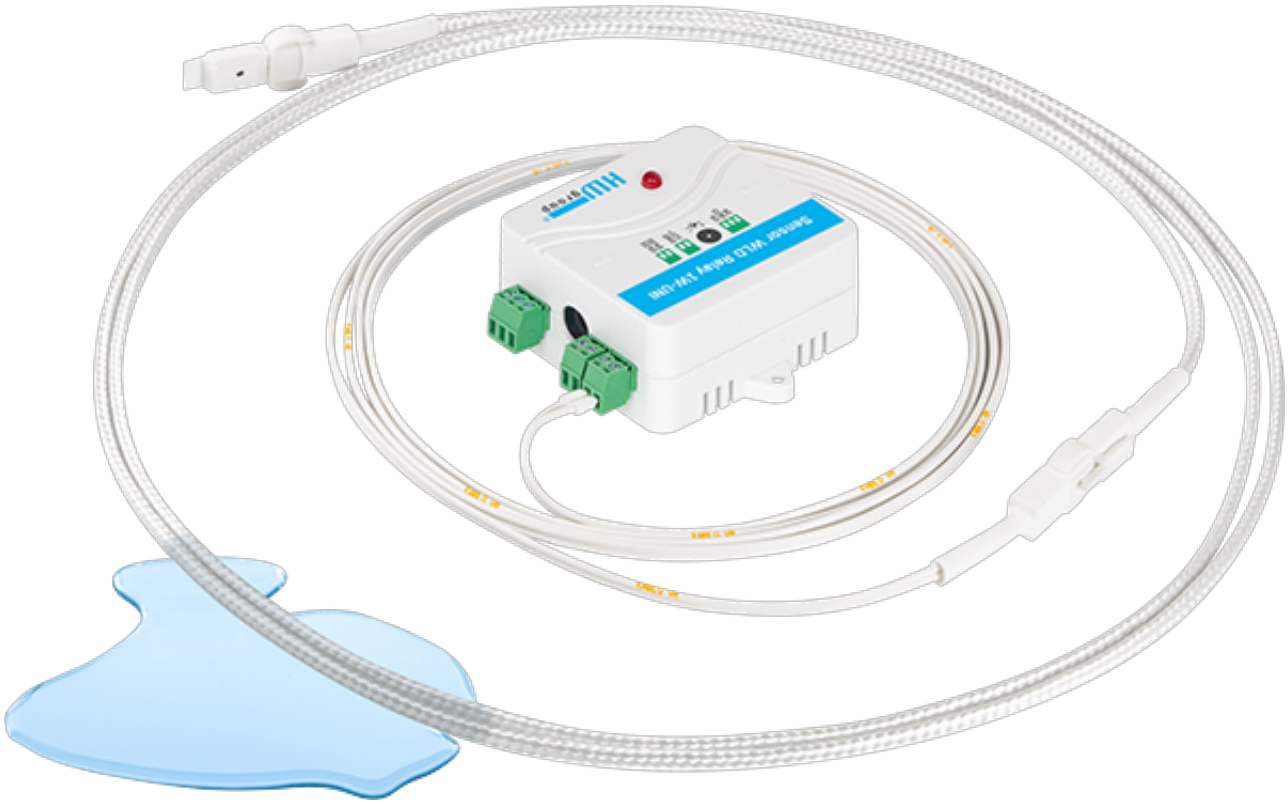
Top-selling WLD component: WLD Relay

WLD Relay - a universal WLD (Water Leak Detection) sensor, with one WLD sensing cable input and 2 kinds of outputs, is one of our top-selling products. Here's why.



WLD (Water Leak Detection) from HW group uses a sensing WLD cable to detect water along the entire length of the sensing cable. It's a reliable system with early warnings from the very first drops of the water in the critical points.

HW group produces several devices with WLD zone input on the LAN devices (SD-WLD, WLD2, Perseus 150) or NB-IoT (NB-WLD). However, many customers want to use only WLD detection and connect it to **their own system**. For them we produce the WLD Relay, which can be powered by 12V and switches a simple relay output when water is detected.

WLD sensing cable features

It's hard to explain why the HW Group's WLD sensor cable is so popular. Our

customers love it simply because this water leak detection cable does not generate false alarms.

- **No Bend Limit**

Most of the other water detection sensing cables are limited to a minimal diameter. If it bends too much, it will generate a false water alarm. It's a fundamental problem for many installations.
The WLD sensing cable doesn't have a bend radius limit. It can be knotted and still work, which means installation is easy and doesn't require any special training.

- **No Grip Limit**

Point pressure within a reasonable range won't change the functionality of the cable. You can step or press on the WLD sensing cable without triggering an alarm. It could even be routed over the door sill.

- **No Twist Limit**

Like any other electrical cable, the WLD sensing cable can be twisted. No twist limit for the WLD sensing cable also means that no cable movement after installation will cause a false alarm.

