

SEAHAWK LEAK DETECTION



The LD2000 is one of the market's first web-accessible distance read leak detection panel. When integrated with SeaHawk Water Leak Detection Cable (SC) and/or zone spot detectors (SD-Z), the LD2000 detects the presence of any conductive fluid and reports the distance to the leak. Within seconds, the distance to the leak is shown on the LED display. The physical location of the leak can then be determined by cross referencing the distance displayed on the LED display with a cable reference map (FM1114) or by linking to a saved image through the HTML (webpage) interface.

The LD2000 can easily integrate into existing Building Management Systems (BMS) and Network Management Systems (NMS) or be configured for direct alarm notification via email.

The LD2000 can accommodate a continuous run of up to 2000 feet (609m) of SC and is ideal for leak detection in areas where the SC may not be visible. Common applications of this system include data centers (under raised floors), clean rooms, telecommunication centers and other critical areas. The LD2000 offers a reliable leak detection solution that mitigates potential water damage, costly business outages, and downtime.

Features

- HTML interface
- Quick return to normal status after SC is wiped dry
- Adjustable leak, delay, contamination thresholds
- Eight configurable virtual zones*
- Modbus integration (LD5100, LD2000, & LD1500)
- SNMP, Modbus, BACnet and summary relay output
- SMTP (email) notification
- Single person mapping
- Self-calibrating
- Supervised system

Benefits

- View alarms/alarm logs & configure via a Web browser
- Ready for next alarm—no need to wait for SC to dry
- Helps prevent nuisance & false alarms
- Allows users to label unique areas
- Can be used to identify simultaneous leaks
- Simple integration with BMS& NMS
- Alarm notification via email and other wireless devices
- Simplifies the setup
- No factory calibration required
- Identifies cable disconnects & breaks

*Virtual zones can be used to annunciate multiple, simultaneous leaks when other LD5100's, LD2000's or LD1500's are integrated into the system.

Specifications

Power LD2000	24VAC Isolated @ 600mA max., 50/60Hz; requires power supply (not included) 24VDC @ 600mA max., 50/60Hz; requires power supply: WA-DC-24-ST (not included) 100/120/230-240VAC @ 500mA max, 50/60Hz power supply; included in the LD-ENC optional enclosure
Inputs Water Leak Detection Cable Cable Input Maximum Length Detection Accuracy Detection Repeatability Detection Response Time	Compatible with SeaHawk SC Cable (not included) Requires SeaHawk LC-KIT: 15ft (4.57m) leader cable and EOL (LC-KIT not included) 2,000ft (609m) ± 2ft (0.6m) +/- 0.5% of the cable length ± 2ft (0.6m) +/- 0.25% of the cable length 5-995sec, software adjustable in 5sec increments; ±2sec
Outputs Relay	Summary Relay; 1A @ 24VDC, 0.5A resistive @ 120VAC
Communications Ports Ethernet EIA-232 EIA-485	10/100 BASE-T, RJ45 connector; 500VAC RMS isolation DB9 female connector; 9600 baud; No parity, 8 data bits, 1 stop bit 1200, 2400, 9600 or 19200 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit
Protocols TCP/IP, HTML, TFTP SNMP SMTP (Email) Modbus (EIA-485) Modbus TCP/IP UDP/IP BACnet/IP BACnet MS/TP BACnet Alarms Terminal Emulation (EIA-232)	IPv4.0; webpages comply with Rehabilitation Act of 1973, sections 504 and 508, US Dept of Education (website accessibility for computer users with disabilities) V1: V2C MIB-2 compliant; NMS Manageable with Get, Set, Traps Supports Client Authentication (plain and login); compatible with ESMTP Servers Slave; RTU mode; Supports function codes 03, 04, 06 and 16 Master: RTU mode for integration with RLE's LD5100, LD2000 & LD1500 products only Modbus Slave; TCP/IP transmission protocol Modbus Master; TCP/IP transmission protocol for integration with RLE's LD5100, LD2000 & LD1500 products only ASHRAE STD 135-2004 Annex J EIA-485 Automatically reports to a single destination VT100 compatible
Alarm Notification Visual Alarm Email (Ethernet) SNMP Traps (Ethernet)	Red, 4-digit; 7 Segment LED Display; Bi-color status LED 4 Email recipients; email sent on Alarm and Return to Normal; each Alarm can notify any or all of the email recipients 4 Community Strings
Logging Capabilities Event Log Trend Log	Last 500 events Cable current level every day, for the last 288 days
Login Security Web Browser Access (Ethernet) Terminal Emulation Access	1 Web password Read Only; 1 Web password Read/Write None
LD2000 Front Panel Interface Display Push Buttons LED Indicators	Red, 4-digit; 7 Segment LED Display; Bi-color status LED Test/Rest: 1 Power/Status: 1 tri-color (Power On: green; Alarm: red; Cable Fault: yellow)
Operating Environment Temperature Humidity Altitude	32° to 122°F (0° to 50°C) 5% to 95% RH, non-condensing 15,000ft (4,572m) max.
Storage Environment	-4° to 185°F (-20° to 85°C)
Dimensions LD2000	8"W x 4.25"H x 1.25"D (203mmW x 108mmH x 32mmD)
Weight LD2000	1.5 lbs. (680g)
Mounting LD2000	Wall mountable; Rack mount kit RMK-DR (optional); Wall mount enclosure LD-ENC (optional)
Certifications	CE; ETL listed: conforms to UL STD 61010-1, EN STD 61010-1; certified to CSA C22.2 STD NO. 61010-1; RoHS compliant



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