

AMMONIA GAS SENSOR

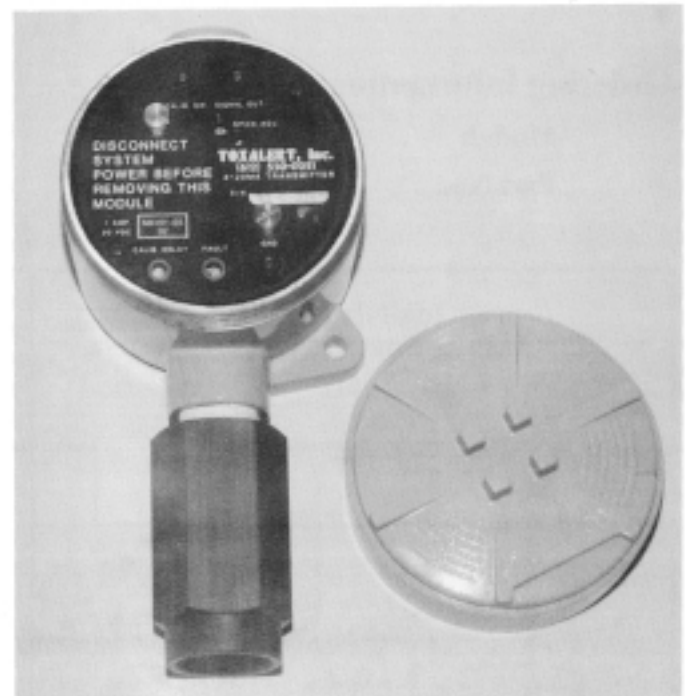
MODEL: TOX-NH₃/ANA

FEATURES:

- Low Voltage circuits
- Sensor Failure indicator
- Low Sensitivity indicator
- Interfaces directly to DDC systems
- Linear 4 to 20 mA output
- Explosion Proof Housing
- Output locked during warm up and calibration

GENERAL DESCRIPTION:

The Model Tox-NH₃/ANA Ammonia Gas Sensor utilizes an electrochemical sensor which is designed for use in ambient monitoring applications. It is designed for fixed installation and for continuous operation. The sensor module is a 4 to 20 mA transmitter designed for use in conjunction with Toxalert's Models Tox-4 ANA and Tox Control Controllers or any industry standard 4-20 mA loop controller. The Tox-NH₃/ANA has an effective range of 0-50 ppm. The sensor module requires a three wire connection to a controller that provides a nominal 28 VDC and the module sources current in proportion to the gas concentration.



Tox-NH₃/ANA

GUIDE SPECIFICATION:

Provide an Ammonia (NH₃) sensor(s) with a range of 0 to 50 PPM (parts per million) and a linear output of 4 to 20 mA over its range. The sensor shall be housed in an explosion proof housing and have explosion proof conduit connections to the housing to maintain system integrity. The sensing element shall be electro chemical and have a life of one to three years. The sensor response time shall reach 90% of level being sensed in 30 seconds. The sensor shall be powered by low voltage and have a self check capability and an LED to indicate sensor "Low Sensitivity." If the sensor fails, its output shall drop to zero to signal the controller of failed condition. The sensor shall be as manufactured by Toxalert, Inc.

SPECIFICATIONS

- **Type:** Electrochemical-membrane barrier type
- **Range:** 0 to 50 PPM Ammonia (NH₃)
- **Response Time:** 90% in less than 30 seconds
- **Resolution:** 10% of full scale
- **Electrical Data:**
 - Input Voltage:** 24 vdc nominal (14 to 28 vdc)
 - Input Power:** 1.4 watt
 - Input Current:** 40 mA @ 28 vdc
 - Loop Resistance:** 800 Ohms max. @ 21 vdc
- **Unit Construction:**
 - Housing:** Division 1, Class 1, Groups C & D
 - Physical:** 8.8" H x 4.0" W x 4.2" D
- **Operating Temperature:** 14° F to 113° F (-10° C to 45° C)
- **Relative Humidity:** 20 to 95% non-condensing
- **Typical Life:** One year in normal service
- Output Signal:** Linear 4 to 20 mA
- Signal Output-Trouble:** 0 mA
- Wiring:** 3 wire non-isolated
- Mounting Style:** Surface
- Weight:** 2.1 pounds

Ordering Information:

Model: Tox-NH₃/ANA
Part No.: 4101-25