- **No Reuse Limit**

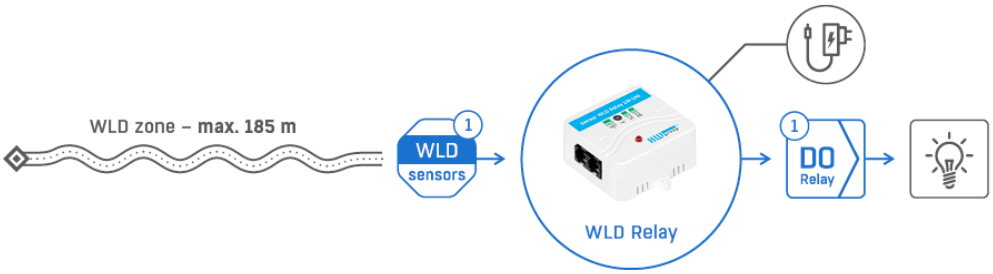
Once the liquid has been detected and hopefully stopped from flooding the monitored facility, the cable simply dries out and resumes its primary function.

Water detection on 185m sensing cable with relay output

The WLD Relay has 1 WLD zone input with a green terminal block. A WLD connection cable (2m) and one or more segments of WLD sensing cable are connected. The total length of the WLD zone can be up to 185 including the length of the non-sensing cable.

Relay output responds to the smallest amount of water, ethylene glycol or other conductive liquid water along the entire length of the sensing cable. The relay will also alarm if the WLD sensing cable is disconnected.

The WLD relay requires a 12V power supply.



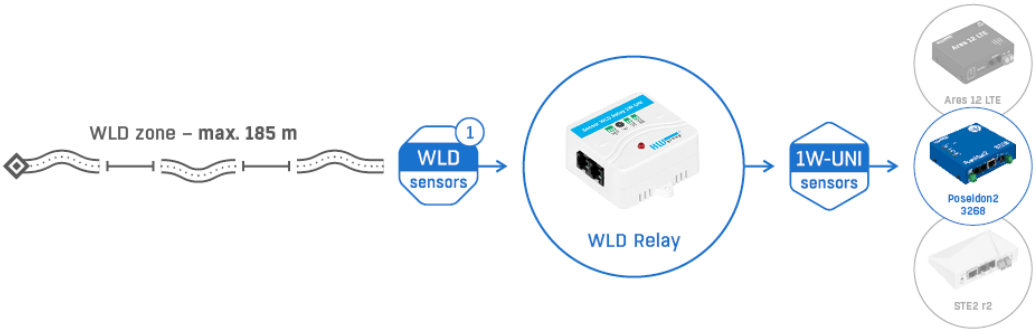
WLD-Relay as RJ11 sensor

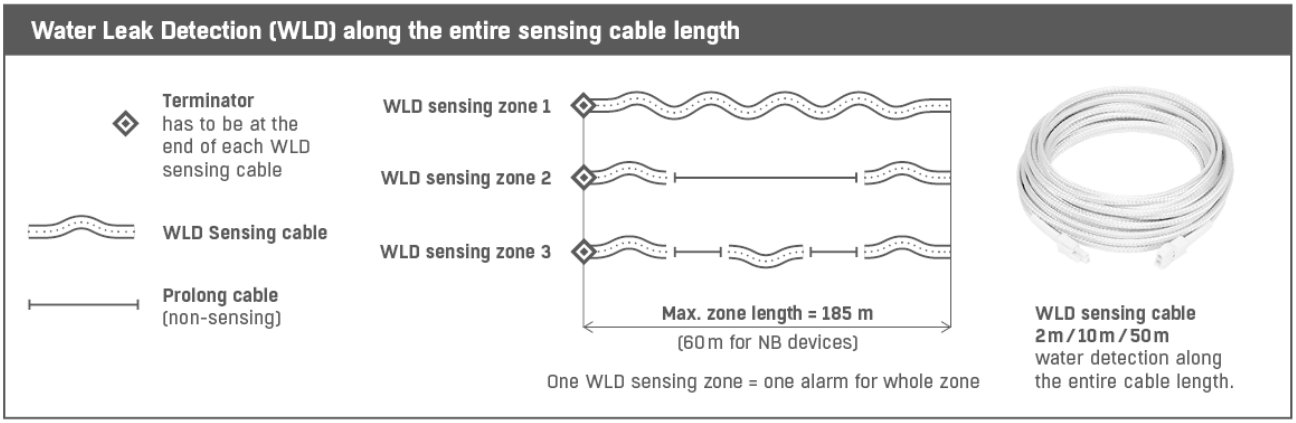
The same device WLD-Relay can also be used as RJ11 (1W UNI) sensor. A WLD zone can be connected to any HWg device with an RJ11 port (STE2 family, Poseidon2 family, Ares 12, ...).

The WLD Relay as 1W-UNI sensor supports three states:

- OK
- Water
- Disconnected

This means that the operator of the remote monitoring solution would know if something has happened to the cable itself or if there is water flooding. There would be no surprise leakage if the cable were accidentally broken or disconnected.





WLD relays can be ordered as:

- **Sensor WLD Relay 1W-UNI**

Plain unit - white box only.

- **WLD Relay**

Set with power supply, 2m + 2m WLD sensing cable

WLD-Relay in action - 1200 meters of WLD sensing cable

WLD relay can be massively scaled, as we have shown in the ONSEMI case study, where the water monitoring system counts 28 relay-based zones with a total of more than 1200 meters of sensor cable. All of this is connected to a single Damocles2 monitoring unit responsible for alarming and alerting.

Take a look at the video we made about the WLD Relay.