## Rain Water Sensing and Alerting System-Remote Operation



### **Operation:**

1. The sensor reads the rain drops and send data to main unit.

2. The main unit alert the operator about the rain condition through Missed Call / SMS.

#### Installation:

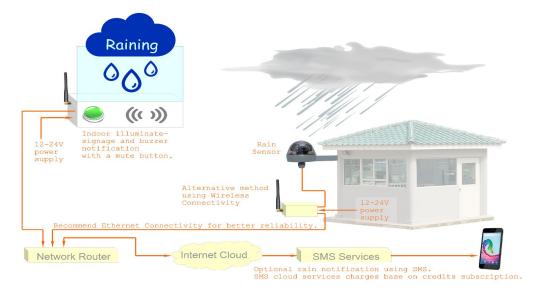
1. The system Contains one main Module. This can be placed inside building

2. The rain sensor is installed at the place of measurement. There is wire connection between sensor and main Module

#### **Optional:**

The main unit attached with the Wifi Module can send data to any cloud server for continuous data logging.

## Rain Detection & Alert Notification System



### Unit description:

- ✓ The sensor uses a high -quality double-sided FR-04 materials , the large area of 5.0" 4.0CM, and nickel -plated surface , effective against oxidation, conductivity, superior performance and lifetime areas.
- ✓ The comparator output signal clean waveform is good , driving ability, than 15mA.
- $\checkmark$  Power bits adjust the sensitivity .
- ✓ Working voltage 3.3V-5V.
- ✓ The output format : Digital switching output (0 and 1) and analog voltage output AO.
- ✓ With bolt holes for easy installation.
- ✓ A small board PCB size : 3.2cm x 1.4cm.
- ✓ Using a wide voltage LM393 comparator.

### Features:

- ✓ Connect the 5V power supply
- ✓ power indicator light
- ✓ sensor board does not drop when
- ✓ DO output is high
- ✓ the switch lights off
- ✓ dripping a drop of water
- ✓ DO output is low
- ✓ the switch indicator light,
- ✓ Brush above water droplets, has returned to the output high state.
- ✓ AO analog output can be connected to the micro controller detects
- $\checkmark$  AD mouth drops of rain in the above size.
- ✓ DO TTL digital outputs can also be connected to the micro controller detects whether there is rain .

No wires. No hassle. Just reliable rain sensing that provides optimum water savings. Our Company innovative wireless technology provides easy to use, advanced features for prompt reaction when it starts to rain. With options for rain or rain/freeze sensing, the TWRS Series can save up to 30% more water than existing disc rain sensors. The patent pending Water Conservation Mode turns the Rain Sensor into a smart sensor by allowing the receiver to intelligently extend the controller reset based on settings provided by the user. All sensors can be set for universally Normal-Open or Normally-Closed operation making the TWRS compatible with just about all electronic timers.

### ADVANTAGE :

- ✓ The Raindrop Detection Sensor module is an easy-to-use and low cost drop recognition sensor.
- The sensor works through a series of exposed parallel traces on board which produces electrical variations when drops or water volume changes.

- ✓ By using microcontrollers or ADC ICs (Arduino and PIC) its fairly easy to convert the analog output from the sensor to digital values.
- ✓ This can be directly read by an Arduino or a comparator circuit if you wish to use it as a rain detection alarm.
- $\checkmark$  It can be used to monitor a variety of weather conditions.