



The LPT-A-VLT Ammonia Vent Line Transmitter is designed for continuous monitoring of ammonia levels in the vent line of refrigeration systems. More specifically, it is designed for the detection of equipment failure in ammonia plant vent stack applications. Using the 3/4" cast steel coupler, it can be mounted indoors on the ammonia vent relief stack above the pressure relief valve or mounted outside on the relief header above the roofline. It can be configured to alarm at user specified concentration levels and send an analog signal to the controller or PLC to activate the emergency ventilation system or shut down the equipment depending on the level of alarm.

It offers 3-wire VDC or 4-wire VAC power, jumper selectable 4 - 20 mA or 0 - 10 VDC analog output, one SPDT dry contact relay, thermal resetting fuse, temperature compensation, back lit LCD display and audible alarm, all in a RoHS compliant package.

It comes standard with a water / dust tight, corrosion resistant ABS / polycarbonate enclosure with a hinged, secured door. Calibration and other maintenance procedures are simple and easily performed in the field.

NOTE: This device is not designed to monitor ammonia in applications requiring human health safety levels detection.

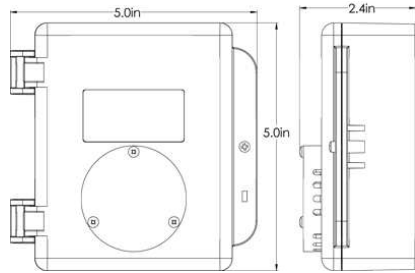
KEY FEATURES

- » Single channel, internal catalytic Ammonia sensor
- » Linear 4 - 20 mA or 0 - 10 volt output signal
- » 3-wire VDC or 4-wire VAC power
- » 24 volt DC or AC power (nominal)
- » LCD display (with user selectable function)
- » One 2A SPDT dry contact relay
- » Internal audible alarm
- » Standard water / dust tight, corrosion resistant enclosure (drip proof)
- » Thermal resetting fuses
- » RoHS compliant circuit board

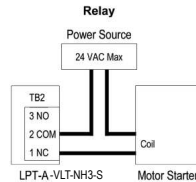
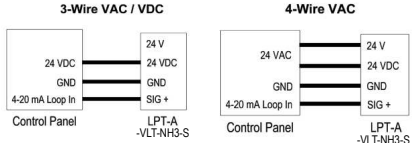
APPLICATIONS

- » Ammonia Refrigeration Plants
- » Processing Plants
- » Cold Storage / Freezer Rooms
- » ...and many more

TECHNICAL DRAWING



WIRING



TECHNICAL SPECIFICATIONS

GAS TYPE

Ammonia (NH₃) 0 - 3.00% volume range (catalytic)
Tolerant to 15% volume. **NOTE: Ammonia is flammable between 15% (LEL) and 28% (UEL) volume in air.**

MECHANICAL

Enclosure	ABS / Polycarbonate, IP54 rated. Copper coated interior to reduce RF interference.
Weight	825 g (29 oz)
Size (transmitter only)	127 x 127 x 60.96 mm (5.0 x 5.0 x 2.4 inches)



LPT-A-VLT Ammonia Vent Line Transmitter

TECHNICAL SPECIFICATIONS continued

Coupler	19.5 mm (3/4 in) NPT, cast steel
Sensor Assembly length (including coupler)	98.5 mm (3.875 in)

USER INTERFACE

Display	Graphic LCD, grey border
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INPUT / OUTPUT

Output	<ul style="list-style-type: none"> - Linear 4 - 20 mA analog - Maximum 216 Ω load (wiring plus termination resistor) @ 12 VAC - Maximum 316 Ω load (wiring plus termination resistor) @ 12 VAC - Voltage 0 - 10 volt - Minimum 1k ohm load
Relay	One dry SPDT contact, rated 30 volts, 2 amps max
Audible Alarm	Standard internal buzzer; enable/disable

SENSOR

Type	Catalytic NH ₃
Range	0 - 3.00% volume
Response Time T ₉₀	< 30 seconds

ELECTRICAL

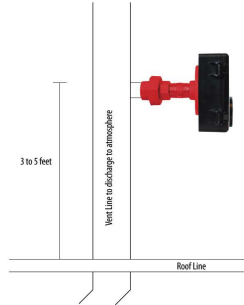
Power Requirement	<ul style="list-style-type: none"> 3-wire mode 16-30 VDC, 3 W, Class 2 4-wire mode 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Wiring	<ul style="list-style-type: none"> - VDC (or ground referenced AC) three conductor shielded 18 awg stranded - VAC four conductor shielded 18 awg stranded
Fuses	Thermal, resetting

ENVIRONMENTAL

Operating Temperature	-20°C to 40°C (-4°F to 104°F), lower temperature option available
Humidity	0 - 80% RH non-condensing

PRODUCT CODES

LPT-A-VLT-NH3-S	Ammonia (NH ₃) sensor 0 - 3.0% volume range)
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TYPICAL MOUNTING LOCATION**ACCESSORIES**

CET-5GC	Calibration clip for splash guard
CET-715A-CK1	Calibration Kit for 17, 34, 58, 74, 100 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
RSH-24VDC	Remote Strobe and Horn combo, mounted, 24 VAC/VDC, rated 100 dB @ 3 m (10 ft)
RAA-90	Remote Audible Alarm, rated 90 dB at 30 cm (1 ft)
SCS-8000-RSG	Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters

CERTIFICATION

Conforms to: CSA-C22.2 No. 205-12, UL508 (Edition 17):2007

Conforms to: EMC Directive 2004/108/EC
EN 50270:2006, Type 1, EN61010

Conforms to: FCC. This device complies with Part 15 of the FCC Rules.

