Ammonia Leak Detector
Model LBW-WATCHMAN

An affordable, dependable, and virtually maintenance-free detector manufactured by the leading supplier of quality ammonia refrigeration leak detectors

Integrates seamlessly with common industry automation and/or alarm systems

The LBW-WATCHMAN Ammonia Leak Detector from Cool Air Incorporated has all the features you need to protect your personnel and product. It has a solid-state, long-life ammonia sensor cell that provides fast and accurate detection of ammonia gas. The sensor cell will not deplete during an ammonia leak, from background ammonia vapors, or during testing &/or calibration.

The front panel display indicates ammonia concentration in parts per million (PPM). The detector has a 4-20 mA analog output for PPM that will seamlessly integrate with your existing automation system.

To reduce nuisance alarms during cleaning, servicing, testing, and/or calibration, the LBW-420 has a service mode that temporarily disables the detector’s 4-20 mA signal. To further enhance the value of this detector, Cool Air Incorporated offers these beneficial options: ABS washdown/utility tube, external service switch, LCD door monitor.

The LBW-WATCHMAN detector is housed in a custom-made safety yellow, NEMA 4X, UL-listed, CSA, IEC, IP66 enclosure with viewing window.

The LBW-WATCHMAN is fully compatible with the Cool Air Inc. Digital Central Supervisory Alarm Panel.

The LBW-WATCHMAN is manufactured in the USA and comes with our standard 36-month limited warranty.

Standard Features
- Displays ammonia concentration
- Solid-state, long-life sensor cell
- 4-20 mA analog output
- Service mode to avoid nuisance alarms during cleaning, servicing, testing, and/or calibration
- NEMA 4X, UL-listed enclosure
- Fully compatible with the Cool Air Inc Digital Central Supervisory Alarm Panel
- Made in the USA

Available Options
- ABS washdown/utility tube
- External service switch
- LCD door monitor

Typical Applications
- Industrial coolers and freezers
- Compressor rooms
- Control rooms
- Loading docks
- Storage tank areas
- Production area
- Valve groups
Ammonia Leak Detector Model LBW-WATCHMAN Guide Specifications

Specifications

**Ammonia detection sensitivity:** 0 to 1000 ppm
**Ranges:** 0-100, 0-250 (std.), 0-500, 0-1000
**Display:** 0.8", 7-segment LED, 4-digit readout;
**Controls:** Pushbuttons (Mode, Up, Down and Enter), Rotary selector switch

**Ammonia sensor:** Metal oxide semiconductor. 833 mW integral heater. Alumina ceramic base. 100 mesh SUS 316 double gauge. Flame arrestor.

**Outputs:** 4-20 mA for ammonia concentration.
**Operating temperature:** -50°F to 125°F
**Operating humidity:** 5% to 95% RH, non-condensing; condensing kits available.
**Power requirements:** 24 VDC .2A
**Outside Dimensions:** 4-1/2" H x 7-1/2" W x 4 1/2" D
**Weight:** 1.5 lbs.

**Note:** All dimensions and weights are approximate and should not be used for installation planning purposes.

**Enclosure:** Custom safety yellow, NEMA 4X rated, UL listed, CSA, IEC, IP66, with viewing window.

**Options:**
- ABS washdown/utility tube
- External service switch
- LCD door monitor

Suggested Specifications Text

Ammonia (NH3) Vapor Detector System

Provide ammonia leak detector(s), models LBW-WATCHMAN, as manufactured by Cool Air Incorporated, Ham Lake, Minnesota. Ammonia leak detector(s) shall be stand-alone, wall-mounted unit(s), and have a solid-state instrument panel and sensor capable of sensing ammonia vapor concentrations of 0 to 1000 parts per million (PPM). Sensor shall not deplete during an ammonia leak, from background ammonia vapors, or during testing &/or calibration.

Detector(s) shall contain no radioactive materials.

Detector(s) shall have: 4-20 mA analog output for PPM, and a service mode for avoiding nuisance alarms during cleaning, servicing, testing, &/or calibration.

Optional ABS washdown/utility tube, external service switch, and LCD door monitor.

Power supply shall be 24 VDC.

Detector(s) shall be manufactured in the USA.

Warranty

The LBW-WATCHMAN comes with a 36-month limited warranty on workmanship from the time of shipment. An optional 60-month limited warranty is available. Cool Air Incorporated reserves the right to make changes in the design without notification.