

## GG-002D SYSTEM SMS ALARM INTRODUCE

ANC GG-002D system send out short message alarm (SMA) when there is a potential problem through cloud.

The alarm information including PID + Zone + Device information + Device number + Alarm details, which is very information rich. User chooses either go to field to check or ignore.

Please see following illustration.



### 1. Wireless communication alarm:

#### Alarm content:

【Ancnoble】 SYSTEM NOTICE PID:XXXXXX 【Zone XX DEVICE XX: Wireless Communication failed】

#### Alarm based on:

If one device failed wireless communication 10 times continuously.

#### Possible cause:

a. The wireless distance is too critical. Easy to be interfered by weather, or past by vehicle.

Recommend to test wireless signal to decide field device location before installation. Let main controller keeps scan then see if the wireless signal is always good.

b. Field device is out of power, lost communication route

c. The repeater in the route is short of power went to sleep.

d. The repeater device is failed.

## **2, Low battery alarm:**

### **Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Low battery】**

### **Alarm based on:**

Main controller will monitoring power of all wireless devices in the system. Will issue alarm when battery hit low.

### **Possible cause:**

- a, Continuous cloudy or rainy days.
- b, Controller is in the shade for long.

## **3, Battery with abnormal charging alarm:**

### **Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Solar charging failed】**

### **Alarm based on:**

No or little charging signal has been detected from the solar panel charging circuit continually.

### **Possible cause:**

- a. The solar panel has been damaged or the connecting wire is disconnected.
- b. The solar panel had fallen to ground, or been covered, or too dirty.

## **4, Battery end of life Alarm:**

### **Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Battery maybe at end of life】**

### **Alarm based on:**

By checking how steep is the discharge speed at night for several cycles.

### **Possible cause:**

- a. The battery is close to the end of life.
- b. Inferior batteries were used.

## **5, Valve open failure alarm:**

### **Alarm content:**

**【Ancnoble】SYSTEM NOTICE PID:XXXXXX 【Zone XX DEVICE XX: Open valve failed】**

### **Alarm based on:**

After the valve has been open, delay time past, check the water pressure meter reading.

If the reading is higher than closed status, normal, otherwise alarm.

### **Possible cause:**

- a. There are three kinds of “pulse on time” drive methods to choose from at the field controller setup. Make sure you chosen the right one.
- b. Valve quality problem.
- c. The valve is need a lean up.
- d. The valve connection is open or short circuited, or there is some problem with the pressure meter.
- e. If everything is normal, then check if the pressure range setup is right. Adjusting accordingly.
- f. There is no water in the pipe. The valve has been effectively opened, but the opening failure will be judged when the pressure sensor detected there is no water pressure.

## **6, Valve close failure alarm:**

### **Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Valve Off failed】**

**Alarm based on:**

After the valve is closed, delay time is over, if the water pressure meter reading is higher than the reading of closed status of the valve, alarm.

**Possible cause:**

- a. There are three kinds of “pulse on time” drive methods to choose from at the field controller setup. Make sure you chosen the right one.
- b. Valve quality problem.
- c. The valve needs to clean up.
- d. The valve connection is open or short circuited, or there is some problem with the pressure meter.
- e. If everything is normal, then check if the pressure range setup is right. Adjusting accordingly.

**7, Valve protective off alarm:**

**Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Protective off】**

**Alarm based on:**

System will check water pressure every minute during irrigating period. If the reading is less than normal range three times straight, system will judge as there is possible leaking, protectively turn off the valve. Then you only can cancel the protective status by field manual operation, or remote operation

**Possible Cause:**

- a. There is some leaking some where.
- b. Not enough water pressure.

## **8, Irrigation notice:**

### **Alarm content:**

**【Ancnoble】SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Zone is Irrigating】**

### **Notice based on:**

Notice of zone irrigation at very beginning.

## **9, Pump protective off alarm:**

### **Alarm content:**

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Pump Protective off】**

### **Alarm based on:**

There are three kinds of sensors to protect the pump: liquid level sensor, flow sensor and pressure sensor.

During pump starting, if any reading of these three sensors are out of setup range, then turn off pump and alarm. The pump will not restart until there is field maintain, or remote recover because the reason is not enough water pressure.

### **Possible Cause:**

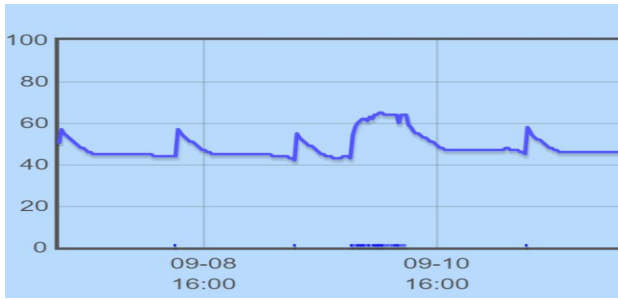
## **10, Abnormal irrigation alarm:**

### **Alarm content:** Abnormal Irrigation

**【Ancnoble】 SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Abnormal Irrigation】**

### **Alarm based on:**

Moisture sensor chart analysis. See example of following chart. There are lots irrigations which should not happen.



**Possible cause:**

The battery of moisture sensor controller is close to the end of life, please change battery.

