

NTM Alarm System with NTM SenseH₂™ hydrogen sensor

NTM Alarm System

The NTM Alarm System is a complete hydrogen monitoring solution. The alarm system is provided with the innovative NTM SenseH₂™ hydrogen sensor and all system components required for a safe, reliable, and simple installation. The NTM Alarm System detects and alarms with LED lights, an audible alarm and two internal relays to hydrogen concentration levels within the Lower Flammable Limit (LFL).

The NTM SenseH₂™ hydrogen sensor provided is designed to be used with the NTM Alarm System for HYDROGEN MONITORING applying the hydrogen sensors' patent-pending, chemi-resistive ceramic technology which exhibits a highly sensitive, selective, and rapid response to the presence of hydrogen in ambient air. It reliably measures hydrogen concentration levels between 0.25% to 4.0% over a wide range of temperature and humidity variations.

➔ NTM Alarm System includes:

- ❑ Composite Control Box with:
 - connectors for input of one or two NTM SenseH₂™ hydrogen sensors
 - connector for power supply 100V to 240V
 - three LED indicator lights which function as:
 - Device on: Green LED
 - <1% H₂: Green LED
 - 1% H₂: Yellow LED and Relay 1
 - 2% H₂: Red LED, Audible Alarm, and Relay 2
 - dedicated alarm system circuit board
 - internal audible alarm
 - two internal, sealed, mechanical relays
 - built-in diagnostics for LEDs, audible alarm, and relays
- ❑ One NTM SenseH₂™ hydrogen sensor
- ❑ One external power supply for 100V to 240V (50-60 Hz), select at time of order placement
- ❑ One 25 ft. shielded communication cable with connectors for control box and sensor
 - second hydrogen sensor and cable can be purchased separately

Contact: sales@ntmsensors.com 614.842.6606 x 123 or 104 www.ntmsensors.com

New Website: <http://www.nextechmaterials.com/energy/>





Key Characteristics:

- Ease of installation
 - *Mount control box in an easy to access location while the hydrogen sensor can be mounted where needed to detect hydrogen*
- Expandable and maintainable
 - *add second sensor with ease as control box functions seamlessly with one or two hydrogen sensors*
 - *replace just the hydrogen sensor without the need to purchase a new control box*
 - *have a NTM SenseH₂™ hydrogen sensor in stock for mission critical applications*
- High selectivity to H₂ yet insensitive to other gasses
 - *providing a reliable signal without false positives*
- Insensitive to humidity and temperature changes
 - *allowing use in widely varying environments*
- Rapid response and recovery times
 - *allowing quick response to control box for safe alarm reaction*
- Durable and stable for long term operation without calibration
 - *lowering cost of ownership*
- Control Box has built -in diagnostics:
 - *checks LED indicator lights, audible alarm and two relays*
 - *facilitating ease of use*
 - *NTM SenseH₂™ hydrogen sensor can be field verified using a “Puff Test”*



Applications Where the NTM Alarm System with NTM SenseH₂™ Hydrogen Sensor Excels:

- Hydrogen fuelled back-up power systems
- Battery based uninterruptible power supply (UPS) or cabinet systems
- Battery Charging Rooms
- Remote battery buildings with battery charging or battery backup processes



Important Installation Guidelines for NTM SenseH₂™ Hydrogen Sensor:

Exposure to 100% hydrogen and other reducing conditions may damage the sensor. The sensor is calibrated for hydrogen detection in air. Use in oxygen concentrations other than air (21% O₂) can invalidate the sensor's calibration. Exposure to silicone-containing products such as sealants, hoses, and caulking compounds should be avoided, but the design of the hydrogen sensor has a poison resistance feature to combat this issue.

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