

# Zone Leak Detection Panels

## Zone Leak Detection Controller



### DESCRIPTION

LD300, LD1000, LDRA6 and LDRA6-MB control panels continuously monitor up to 1,000 ft. (300 ft. for the LD300) of SC, SC-Con, or SC-H detection cable per zone. If the cable detects fluid at any point along its length, the detection panel illuminates the corresponding zone LED, clearly indicating which zone is affected. An alarm (visual for LD300, audible for all others) signals the presence of a leak. Additionally, if the cable fails or loses continuity, the panel will activate a cable fault LED. The detection sensitivity can be set independently for each zone. A summary alarm relay output is standard.

The LDRA6 can interface with a computer via an RS-232 port, through which 117 days of cable current level readings and the last 100 alarms can be accessed for analysis. The LDRA6-MB also offers an optional Modbus slave port allowing other devices to communicate with it.

### APPLICATIONS

- Monitoring data centers, computer room under-floor areas, mechanical rooms, and electrical control centers
- Protecting records storage rooms
- Monitoring plumbing in facilities
- Monitoring chilled beams
- Monitoring chemical and fuel storage areas

### SPECIFICATIONS

**Input Power** LD300: 5VDC  $\pm 10\%$ ; LD1000: 24VAC/DC ( $\pm 10\%$ )@300mA max.; LDRA6, LDRA6-MB: 24VAC/DC ( $\pm 10\%$ )@600mA max.

**Inputs:**  
**Water Leak Detection Cable** Requires 15 ft. (4.5 m) leader cable kit (LC-Kit) per zone

**Maximum Cable Length** LD300: 300 ft. (91 m); LD1000, LDRA6, LDRA6-MB: 1000 ft. (305 m)

**Detection Response Time** LD300: < 20 sec (10 sec typical); LD1000: Configurable for 10 sec or 2 min,  $\pm 10\%$   
 LDRA6, LDRA6-MB: 20-3600 sec, software adjustable in 10 sec increments,  $\pm 2\%$

**Relay Output** LD300: 2 Form C relays (leak and fault); 1A@24VDC, 0.5A resistive@120VAC; LD1000: 2 Form C relays (leak and fault); 1A@24VDC, 0.5A resistive@120VAC  
 LDRA6, LDRA6-MB: 1 Form C summary alarm relay, 1 Form C relay for each zone/alarm; 1A@24VDC, 0.5A resistive@120VAC

**Communication Ports (LDRA6 and LDRA6-MB only):**

**RS-232 & RS-485** 1200, 2400, 9600, or 19200 selectable; no parity; 8 data bits, 1 stop bit

**Terminal Emulation (RS-232)** VT100 Compatible (configuration)

**Modbus (RS-485) (LDRA6-MB only)** Slave; RTU Mode; Supports function codes 03, 04, 06 and 16

**Alarm Notification Audible Alarm** LD1000: 85 dBA@2 ft. (0.6 m); LDRA6, LDRA6-MB: 85dBA@2 ft. (0.6 m) re-sound disabled, 8, 16, or 24 hrs.

