△ DET-TRONICS®

Hydrogen Sulfide Gas Detector
Model TXL-H2S

DESCRIPTION

The Model TXL-H2S is a reliable, low-cost hydrogen sulfide 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-H2S 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—
0-500 PPM standard (other ranges are field selectable).

TRANSMITTER OUTPUT—
4–20 mA linear current signal.

DISPLAY—
8 character LCD.

ACCURACY—
±2 PPM or ±10% of applied gas concentration.

LINEARITY—
±5%.

REPEATABILITY—
±5%.

Table 1—Cross Sensitivity of H_2S Sensor

Gas	Level	Reading
Carbon Monoxide	50 ppm	0
Hydrogen Sulfide	10 ppm	10
Sulfur Dioxide	2 ppm	0
Nitrogen Dioxide	3 ppm	0
Nitric Oxide	25 ppm	0
Chlorine	0.5 ppm	0
Hydrogen	100 ppm	0
Ethylene	100 ppm	0
Carbon Dioxide	5000 ppm	0
Ammonia	50 ppm	0

RESPONSE TIME—
T90 < 20 seconds.

SENSOR CROSS SENSITIVITY—
See Table 1.

TEMPERATURE RANGE—
–20°C to +50°C (–4°F to +122°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—
$Voc \leq Vmax = 30$ vdc,
$Isc \leq Imax = 125$ ma,
$Ca \geq Ci + C$ cable,
$La \geq Li + L$ 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
000518-001	Model TXL-H2S Hydrogen Sulfide Gas Detector, 0-500 PPM Range
000518-002	Model TXL-H2S1 Hydrogen Sulfide Gas Detector, 0-50 PPM Range

REPLACEMENT H2S SENSOR CELL

Part Number	Description
000518-101	H_2S sensor cell, 0-500 PPM range
000518-102	H_2S sensor cell, 0-50 PPM range

CALIBRATION KIT

Part Number	Description
000518-201	Model TXL-KIT-H2S Kit includes: Two 0.58 liter cylinders, one containing 25 PPM H_2S cal gas, one containing "zero" clean air, carry case, calibration cup, 3 ft length hose, gauge/regulator, calibration magnet.