

Drop Sense CS8ZWLD

Water leak detection System should be designed to protect the Air-conditioned premises and to alert the personnel about the leak in the AC systems. The system should be capable of interfacing to Water leak detection sensors, condensation sensors & I/O modules

Technology

The product is designed using High Speed Microprocessor based proprietary design and uses 12V, 50Hz AC as sensing voltage for sensing potential leaks.

Technological Advantage over Existing Design

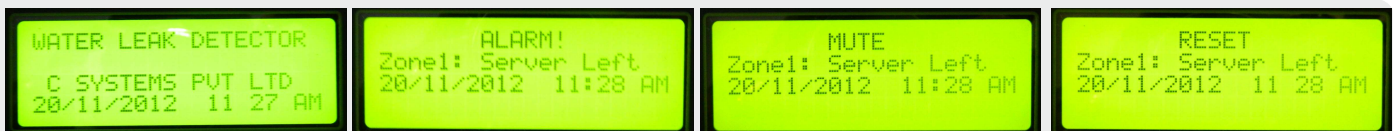
Existing water leak detection systems available in the market, uses a 12V / 24V DC supply for sensing leaks. When DC excitation is used in the sensing cables they form electrolysis during the presence of water and forms corrosion around the sensing cables. This reduces the sensitivity over a period of time to virtually zero. However WLD200 module uses AC as a sensing voltage, it does not corrode or degrade due to the alternating nature of the current and hence maintains the sensitivity of the sensing cables through out its life time.

C Systems designed the CS8ZWLD with the end-user in mind. All basic device functionality is available from the LCD screen — configure, monitor, locate, and acknowledge leaks from the front panel of the CS8ZWLD. The CS8ZWLD panel accepts single zone WLD module. Upto 8 modules can be connected to a single CS8ZWLD panel.

Once the CS8ZWLD is connected to a network via RS485 to Ethernet gateway, a robust MODBUS interface expands the capabilities of the unit. Using any BMS interactive facility mapping tool, one can create an interactive overlay that displays on top of an uploaded floor map image. When a leak is detected, the CS8ZWLD displays its zone name on the map, making leak location quick and easy.

The panel report a fault indication if the sensors tampered with or if the system cables are cut even in the Isolated state.

A LCD supports all device functionality



Features

- Monitor up to 400 meters of conductive fluid sensing cable
- Microcontroller based innovative technology.
- Configure up to 8 zones. Accepts 8 WLD modules
- Battery backup facility, 12V, 7Ah
- Detects fault when any tape sensor is cut open during isolated state
- Triggers individual Relay output for each zone and activates common Fire & hooter relays.
- Access the device remotely via Remote BMS via MODBUS protocol
- Zone names can be configured
- Log an extensive variety of events and alarms

Benefits

- Stand-alone or integrated leak detection and notification
- Pinpoint zone leaks quickly and accurately
- Manage an entire Server Room leak detection system through one RS485 Port or through IP Gateway
- Detailed alarm history with time and date stamp assists in troubleshooting

Leak Detection

www.systemsindia.com

CS8ZWLD Specifications

Power	100-240VAC@ 500mA max, 50/60Hz
Battery Backup	13.5V charging voltage, 700 mA trickle charger
Battery	12V,7Ah maintenance free Lead Acid battery (not included)

Inputs

Sensing Module	Compatible with all Drop Sense sensing Modules M200
Connectivity	2 core x 1.5 sq.mm between module and panel
Detection	Module presence fault indication
Isolation	Optical Isolation between module & panel
Maximum Modules	8

Outputs

LED Indications	
Power on	Green LED
Alarm	Red LED for each zone
Fault	Amber LED for each zone
Isolate	Green LED for each zone
Relays	8 x Form SPDT Zone Leak Relays, 2 x Form SPDT Fire & Fault
Sounder	12V terminals for Hooter / strobe

Communication Ports

EIA-485 (Port 1)	9600, or 19200 baud (selectable); No parity, 8 bits, 1 stop bit
R8A (Port 2)	50000 bps ; For firmware download

Protocols

EIA-485 (Port 1)	Modbus RTU - Slave; Terminal emulation, VT100 compatible
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Alarm Notification

Audible Alarm	Inbuilt buzzer 80dBA @ 1m (3.3ft); External hooter (not included)
Visible Alarm	Alarm indicated on LCD screen and through BMS after integration

Logging Capabilities

Event Log	Last 100 events with Date & time
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Login Security

Membrane Keypad	No password required to view controller status and data. Administrator password limits access to Log options.
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Front Panel Interface

Display	4 x 20 Characters Yellow Green backlit LCD screen; 95mm x40 mm
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Operating Environment

Temperature	0 to 55 Deg C
Humidity	0% to 90% RH, non-condensing
Altitude	15,000ft (4,572m) max.