**Push Buttons** LD1000, LDRA6, LDRA6-MB: 1 for reset, quiet, and test

**Operating Environment:**

**Temperature** 0° to 50°C (32° to 122°F)

**Humidity** 5% to 95% RH non-condensing

**Altitude** 15,000 ft. (4,572 m) max

**Storage Environment** -20° to 70°C (-4° to 158°F)

**Weight** LD300: 3 oz. (85 g); LD1000: 27 oz. (766 g); LDRA6, LDRA6-MB: 4 lbs. (2 kg)

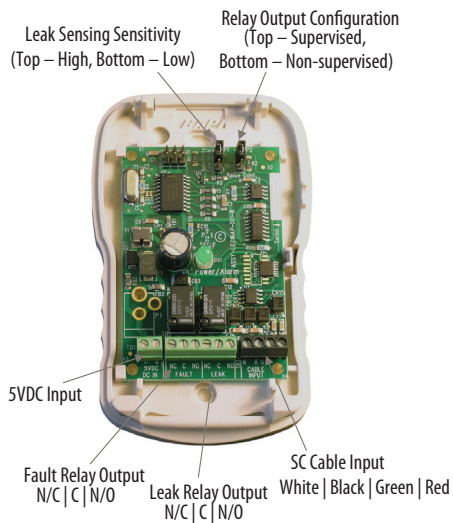
LD300: CE; RoHS Compliant

LD1000: CE, ETL listed; conforms to UL 61010-1, RoHS Compliant

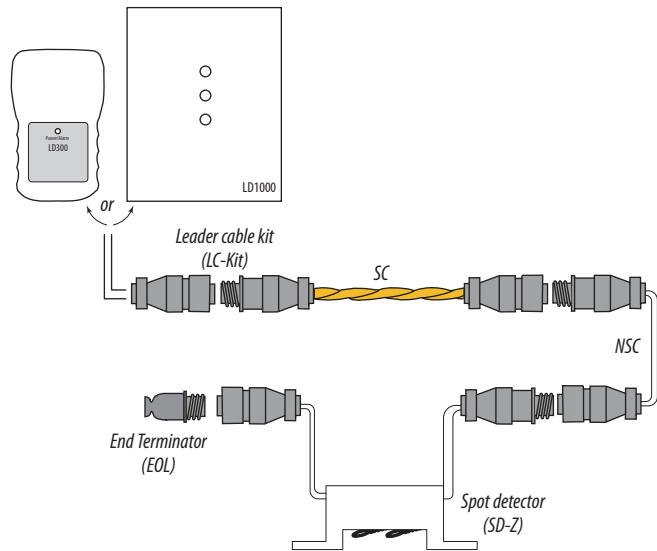
LDRA6, LDRA6-MB: CE; ETL Listed; Conforms to UL 61010-1, EN 61010-1, CAN/CSA C22.2 No. 1010.1, RoHS Compliant

## APPLICATION/WIRING DIAGRAMS

### LD300 Wiring

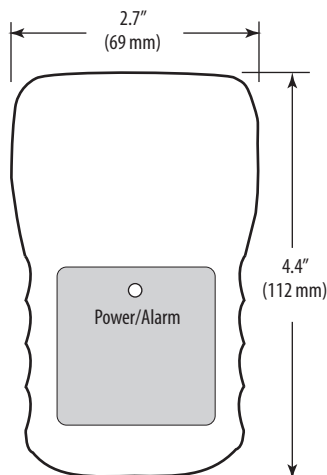


### LD300 or LD1000 basic installation with SC Sensing Cable and SD-Z Spot Detector

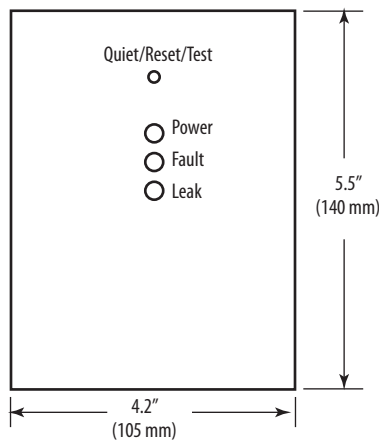


## DIMENSIONAL DRAWINGS

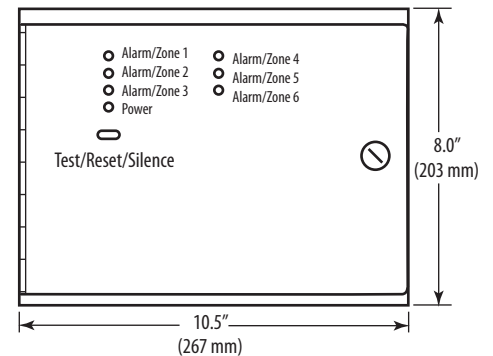
### LD300



### LD1000



### LDRA6 and LDRA6-MB



## ORDERING INFORMATION



MODEL	MANUF. PART #	DESCRIPTION
U006-0002*	LD300*	Leak Panel, 1 zone, LED, 2 relay outputs
U006-0001**	LD1000**	Leak Panel/Remote Annunciator, 1 zone, supervised, relay output
U006-0034**	LDRA6**	Leak Panel, up to 6 zones, supervised, relay output
U006-0036**	LDRA6-MB**	Leak Panel, up to 6 zones, supervised, relay output, Modbus RTU
U006-0035	LC-KIT <sup>†</sup>	Leader cable kit for SC cables (connects from leak panel to SC or NSC cable)
U006-0061	LC-KIT-M <sup>††</sup>	Leader cable kit for SC-C and SC-H cables (connects from leak panel to SC-C or SC-H cable)
U006-0004	FM1114	Reference map, framed (11" x 14")
U006-0037	WA-DC-05	Power Supply for LD300

\* Power supply not included; requires WA-DC-05 power supply.

\*\* Power supply not included; requires Veris PS24-7.5W power supply or equivalent.

<sup>†</sup> Included with LD300 and LD1000.

<sup>††</sup> Not included with LD300 and LD1000. Required for installation of SC-C and SC-H cables.

## BLINK CODE KEY

Model	LED Indication	Device Status
LD300	Solid green (on or off)	Normal operation
LD300	Flashing green (0.5 sec on/2.5 sec off)	Cable fault
LD300	Flashing green (0.5 sec on/0.5 sec off)	Leak detected
LD1000	Solid green (on or off)	Normal operation
LD1000	1 amber	Cable fault
LD1000	1 red	Leak detected
LDRA6/LDRA6-MB	Solid green (on or off)	Normal operation
LDRA6/LDRA6-MB	1 green	Power on
LDRA6/LDRA6-MB	1 red	Leak detected
LDRA6/LDRA6-MB	1 yellow	Cable fault