**11, Abnormal reading of MS alarm:**

**Alarm content:**

【Ancnoble】SYSTEM NOTICE PID:XXXXXX 【Zone XX DEVICE XX: Abnormal reading of moisture sensor】

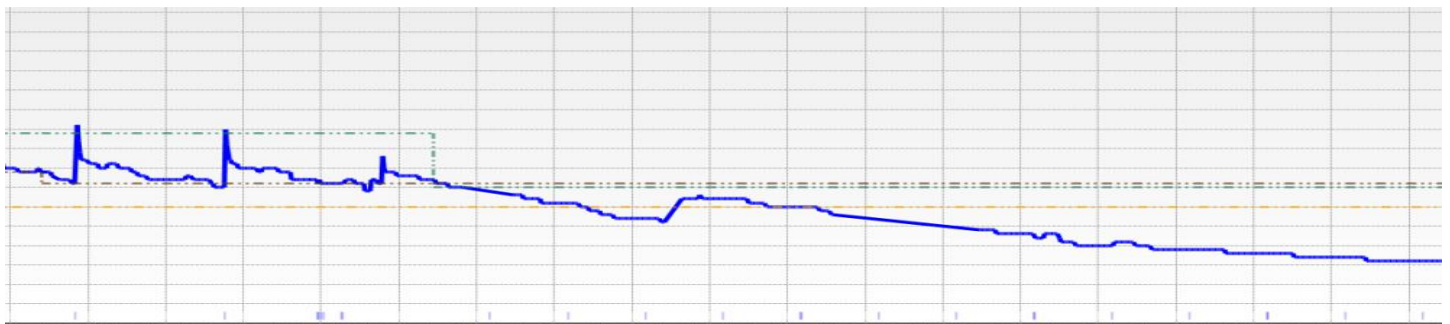
**Alarm based on:**

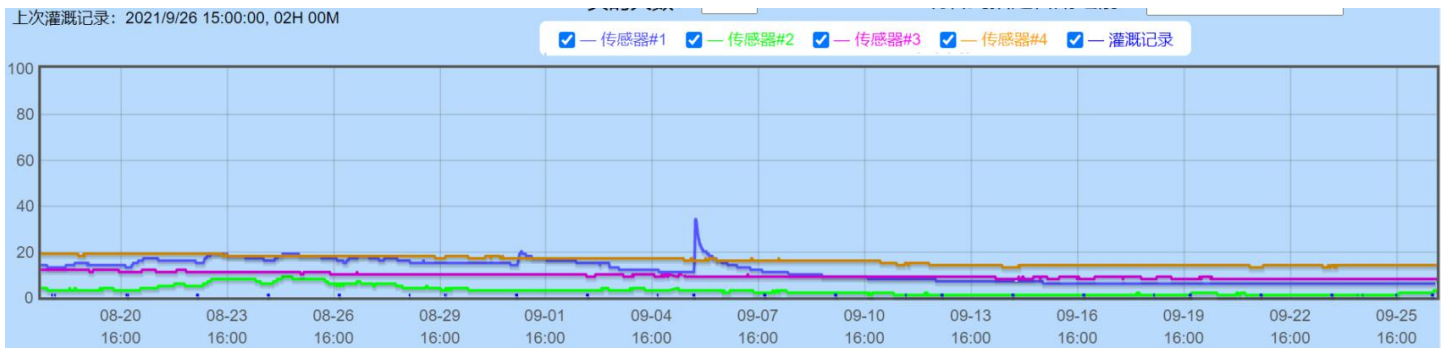
a. If reading of moisture sensor reached abnormal 99% multi times continuously, alarm. The moisture sensor is very possible go bad.

b. The reading of moisture sensor is more steep than history chart, alarm.



c. If the reading of moisture sensor has no increase after 3 times of irrigation, then alarm.





**Possible cause:**

- a. The moisture sensor is buried too deep, or covered by other material which prevent water into the sensor spot, or sprinkler is been moved, then no water reach the sensor.
- b. First check connection, then wire integrity. Otherwise the moisture sensor is gone bad.
- c. The power supply of moisture sensor is not appropriate.
- d. There is not enough water pressure to irrigate right.
- e. The main controller failed to get new data. Wait and try again.

**12, Flow rate was of range/Turn off alarm:**

**Alarm content:**

【Ancnoble】SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Flow rate is out of range/Turn off】

**Alarm based on:**

Flow rate of monitored sensor is out of range.

**Possible Cause:**

- a. Small to big leaking on the pipe or devise
- b. Related valve failed to open.
- c. Jam on the pipe, or devises.

**13, Reading of pressure meter is out of range:**

**Alarm content:**

【Ancnoble】SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Reading of pressure meter is out of range】

**Alarm based on:**

Reading of related pressure meter is out of range.

**Possible Cause:**

- a. There is leaking on the related pipe or devises.
- b. Related valves are not open.
- c. There is a jam on the pipe.

**14, Main controller has no Internet for 24 hours:****Alarm content:**

【Ancnoble】SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Main controller has no internet connection for 24 hours】

**Alarm based on:**

If there is no internet connection for main controller over 24 hours, alarm.

**Possible Cause:**

- a. Maybe WIFI/4G is off at main controller location.
- b. Maybe there is WiFi AP related problems.

**15, Reminder of annual cloud fee:****Alarm content:**

【Ancnoble】SYSTEM NOTICE PID:XXXXXXX 【Zone XX DEVICE XX: Please pay/renew your cloud fee】

**Alarm based on:**



Remind customer to pay/renew cloud service, start from one month before due time, then once a week.

## **16, Soil moisture reached dry setup alarm:**

### **Alarm content:**

【Ancnoble】 SYSTEM NOTICE PID:XXXXXX 【Zone XX DEVICE XX: Soil moisture is below setup dry】

### **Alarm based on:**

When the soil moisture reading is lower than the Dry threshold over 2 hours, alarm.