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INDUSTRIAL PRODUCT DATASHEET

IoT Based Biofloc Monitoring System Using WioTerminal

IoT-based system for biofloc monitoring and water quality inspection in aquaculture.

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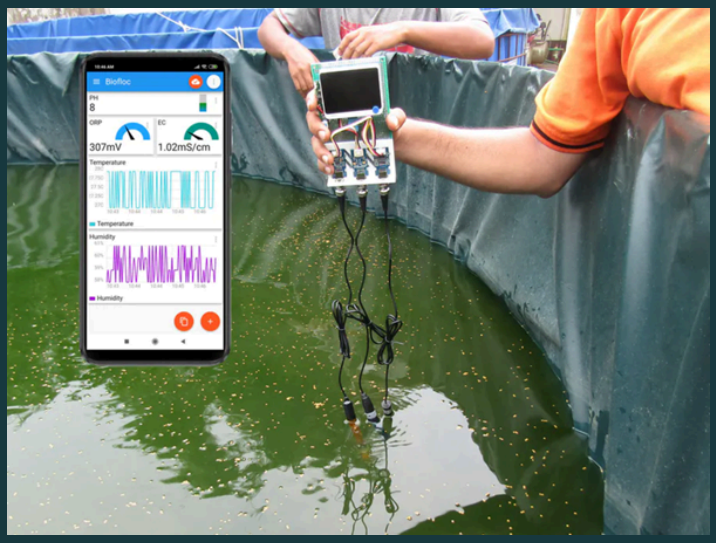
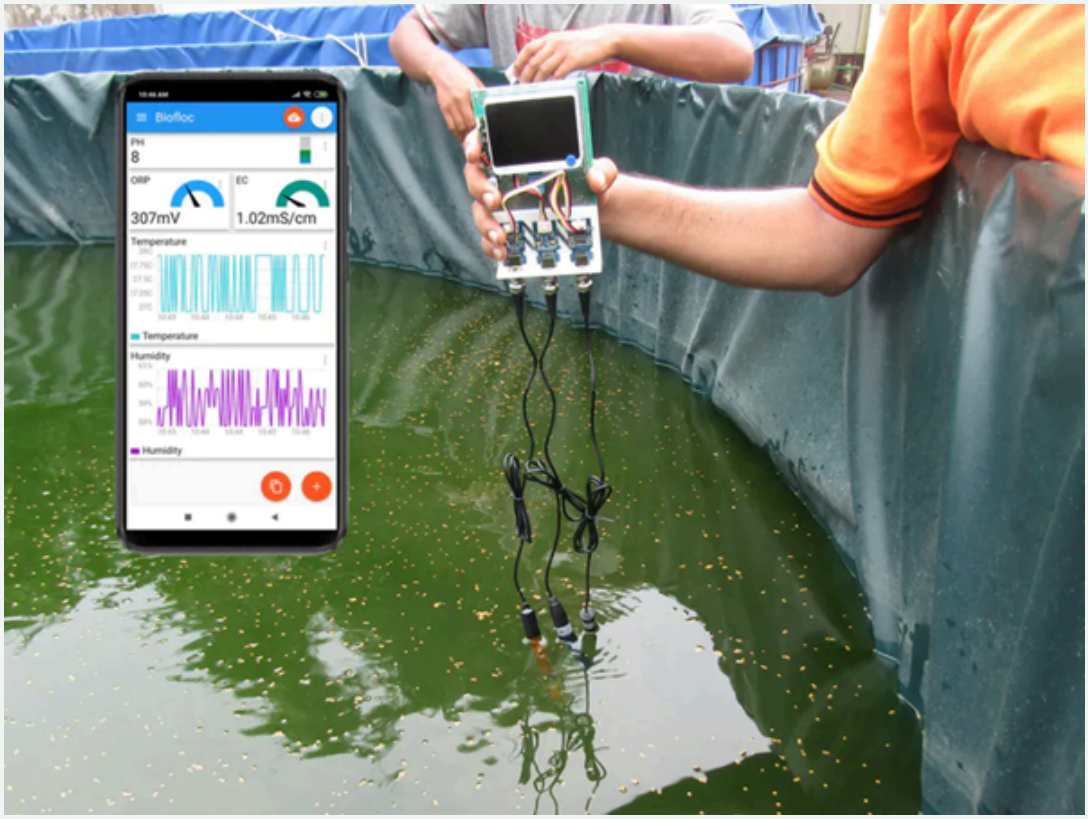


Overview



The IoT Based Biofloc Monitoring System Using WioTerminal is a kit for continuous water quality monitoring in aquaculture. It measures temperature, pH, ORP, and EC using Grove sensors and provides real-time data visualization on the WioTerminal display and an Android app.

Key Features

Description

This kit provides the components needed to realize the biological floc monitoring system, which can also be called IoT Based Temperature, PH, ORP, and EC monitoring system. The kit includes WioTermianl, Grove ORP, PH, EC, DHT Sensor, etc. This system can continuously detect the biological flocs in the water of aquaculture, so as to maintain and detect the water quality to ensure the success of the aquatic product growth cycle.

Md. Khairul Alam provided us with a tutorial on biofloc monitoring system. This tutorial shows you how to make a custom IoT-based solution to continuously monitor temperature, pH, EC, and ORP. The system uses Wio terminal to connect all Grove sensors. The data can be visualized from the display screen of the Wio terminal and the Android application. If any parameter reaches an unsatisfactory level, an alarm will be generated and the buzzer of the Wio terminal will sound. Your phone will also receive notifications. MQTT will be used to send data from the Wio terminal to the mobile application.

Before officially starting this project, you should prepare the listed WioTerminal, Grove sensor components, battery, boost converter, etc. After preparing these things, we can start to build our IoT based biofloc monitoring system!

The main process includes collecting the hardware, adding external libraries to compile the code correctly, configuring the Android mobile application, debugging and running. For specific operations, please refer to **Biofloc Monitoring System (Powered By: Wio Terminal)**.

- Monitoring data visualization-real-time display on WioTerminal and mobile phones
- IoT-based customized solution-biological floc monitoring

Application

- Biofloc Monitoring System
- Water quality inspection and monitoring

Documentations

Biofloc Monitoring System (Powered By: Wio Terminal)- Credits to **Md. Khairul Alam**

Product Gallery



Applications

- **Water quality inspection and monitoring**

Resource Links

- https://www.seeedstudio.com/IoT-Based-Biofloc-Monitoring-System-Using-WioTerminal-p-5223.html

Seeed Technology Co.,Ltd.
9F, Building G3, International E City,
Zhongshanyuan Road, Nanshan, Shenzhen, China

Tel: +86 0755-80695676
Web: www.seeed.cc
Shop: www.seeedstudio.com