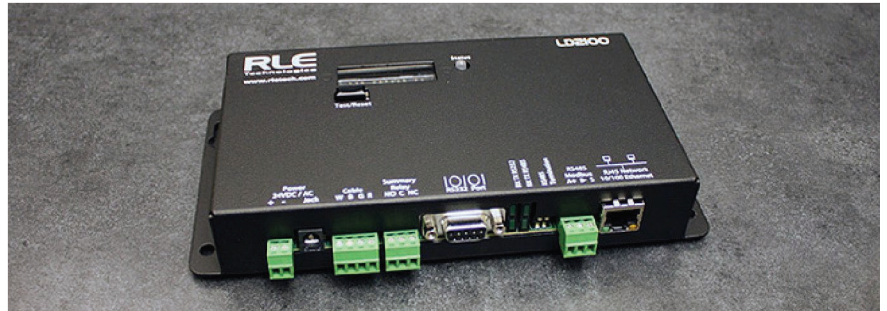# LD2100
Distance-Read
Leak Detection Controller

Applications

- Data Centers
- Clean Rooms
- Hospitals
- Telecommunication Centers
- Museums & Libraries
- Warehouses

Key Features

- Monitor up to 5,000 feet of sensing cable and spot detectors
- Quickly returns to normal status after sensing cable is wiped dry
- Adjustable leak alarm sensitivity
- DeltaView technology displays leak location on a web accessible map
- Segment a facility into 32 virtual zones with descriptive labels for quick leak location
- Display the status of up to 32 controllers to annunciate multiple simultaneous leaks

Robust, Web Accessible Leak Detection

The LD2100 combines reliable, scalable leak detection with a suite of diverse alarm notification pathways and protects any critical facility from damaging leaks.

What Sets ACI's LD2100 Apart?

- **Distance-read leak detection** pinpoints the precise location of the leak.

- **A supervised system,** the controller continuously monitors the cable for leaks, breaks, and disconnects.

- **Robust alarm notification** via scrolling display, audible alarm, web interface, email, relay output, and protocol integration; notify users of leaks and faults in real time.

- **Seamless integration**. SNMP, BACnet, and Modbus outputs, plus a summary relay output, allow the LD2100 to deliver information directly to a larger BMS system.

- **Hosts its own web pages** so you can access alarms, interactive floor maps, and configuration details from any web browser with no additional fees or subscriptions.

LD2100 · Compatible with all ACI sensing cables and the SD-Z spot detector

Product Codes

LD2100	Distance-read leak detection controller; LED display, web enabled. Includes LC-KIT for use with SC, SC-ZH, SD-Z. Requires A/PS24-24V-S.
LD2100-M	Distance-read leak detection controller; LED display, web enabled. Includes LC-KIT-M for use with SC-C. Requires A/PS24-24V-S.
A/PS24-24V-S	24VDC Adjustable Power Supply w/Snap Track
LD-ENC	Wall mount enclosure with backplate and power supply; 12.5in x 10in x 3.5in. Requires hardwired 110/120/230-240VAC.
LD-ENC-NP	Wall mount enclosure with backplate; 8in x 10in x 2in.
LD2100-RMB	Rack mount bracket for LD2100; 19in/482mm.

Technical Specifications

Power	Requires an isolated power supply. 24VDC Isolated @ 600mA max., 50/60Hz; requires power supply A/PS24-24V-S (not included) 100/120/230-240VAC @ 500mA max., 50/60Hz power supply; requires LD-ENC enclosure (not included)
Included Accessories	Leader cable and EOL terminator
Relay Output	1 Form C summary relay, 1A @ 24VDC, 0.5A resistive @ 120VAC; configurable for latched or non-latched

Sensing Cable
  Cable Input
  Maximum Length
  Minimum Length
  Detection Accuracy
  Detection Repeatability
  Detection Response Time
	Compatible with ACI sensing cables and the SD-Z spot detector
	Requires 15ft (4.57m) leader cable and EOL terminator (included)
	5,000ft (1524m) of sensing cable
	35ft (10.67m)
	± 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

Communication Ports
  Ethernet
  EIA-232
  EIA-485
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)
	10/100BaseT, full/half duplex RJ45 connector; 500VAC RMS isolation
	DB9 female connector; 9600 baud; 8 data bits, no parity, 1 stop bit
	9600, 19200, 38400, or 56700 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit
	
	IPv4.0; web pages 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: V3 optional
	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 ACI's LD5200, LD2100, and LD1500 products; Johnson N2
	Modbus Slave; TCP/IP transmission protocol Modbus Master; TCP/IP transmission protocol for integration with ACI's LD2100 and LD1500 products
	ASHRAE STD 135-2004 Annex J
	EIA-485
	Automatically reports to a single destination
	VT100 compatible

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

Logging Capabilities Event Log Trend Log	Last 500 events Cable current level once daily for the last 288 days
Web Interface Login Security	1 password Read Only; 1 password Read/Write

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

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