



**Integrated Monitoring  
Solutions for Today's  
Technology Facilities**

# WD1/WD1-S Point Leak Detector

## FEATURES

- Adjustable Probe Height
- Wide Range of Operating Voltages
- Form "C" Relay Output for Alarms  
(1Amp/120Vac Rated)
- Gold Sensing Probes
- Red LED indicator light
- Encapsulated Electronics
- Failsafe Circuitry (WD1-S Only)
- Self Contained System  
(No special monitor panel required)
- Design Flexibility
- Simple Installation



## GENERAL

The DIT WD1 and WD1-S are Water Point Detectors, featuring gold-plated probes and microchip technology for the highest level of water detection confidence. All models can be operated from 12-25 Volts AC or DC. Alarm signaling is provided with form "C" relay contacts. Connect the WD1 or WD1-S to a Darwell MPR, GMP or similar monitoring system to complete the monitoring package. A height adjustable, epoxy painted steel enclosure is standard.

The WD1 models change the relay contact state, and lights the red LED on the cover when water is present at the sensing probes. The WD1 model provide a single sets of contacts. The WD1-S models include fail-safe circuitry to signal an alarm condition for an internal malfunction or loss of power to the sensor. The WD1-S models incorporate a reverse acting set of relay contacts that are closed in a normal condition.



## OPERATION

The WD1 or WD1-S can be used with any "contact-closure" monitoring panel. The "dry" contact points may be wired normally open or normally closed, allowing wiring flexibility to handle most installations.

Relay contacts on the WD1 sensors, once powered, remain in the same state until water is applied to the sensing probes. When water is present, the relay contacts make.

On WD1-S sensors, the relay contacts are reverse acting and make as soon as power is applied.

When water is present at the sensing probes, the relay releases and returns to a non-powered state. During a powered steady state condition, the contacts will change states and signal an alarm condition if:

1. A leak is detected
2. An internal malfunction occurs
3. Power is lost to the sensor

## MOUNTING

The units mount directly on the floor or sub-floor. Two ¼" mounting holes are provided (one on each flange) for anchoring to the floor. Adjust the height of the sensing probes with the screws on the mounting legs.

## WIRING

The unit requires 12-24 Volts DC or AC power. Shielded cable should be used for wiring to prevent electrical noise. Electrical knockouts (1/2") are provided for electrical connection.

## WD1 Wire Connections

- |        |                |
|--------|----------------|
| Red    | Positive Power |
| White  | Negative Power |
| Orange | Relay Common   |
| Blue   | N.C. Contact   |
| Yellow | N.O. Contact   |

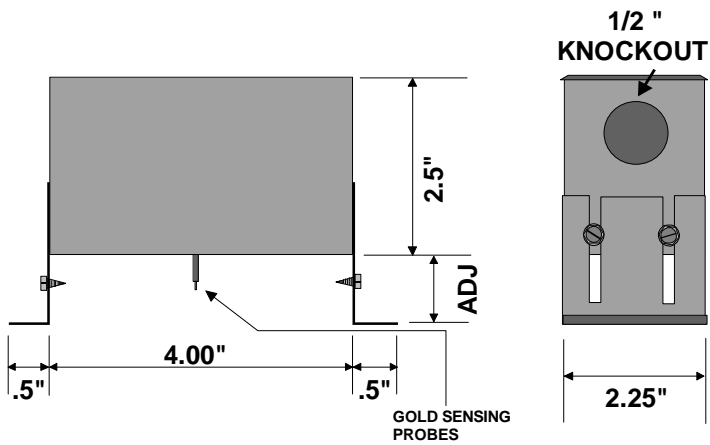
**Relay contacts are reverse acting on D1-S models.**

*For detailed mounting and wiring information, see the Darwell Technology Water Detection Installation Manual.*

**PO Box 2029  
Rowlett, Texas 75030-2029  
Phone: 214-607-9991  
Fax: 214-607-4334  
WWW.DARWELLIT.COM**



**Dimensions**



**SPECIFICATIONS**

**Model Number** WD1  
**Power** 12-24 Volts AC or DC  
 50MA  
**Alarm Output** Form "C" Relay Contacts  
**Indicator Light** Red LED  
**Contacts** (1Amp/120Vac Rated)  
**Environmental** 32-125F/0-95%Rh  
**Size** 5"L x 5"H x 3.25"D  
**Weight** 1.4 lbs.

