Low and High (customer specified)
- Two alarm outputs
- No extra transformer required

### Special Feature

The full function sensor integrity test is a unique safety advantage of Vulcain equipment. The automatic daily self-test verifies sensor operation and advises the control system if the sensor is defective.



#### For further information:

USA 1971 Western Avenue, Unit 1122 Albany, NY USA 12203

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Tel: 1-905-660-6544 Fax: 1-905-660-7362

MONTREAL 4005 Matte Boulevard, Unit G Brossard, QC J4Y 2P4

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E-mail: sales@vulcaininc.com www.vulcaininc.com vn1020-01-01-00-8.25x11-20050218-5137-7



#### **SPECIFICATIONS**

MONITOR: 2-wire, 4-20 mA CO gas transmitter with advanced microcontroller based circuitry

Supply Voltage: 10 to 28 VDC; (24 VDC nominal)

Power Supply: 50 m/

Power Consumption: Maximum: 24 mA @ 24 VDC Nominal: 4 mA @ 24 VDC Alarm Outputs O/P1 and O/P2: 0.25 A (Max) @ 24 VDC supply

EMI/RFI: Complies with EMC Directive 89/336/EEC

Monitor	Operational Life <sup>N.1</sup>	Measuring Range	Temperature Range	Alarm LOW	Levels <sup>N.2</sup> HIGH
ToxyPoint CO	3 years	0-500 ppm	0 to 40°C 32 to 104°F	25 ppm	200 ppm

**SENSOR:** Zero-maintenance electrochemical Humidity: 15 to 90% non-condensing

Calibration: Not required

ALARM OUTPUTS: Two (2) trigger field interface(s) (slave relay, fan, strobe, etc.) rated 250 mA at 24 VDC

Gas Alarms: Two (2) factory set (customer specified) gas alarms: LOW (O/P1); HIGH (O/P2)

Fault Alarm: Activates both Low and High alarm outputs

CURRENT OUTPUT: Signal Output to Control System (DDC, PLC etc):

Normal Operation: 4-20 mA linear signal

Self-Test Fail: 2 mA signal Sensor Expired: 2 mA signal

Over Range Gas Alarm: 24 mA signal (maximum)

Power OFF: 0 mA signal

LED INDICATOR ADVICE: Power ON: On

No Power: Off

Self-Test Fail: Fast flash (1 flash every 0.5 seconds) Life Ending Warning: Slow flash (1 flash every 2 seconds) (Provides one month warning prior to expiry date)

Operational Life Ended: Off Self-Test: On activation (Auto) and Dail

ELF-TEST: On activation (Auto) and Daily (Auto)
Verifies: Sensor integrity and operation

TRANSMISSION RANGES:

2- Wire Cond	luctor Size:	Distance		
22 AWG	0.64 mm	6,712 ft.	2,045 m	
20 AWG	0.75 mm	10,953 ft.	3,253 m	
18 AWG	1.0 mm	16,953 ft.	5,167 m	

**PHYSICAL:** Size: 1.36 x 1.75 x 2.56 in. (3.5 x 4.5 x 6.5 cm)

Weight: 1.34 oz. (38 g)

Cover: ToxyPoint aluminum cover mounting plate fits standard single outlet electrical box

Wire Terminations: Screw type terminals

WARRANTY: Two (2) year (3 year operational life)

N-1 One year shelf life before activation

N-2 Customer special alarm settings available at time of order

DUE TO ONGOING RESEARCH AND PRODUCT IMPROVEMENT, SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

RATINGS AND CERTIFICATIONS:

o Ordinary locations
International Electrical Code: IEC No. 1010
U.S. Standard: ANSI/ISA S82.01

Canadian Standard Electrical Code: C22.2 No. 1010



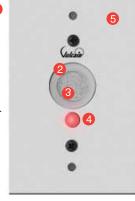


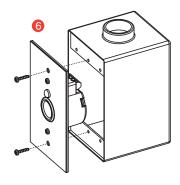
Electrochemical CO sensor

Sintered screen protects sensor from damageRed LED status indicator

Mounting plate fits single outlet electrical box

**6** Simple installation





Locally Distributed by: