Detect. Connect. Protect.

FCC ID:2AFOINWLVLV
IC:20798-NWLVLV

Triple+ NWL

System description

Triple+ NWL™ is the most effective system in addressing the root cause for flooding huge damages, that is, the length of time it takes to discover and stop the leak. With Triple+ NWL™ you can reduce the damage by over 90%.
Triple+ NWL™ is fitted in minutes with little to no infrastructure changes.
Installing the system requires no electrician.

Control Unit

The controller communicates with the flooding sensors and the Shut off Unit.

Water Shut off Unit (Valve)

At the moment of occurrence, the system will automatically shut off.

Repeater Unit

The wireless repeater can be used in order to extend the communication

Flood Sensor Unit

The wireless flood sensor is installed in places where high chance of water flooding may occur.

Specifications

RF Specifications (all units)	
Internal Clock	32 MHz
Operation Frequency	433.85 MHz
Bandwidth	100 KHz
Transmit duration	3 ms
Transmit interval	10 sec
Maximal Output Power	10 dBm (10mW)

Water Shut off Unit specifications

Dimensions [mm]	124x 102×74
Weight	740gr
Power supply	CR123x2 batteries
Operating Voltage	3V
Battery life time	Up to 2 years
Primary Radio Frequency	433Mhz
Operating temperature	0-50ºc

Operational description

The system components communicate via RF.
NWL system have 2 battery powered devices (Valve and Flood-sensor) and 2 devices with external power supply (Controller and Repeater). Therefore, valve and flood-sensor spend most of the time at sleep mode, and wake up periodically for status update. Controller and Repeater are always in receive mode.
Controller can be driven by one of 3 triggers:

1. External signal from alarm system
2. User request through the box's keys
3. RF command from Flood-sensors (directly from sensor od through Repeater).

The Valve unit transmits packets periodically and the other components response on any request and informs if status has changed. The information of the motor packet includes the Unit state so it can be monitored easily. The valve sends its status in every message, the status includes the following fields (the Controller will update the LED display and the Alarm interface accordingly):

- The Motor switches state are monitored all the time.
- The Battery condition
- The Motor last activation status (if completed successfully or failed due to timeout or bad switch condition)

In case of marginal RF communication, Repeater unit can be installed between Controller and Valve. This device is part of the specific local system, and configured to reply selective massages of Controller/Valve.
The Flood-sensor transmits packets periodically (every 1 min) with its internal unique ID as address and the Flood-sensor index is added to the unit type. The controller monitors its Flood-sensors according to its internal address list (generated in the SYNC state) and responses.
If the Flood-sensor status has changed and flood is detected, it will send a burst message and the controller will send a CLOSE command in the nearest Valve's status request.
Up to 10 Flood-sensors can be connected to one CNTL.
The information of the Flood-sensor packet includes the Unit ID as given in sync state and the unit status (flood status, battery condition …) so it can be monitored easily.