



The Water Alarm Controller is designed to supervise and control all components of the AKWA system, including water leak sensors, vacancy sensors and the main water valve.

**The Water Alarm Controller has several roles, including:**

- Close the water valve once the vacancy sensor has confirmed human inactivity in the property;
- Close the water valve once the water leak sensors have reported a puddle;
- Program water leak sensor at the time of initial zone configuration;
- Identify areas where a damage has been reported and identify if the valve is open or closed;
- Reset the controller once a water damage has been reported and the risk has been eliminated.

AKWA is installed in residential units (homes, condos) or in commercial buildings (offices, hotels, seniors' residences, distribution centers, factories, etc.). The main component of this system is the **Water Alarm Controller**, and this module is in constant bi-directional communication with the water leak sensors using a RF long range radio signal at 433.5 MHz. Using this communication protocol, the signal strength can reach up to 600 linear feet (180m).

The controller is in fact a supervision module that includes essential features used in an alarm system, including :

- Validation if sensors are present and active (sensors could be stolen or have disappeared)
- Validation of battery levels
- Validation of false alarms (ex. wet mop in contact with leak sensors)

If by mistake a wet mop touches a water leak sensor, initially the sensor sends a signal to the controller, and in turn it will send a signal to close the valve. If the alarm is deemed false, it will re-open the valve and it will never send a notification signal to the user. Hence, it is important to note that the controller always takes action and analyses a signal before sending any notification. All notifications are sent by the controller via the AKWA Wi-Fi module.

Also, with the vacancy sensor it is important to note that the controller makes sure the valve is always closed in prevention BEFORE any water leaks may occur.

**Characteristics**

- Integrated LED keypad
- SMS or email notification using a Wifi Module that is connected into the Water Alarm Controller
- Certified FCC, CE and CI