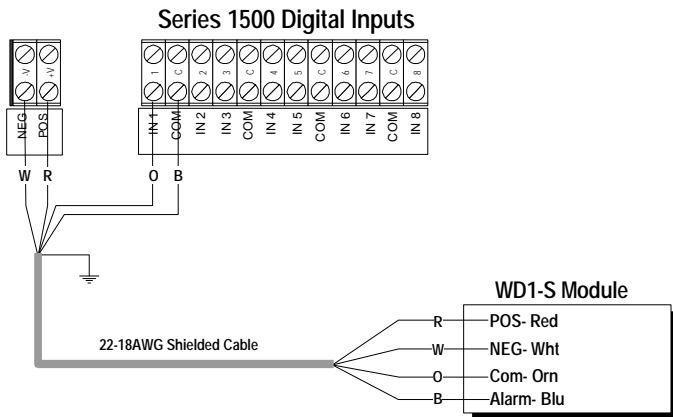
**Model Number** WD1-S  
**Power** 12-24 Volts AC or DC  
 50MA  
**Alarm Output** Form "C" Relay  
**Indicator Light** Red LED  
**Contacts** (1Amp/120Vac Rated)  
 (Reverse Acting)  
**Environmental** 32-125F/0-95%Rh  
**Size** 5"L x 5"H x 3.25"D  
**Weight** 1.4 lbs.

**WD1-(S) Module Wire Connections**

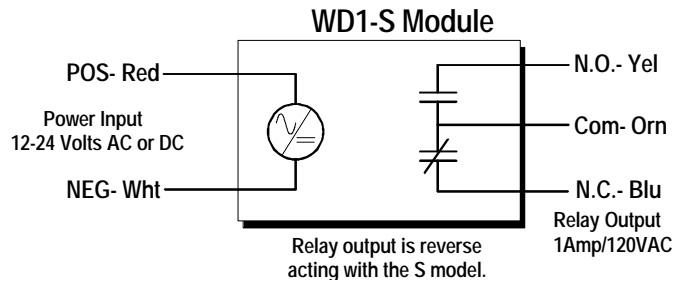
- Red Positive Power
- White Negative Power
- Orange Relay Common
- Yellow Normally Open
- Blue Normally Closed

Use 18-22 gauge stranded wire. For detailed mounting and wiring instructions, see Darwell Technology's Water Detection Installation Manual.

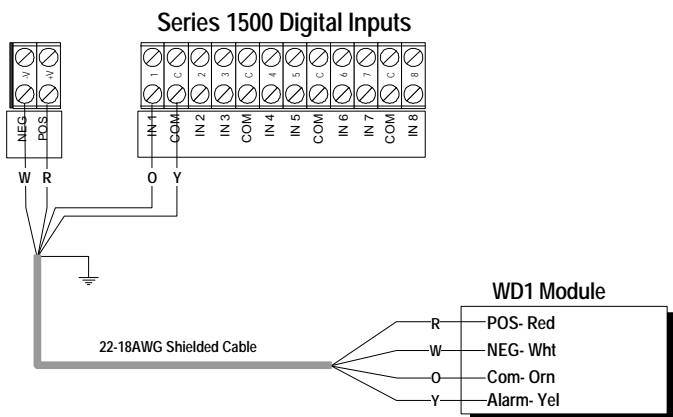
**WD1-S to AS1500 Wiring Diagram**



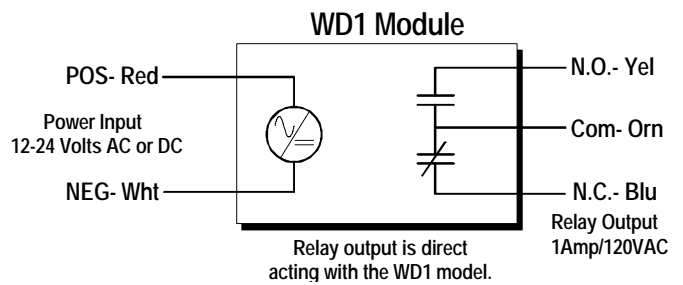
**WD1-S Internal Connections**



**WD1 to 1500 Wiring Diagram**



**WD1 Internal Connections**



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