



Model LD-215 Liquid Nitrogen Level Detector/Alarm

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FEATURING:

- *User programmable alarm delay and mute periods*
- *Audio and visual alarms*
- *Rechargeable battery back-up*
- *Tool-less spring loaded connectors*
- *Includes SPDT relay output*
- *Low or high liquid level detection*

The LD-215 LN2 level detector/alarm uses a cryogenic RTD to sense the level of liquid nitrogen by monitoring the temperature change at the liquid-gas boundary. The unit can be configured for either low-level or high-level detection.

For low-level detection, the tip of the probe should be placed $\frac{1}{4}$ " above the lowest desired liquid level. When the liquid drops to this level, the alarm will sound and the relay output will change state. An optional time period can be specified to delay the activation of the beeper and relay.

For over-flow detection applications, the tip of the probe should be just submerged at the highest desired liquid level. In this configuration, the alarm condition occurs when the liquid rises enough to submerge the tip of the probe.

The relay output is SPDT (Form C) which includes both normally open and normally closed dry contacts. The contacts are isolated and can be used to control a resistive load up to 1 Ampere.

Custom programming and packaging can be provided to fit most monitoring tasks.



**Power Requirements:**

6-12VDC, 300mA max
Includes 120-120VAC, U.S. 2-prong, UL Listed power supply with 10' cord

Battery Back-Up:

Includes 2 each NiMH AA rechargeable batteries and built-in trickle charger

Mechanical:

Case is black ABS, 2.75" w x 5.5" h x 1.1" d
Velcro mount included
Optional wall mount bracket

Sensor:

Cryo 100 ohm RTD attached to 10' PTFE jacketed wire with s.s. sheath
Length of s.s. sheath is customizable from 2"-24"

Audio Alarm:

Beeper 80 Db

Visual Alarm:

Red LED

Selectable Alarm Delay Periods:

0, 30 sec., 1, 5, 10 or 30 minutes

Selectable Audible Alarm Mute Periods:

5, 10, 15, 20, 30 or 60 minutes

Output:

SPDT relay - UL Rated Load:
1 Amp @ 30VDC or 0.5A @ 125VAC
Relay Contact Ratings (Resistive Load):
Max. switched power: 30 W (DC) or 62.5 VA (AC)
Max. switched current: 1 Amp
Max. switched voltage: 220VDC or 250VAC
Max. carry current: 2 Amp

There is a one-year warranty on all Hampshire Controls products.

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About Our Company

Started in 1975, Hampshire Controls provides standard and custom designed electronics to the biomedical and industrial markets. In addition to the Model 140, other products include:

- MPS Multi-Point Temperature Monitor
- ADM-215 Remote Alarm Delay Module
- LN2 & CO2 Backup Control/Alarm for Freezers
- Isolated Input Line Voltage Controls
- Multi-Point Alert Monitoring System (AMS)
- TT-150 Battery Operated Temp Alarm with Wi-Fi Output
- Model 140 Single Probe Temperature Monitor
- Custom Microprocessor Assemblies
- Regulated Output Phase Control
- Custom AC Motor Phase Controls
- Air Flow Monitors
- TC-12 Rapid Response TEMP-CHECK

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