RLE
Technologies

SeaHawk LD2100

The LD2100 is a robust, web-accessible distance-read leak detection controller. When integrated with SeaHawk sensing cable or spot detectors, the LD2100 detects the presence of fluids 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 viewing the interactive map in the user interface or by cross referencing the distance on the display with a wall map.

The LD2100 has an audible alarm for local monitoring. In addition, it can easily integrate into existing building management, network management, and building automation systems, or be configured for direct alarm notification via email.

Common applications include data centers, clean rooms, telecommunication centers, and other critical areas. The LD2100 offers a reliable leak detection solution that mitigates potential damage, costly business outages, and downtime.

Features

- Interactive leak detection map
- Quickly returns to normal status after sensing cable is wiped dry
- Adjustable leak, delay, and contamination thresholds
- Thirty-two configurable zones
- SNMP, Modbus, BACnet, and summary relay output
- SMTP (email) alarm notification
- Audible alarm

Benefits

- Easily identify leak location
- Avoid costly damage and downtime with fast leak notification
- Prevent nuisance & false alarms
- Allow users to label unique areas for quick identification
- Simple integration with BMS, NMS & BAS
- No factory calibration required
- Identify cable disconnects & breaks
- Annunciate multiple, simultaneous, leaks when other distance-read controllers are integrated into the system

Uploaded reference map can be configured to display the location of the leak

Leak Detection
www.rletech.com

LD2100 Specifications

Power	Requires an isolated power supply. 24VDC Isolated @ 600mA max., 50/60Hz; requires RLE power supply PSWA-DC-24 (not included) 24VAC Isolated @ 600mA max., 50/60Hz; requires RLE power supply WA-AC-24 (not included) 100/120/230-240VAC @ 500mA max., 50/60Hz power supply; requires RLE LD-ENC enclosure (not included)

Included Accessories	Leader cable and EOL terminator

Output

Relay	1 Form C summary relay, 1A @ 24VDC, 0.5A resistive @ 120VAC; configurable for latched or non-latched

Inputs

Leak Detection Cable	Compatible with SeaHawk sensing cables (not included)
Cable Input	Requires 15ft (4.57m) leader cable and EOL terminator (included)
Maximum Length	5,000ft (1524m) of conductive fluid sensing cable or 3,5ooft (1067m) of chemical sensing cable
Minimum Length	35 ft. (10.67m)
Detection Accuracy	± 2ft (0.6m) +/- 0.5% of the cable length
Detection Repeatability	± 2ft (0.6m) +/- 0.25% of the cable length
Detection Response Time	5-995sec, software adjustable in 5sec increments; ±2sec

Communication Ports

Ethernet	10/100BaseT, full/half duplex RJ45 connector; 500VAC RMS isolation
EIA-232	DB9 female connector; 9600 baud; 8 data bits, no parity, 1 stop bit
EIA-485	9600, 19200, 38400, or 56700 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit

Protocols

TCP/IP, HTML, TFTP	IPv4.0; webpages comply with Rehabilitation Act of 1973, sections 504 and 508, US Dept of Education (website accessibility for computer users with disabilities)
SNMP	V1: V2C MIB-2 compliant; NMS Manageable with Get, Set, Traps: V3 optional
SMTP (Email)	Supports Client Authentication (plain and login); compatible with ESMTP Servers
Modbus (EIA-485)	Slave; RTU mode; Supports function codes 03, 04, 06 and 16 Master: RTU mode for integration with RLE's LD5200, LD2100, and LD1500 products; Johnson N2
Modbus TCP/IP UDP/IP	Modbus Slave; TCP/IP transmission protocol Modbus Master; TCP/IP transmission protocol for integration with RLE's LD2100 and LD1500 products
BACnet/IP	ASHRAE STD 135-2004 Annex J
BACnet MS/TP	EIA-485
BACnet Alarms	Automatically reports to a single destination
Terminal Emulation (EIA-232)	VT100 compatible

Alarm Notification

Visual Alarm	Green, alphanumeric, dot matrix LED display; bi-color status LED
Audible Alarm	70dBA @ 2ft (0.6m); re-sound configurable (disabled, 0-24 hours)
Email (Ethernet)	4 Email recipients; email sent on Alarm and Return to Normal; each alarm notifies all email recipients
SNMP Traps (Ethernet)	4 Community Strings

Logging Capabilities

Event Log	Last 500 events
Trend Log	Cable current level once daily for the last 288 days

Login Security

Web Browser Access (Ethernet)	Web password Read Only; 1 Web password Read/Write

Front Panel Interface

Display	Green alphanumeric dot matrix display
Push Buttons	Test/Reset: 1
LED Indicators	Power/Status: 1 bi-color (Power On: green; Alarm: red)

Operating Environment

Temperature	32° to 122°F (0° to 50°C)
Humidity	5% to 95% RH, non-condensing
Altitude	15,000ft (4,572m) max.

Storage Environment	-4° to 185°F (-20° to 85°C)

Dimensions & Weight	8"W x 4.25"H x 1.25"D (203mmW x 108mmH x 32mmD); 1.5 lbs. (680g)

Mounting	Wall mountable; wall-mount enclosure LD-ENC or LD-ENC-NP (optional); rack mount bracket RMB (optional)

Certifications	CE; ETL listed: conforms to UL 61010-1, EN 61010-1; certified to CSA C22.2 NO. 61010-1; RoHS compliant

v1.4
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