



AIoT *Aquaculture* Water Quality Toxic Concentration & Vibrio Monitoring and Solutions

GINTEL TECH



Parameters and Accuracy

Kinds of Parameters	Parameters	Range	Accuracy
Basic*6	pH	7-9	+/- 0.01
	Temperature	0-60	+/- 0.01
	Turbidity	1-5	+/- 0.01
	Salinity	0-40	+/- 0.01
	DO	1-14	+/- 0.01
	Alkalinity	100-250	+/- 0.01
Toxic*2	Ammonia	0-3.0	+/- 0.01
	Nitrite	0-1.0	+/- 0.01
Vibrio*1	V. Parahaemolyticus (log10)	0-10	+/- 0.01
REMARKS	Customized design for other aquaculture water parameters is acceptable		



INTRODUCTION



- **The main purpose of this product is to quick monitor aquaculture water parameters, including toxic concentration and Vibrio.**
- **The core technology of the product is designed by multiple technologies including AIoT, cloud, mobile technology and so on.**
- **The system is not only monitoring water parameters , but continuously tracking the changes in toxic concentration and Vibrio of water. The product predicts and send the pre-warning signals when the toxic concentration and Vibrio out of the safe range, The pre-warning is to avoid the collective death of aquatic creatures.**
- **To solve the water toxic problems by non-toxic solutions, the system remind the main source of toxic concentration and Vibrio to avoid the collective death and increase the income of aquaculture farmers. It is not only reducing aquaculture costs and farming risks, but also ensure the safety of aquatic products.**

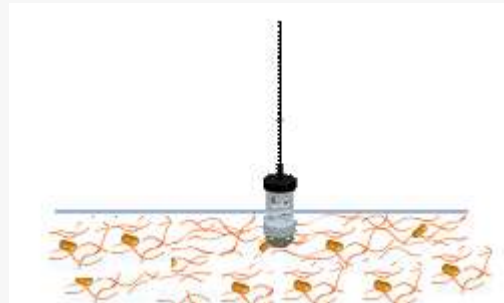
PRODUCT CHARACTERISTICS



- The compound physical sensor is designed in the system. To protect the environmental sustainability development, no chemicals are needed for maintenance in the system.
- Designed with AIoT trans-disciplinary technologies with high stability, accuracy, quick speed to greatly improve farming efficiency and reduce farming costs. A system to give aquaculture farmers a great help in aquaculture.
- Easy operation – 2 buttons (Start & Stop) only. Put sensor into water, about after 2 minutes the robot will sound OK to remind and stop the measurement.
- The data measured will be stored automatically in the system after measurement completed. No manual record.
- Full wireless communications. No distance limited.
- GPS embedded in the system is not only to prevent the stealing, but also recording and identifying the locations of many ponds, including the latitude, longitude and address
- Easy maintenance. No chemicals
- Easy calibration. One button and 2 minutes only.

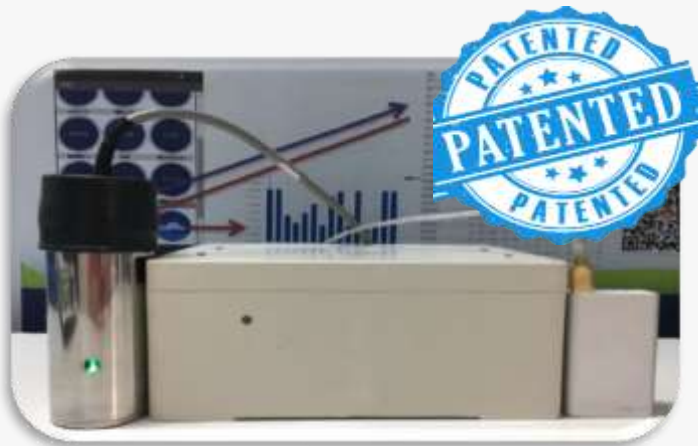
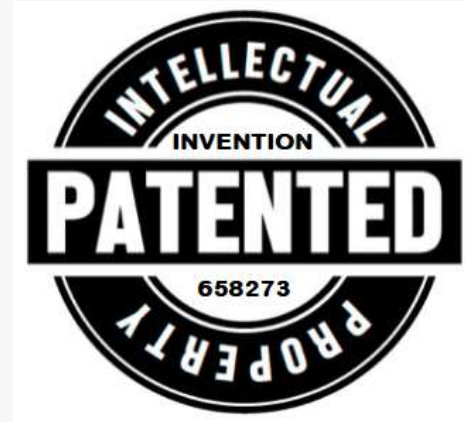
Specifications

- Voltage: DC 5V or AC 110V/220V
- Output: APP of mobile device
- Current < 100mA
- Dimension: 19 x 11 x 5 (cm), 7.4" x 4.3" x 1.9" (in)
- Parameters monitored* 8 (Basic parameters*5, toxic concentration*2, Vibrio*1)
- Basic parameters*5: pH, Temperature, turbidity, salinity, DO, Alkalinity
- Toxic*2: Ammonia, Nitrite
- Vibrio*1: V. Parahaemolyticus
- **Customized design is acceptable for monitoring other aquaculture water parameters**



Patent

- Invention Patent



Shipping List

- Composite physical sensor
- Main system
- App for mobile device



APPLICATIONS

- **Aquaculture**
- **Drinking water** (schools, high-speed rail and other transportation buses, public places such as stations, hospitals, homes, water stations, ...)
- Water quality of **factory production line**

