

**Nitrogen Dioxide Gas Detector  
Model TXL-NO2****DESCRIPTION**

The Model TXL-NO2 is a reliable, low-cost nitrogen dioxide gas detector, housed in an epoxy-coated aluminum enclosure with NEMA 4 rating. Detector outputs include a two-wire loop-powered 4-20 mA analog signal, and an 8-character LCD gas level display. A magnetic, non-intrusive calibration feature and reliable electrochemical sensor round out this well-designed product. The TXL is approved for use in hazardous areas when used with an approved intrinsically-safe zener barrier.

**APPLICATION**

The TXL-NO2 is intended for life safety protection in hazardous applications including petrochemical, general industrial, municipal, and commercial facilities. The output signal is compliant with industry standards and can be routed to any standard 4-20 mA analog input receiver or controller. The TXL product family provides extremely low power consumption, and can be installed with or without zener diode barriers depending upon installation area requirements.

**FEATURES**

- Low-cost
- Easy to install
- Intrinsically-safe
- NEMA 4 aluminum enclosure
- 8-character LCD gas level display
- Magnetic, non-intrusive calibration
- 2-wire, loop-powered 4-20 mA output
- Reliable electrochemical sensor
- 2 year warranty.

**SPECIFICATIONS****MEASUREMENT RANGE—**

0-50 PPM standard (other ranges are field selectable).

**TRANSMITTER OUTPUT—**

4-20 mA linear current signal.

**DISPLAY—**

8 character LCD.

**ACCURACY—**

$\pm 0.2$  PPM or  $\pm 10\%$  of applied gas concentration.

**LINEARITY—**

$> 10\%$  full scale.

**REPEATABILITY—**

$< \pm 3\%$ .

Table 1—Cross Sensitivity of NO<sub>2</sub> Sensor

Gas	Level	Reading
Carbon Monoxide	1000 ppm	0
Carbon Dioxide	5000 ppm	0
Hydrochloric Acid	5 ppm	0
Nitrogen	100%	0
Hydrogen	1%	0
Hydrogen Sulfide	10 ppm	0
Ozone	1 ppm	0.7
Chlorine	1 ppm	3
Alcohols	1000 ppm	0

**RESPONSE TIME—**

T<sub>90</sub> < 20 seconds.

**SENSOR CROSS SENSITIVITY—**

See Table 1.

**TEMPERATURE RANGE—**

-20°C to +40°C (-4°F to +104°F).

**HUMIDITY RANGE—**

15 to 90% (non-condensing).

**OPERATING POWER—**

24 VDC (12 to 30 VDC). 75 milliwatts maximum.

**WIRING—**

2-conductor, stranded and shielded.

**MAXIMUM CABLE LENGTH—**

Up to 4,000 feet using 20 gauge stranded cable.

**CONNECTIONS—**

Screw terminal.

**CALIBRATION—**

1-person, non-intrusive magnetic switch on cover.

**ENCLOSURE—**

NEMA 4, epoxy-coated aluminum enclosure.

**SENSOR HOUSING—**

Aluminum standard (stainless steel option available).

**DIMENSIONS—**

4.65" W x 4.5" H x 2.2" D.

**SHIPPING WEIGHT—**

1 lb (0.5 kg).

**WARRANTY—**

2 years.

**CERTIFICATION—**

UL approved when properly installed for:

Class I, Groups A, B, C and D;

Class II, Groups E, F and G;

Class III.

CE and DEMKO approvals.

**IS BARRIER—**

V<sub>oc</sub> ≤ V<sub>max</sub> = 30 vdc,

I<sub>sc</sub> ≤ I<sub>max</sub> = 125 ma,

C<sub>a</sub> ≥ C<sub>i</sub> + C cable,

L<sub>a</sub> ≥ L<sub>i</sub> + L cable.

Suggested barrier models 9002/13-280/110/00 or 9002/13-252/121/04 manufactured by R. Stahl, Inc.

**ORDERING INFORMATION**

When ordering, please specify:

Part Number	Description
000518-005	Model TXL-NO <sub>2</sub> Nitrogen Dioxide Gas Detector, 0-50 PPM Range

**REPLACEMENT NO<sub>2</sub> SENSOR CELL**

Part Number	Description
000518-105	NO <sub>2</sub> sensor cell, 0-50 PPM range

**CALIBRATION KIT**

Part Number	Description
000518-205	Model TXL-KIT-NO <sub>2</sub> Kit includes: Two 0.58 liter cylinders, one containing 10 PPM NO <sub>2</sub> cal gas, one containing "zero" clean air, carry case, calibration cup, 3 ft length hose, gauge/regulator, calibration magnet.



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