RLE Technologies

SeaHawk
LD1500

T he LD1500 is a cost-effective solution designed for simple integration into an existing monitoring system. When integrated with SeaHawk sensing cable and/or zone spot detectors (SD-Z), the LD1500 detects the presence of fluids and identifies the distance to the leak. Within seconds, this distance can be communicated via various protocols to alarm monitoring and/or notification systems. The physical location of the leak can then be determined by cross referencing the distance with a cable reference map.

Multiple LD1500s can connect to RLE Technologies' LD2100 and LD5200, allowing the LD2100 or LD5200 to identify and annunciate multiple, simultaneous, leaks.
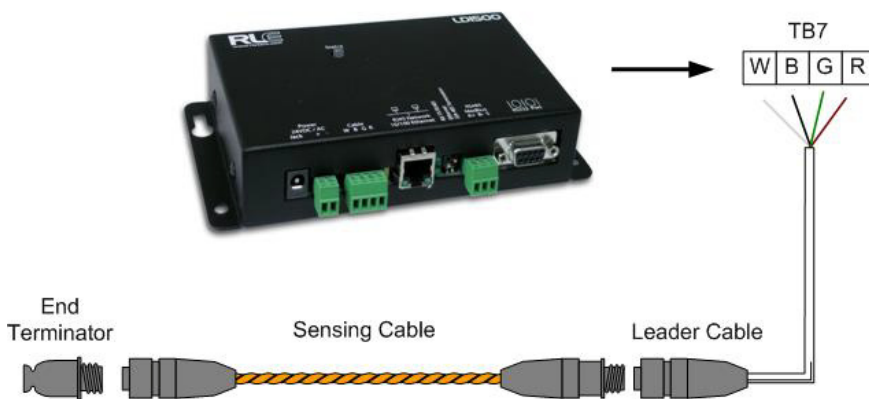
The LD1500 can accommodate a continuous run of up to 1500 feet (457m) of sensing cable and is ideal for leak detection in areas where the sensing cable may not be visible. Common applications of this system include data centers (under raised floors), clean rooms, telecommunication centers and other critical areas. The LD1500 offers a reliable leak detection solution that mitigates potential water damage, costly business outages, and downtime.

Features

- Cost-effective
- HTML interface
- Quickly returns to normal status after sensing cable is wiped dry
- Adjustable leak, delay, & alarm sensitivity threshold
- Modbus integration with LD5200 & LD2100
- SNMP, Modbus, and BACnet communications
- Supervised system

Benefits

- Quality leak detection at a low cost
- View alarms and configuration with a Web browser
- Ready for next alarm - no need to wait for sensing cable to dry
- Helps prevent nuisance & false alarms
- Multiple units can be used to identify simultaneous leaks
- Integrates with BMS &NMS
- Identifies cable disconnects & breaks

Basic installation of LD1500, leader cable, sensing cable, and EOL terminator

Leak Detection

LD1500 Specifications

Power

24VDC@ 600mA max., 50/60Hz; requires power supply: PSWA-DC-24 (not included)
24VAC Isolated@ 600mA max., 50/60Hz; requires power supply: WA-AC-24-ST (not included)
100/120/230-240VAC@ 500mA max., 50/60Hz power supply; included in the LD-ENC optional enclosure

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Included Accessories

Leader cable and EOL terminator

Inputs

Water Leak Detection Cable	Compatible with SeaHawk Sensing Cable (not included)
Cable Input	Requires SeaHawk LC-Kit:15ft (4.57m) leader cable and EOL (LC-Kit included)
Maximum Length	Up to 1,500ft (457m) of conductive fluid sensing cable or 1050ft (320m) or chemical sensing cable
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

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Communication Ports

Ethernet	10/100BASE-T, RJ45 connector; 500VAC RMS isolation
EIA-232	DB9 female connector; 9600 baud; 8 data bits, no parity, 1 stop bit
EIA-485	1200, 2400, 9600, 19200, or 38400 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit

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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
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	Bi-color status LED
SNMP Traps/Informs (Ethernet)	2 Community Strings

Logging Capabilities

Event Log	Last 10 events

Login Security

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

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LD1500 Front Panel Interface

LED Indicators	Power/Status: 1 bi-color (Power On: green; Alarm / Cable Fault / Cable Contamination: 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

7"W x 3.62"H x 1.25"D (178mmW x 92mmH x 32mmD)

Weight

1.5 lbs. (680g)

Mounting

Wall mountable; Rack mount bracket LD1500-RMD (optional); Wall mount enclosure LD-ENC (optional)

Certifications

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