Storage Environment

-20 Deg to 70 Deg C (-4 Deg to 158 Deg F)

Dimensions

340mmW x 245mmH x 80mmD

Weight

1.5kg. (3.31lbs)

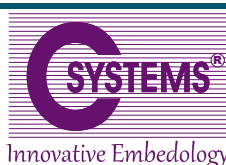
Mounting

Type 1 wall mount enclosure

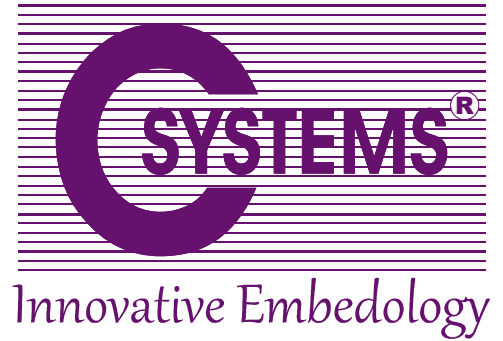
Certifications

CE (EN IEC 61010-1:2010 + A1:2019, EN ISO 12100:2010)

Drop Sense



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Drop Sense WLD-M200

Modules

Water Leak Detection modules are able to mount in DIN rails, inside AHU's, power distribution units or other equipment where localized leak detection is required. The detectors should be resistant to oxidation and erosion. The detector should have relay output for connection to the controller. LED alarm indication should also be provided. The detectors should operate in AC supply..

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Features

- LED Status of leak status
- VFC output
- Audible alarm

Specification

Input Voltage	:	230V AC
Frequency	:	50Hz
Zones	:	1

Output

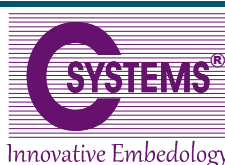
Audio	:	Piezo Buzzer
Visual	:	LED for Alarm
Relay Contacts	:	1 Amps @ 24V DC

General

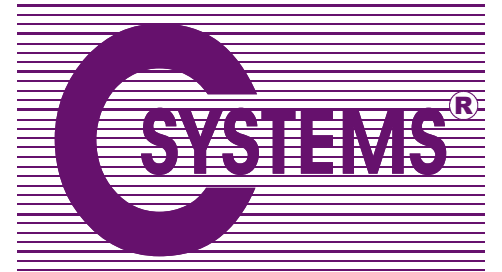
Dimension	:	120 x 75 x 75 mm *
Sensing Cables	:	As per requirement
Country of origin	:	INDIA

* Dimension subject to change

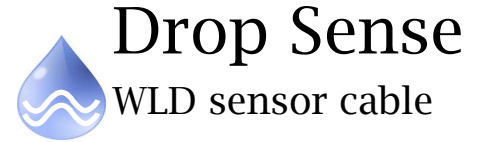
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Innovative Embedology



Features

WLD Sensor cable is easy to lay and detects along its entire length. More than one WLD Sensor cable can be connected to a WD 2400

Detects water leaks under floors or isolated plant rooms

Rain detector to automatically close windows or vents

WLD Sensor Cable Specifications

Material:	PVC twisted pair with stainless 316 elements
Dimension:	3.5mm dia.
Maximum cable run:	200m (including detection cable)
Weight:	28 g /m
Controller:	Drop Sense WLD 2400
Country of origin:	INDIA

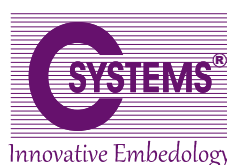
Part Codes

Sensing Cable Length (add type to above code)

- 5M 5 meters (16.4ft)
- 10M 10 meters (32.81ft)
- 15M 15 meters (49.21ft)
- 20M 20meters (65.62ft)
- 25M 25 meters (82.02ft)

Custom lengths available on request *

Dr  Sense



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