

A stylized teal graphic consisting of two overlapping, wavy, leaf-like shapes that curve upwards and to the right, positioned on the left side of the page.

SMART POND

KernelSphere

A large, dark blue wavy graphic that spans the width of the page, resembling a stylized wave or a liquid surface. It is positioned in the lower half of the page.A cluster of light blue bubbles of various sizes, located in the bottom right corner of the page, appearing to rise from the blue wavy graphic.

Pond Monitoring

The pond monitoring system is intended for proper balance of ecosystem in pond by not negatively affecting natural habitats long pond edges or ecosystems, water quality, drainage patterns, or fish passage. This system notifies the dissolved oxygen, Ph and temperature levels of the pond. This helps in turning the aerators ON at required timings only to reduce the power bills. This Device works with both GSM and Lora WAN Network (which gives ultra-low power consumption and provides long range coverage). Its monitoring application can be visualized and analyzed in the secured web application dashboard and mobile app. It gives Continuous live data monitoring of pond parameters DO (Dissolved oxygen), pH and Temperature.

Features of Smart -Pond

- 24/7 monitoring of your pond's vitals (pH, DO and Temperature) at finger prints.
- Improves shrimp production by maintaining DO levels.
- Increases fish farm yield.
- Improves water quality
- Reduces Power Bills by optimal usage of Aerators.
- Reduces Labor, no need to monitor feed trays.
- Check on your pond from anywhere and receive SMS/email/voice alerts on your smart phone.

Specifications

Wireless Frequency Band	865 ISM for LoRa.
Communication	LoRa data transmission network and GSM.
Operating Voltage	Solar powered, no charging needed ever
Receive Sensitivity	-136 dBm typ.
Transmission frequency	60 seconds
Number of Channel	Configurable 8 channels (SKU-EU)
Transmit Power	+20 dBm
Antenna Type	Internal antennas
Modulation	Based on IEEE 802.15.4g
Protection Requirements	IP67