



MIMOS Sensor Unified Technology for Aquaculture (Mi-SUTRA)

Monitoring of physical parameters in environmental conditions is important in a recirculating system for aquaculture industries to optimise production while minimising environmental impact. Mi-SUTRA provides simultaneous physical parameter measurement by combining rugged sensors and smart devices in a unified system.

Overview

MIMOS Mi-SUTRA is a solution that comprises a combination of sensors, the Web and smart device applications to assist aquaculture industries to optimise their production yield. This system provides information on critical environmental parameters in real-time to users thereby promoting yield and quality production improvement while reducing labour dependencies.

Features

Mi-SUTRA comprises the following features:

■ Robust and Reliable for Outdoor Usage

Mi-SUTRA utilises MIMOS Mi-Sensor platforms and products that require only one-time calibration every three months and are able to withstand harsh environmental conditions.

■ Real-Time Data Measurement

Mi-SUTRA offers real-time data measurement with remote monitoring capabilities via its comprehensive sensor management system.

■ Wireless Communications

Environment information is transmitted via wireless communications using MIMOS Mi-Porta Mote (wireless transmitter/receiver), MIMOS Mi-Porta Router (wireless router) and MIMOS Mi-MESA (wireless gateway).

Technology Benefits

The main impacts of Mi-SUTRA are:

■ Easy Access and User Friendly

With Internet connectivity, the Mi-SUTRA web application makes it possible for users to remotely monitor and access data either through a computer or other mobile devices with user-friendly web interface for data visualisation and analysis.

■ Accurate and Reliable Data for Decision Making

Mi-SUTRA's UI Dashboard allows all sensor data to be viewed at any time with a configurable system to view data, create thresholds, set up alerts, monitor network health, and even generate charts and compile reports.

■ Improvement in Produce Yield and Quality

Wireless communications allows the system to be deployed in remote areas and significantly minimises manual workforce activities, reduces labour dependencies and improves production yield.

Technology Summary

Mi-SUTRA

A unified solution for aquaculture industries to optimise produce yield.

Solutions

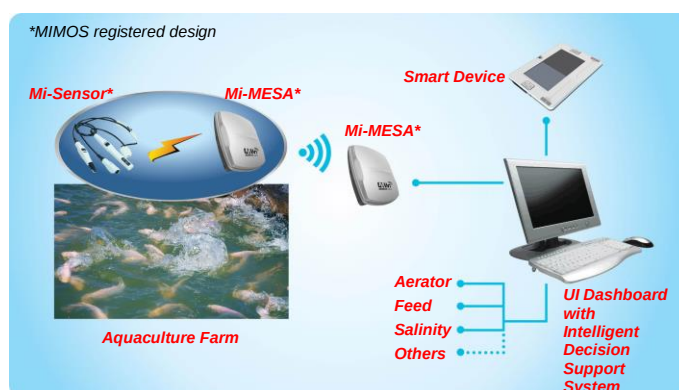
- Mi-SUTRA_POND: A solution for indoor/outdoor pond application
- Mi-SUTRA_HATCHERY: A solution for hatchery application
- Mi-SUTRA_RIVER: A solution for river monitoring

Features

- Robust and reliable for outdoor usage
- Real-time data measurement
- Wireless communications

Technology Benefits

- Easy access and user friendly
- Accurate and reliable data for decision making
- Improvement in produce yield and quality



MIMOS Mi-SUTRA system architecture

Communications

Mi-SUTRA_POND, Mi-SUTRA_HATCHERY and Mi-SUTRA_RIVER Communications

Mi-Porta Master 1.0
Mi-Porta Slave 1.0
Mi-Porta Mote 1.0
Mi-Porta Router 2.0
Mi-MESA
Mi-Porta USB Dongle*
Mi-Porta USB-UART*

*Future Release

Sensors

Mi-SUTRA_POND, Mi-SUTRA_HATCHERY and Mi-SUTRA_RIVER Sensors

Mi-Sensor Tmini 1.0
Mi-Sensor T-EC*
Mi-Sensor T 1.0
Mi-Sensor TpH 1.0
Mi-Sensor TpH 1.1*
Mi-Sensor DO 1.0

*Future Release

MIMOS is the leader in ICT innovations, pioneering new market creations for partners through patentable technologies for economic growth. For more information on MIMOS technologies, contact mimossolutions@mimos.my or go to www.mimos.my.



Innovation for Life™