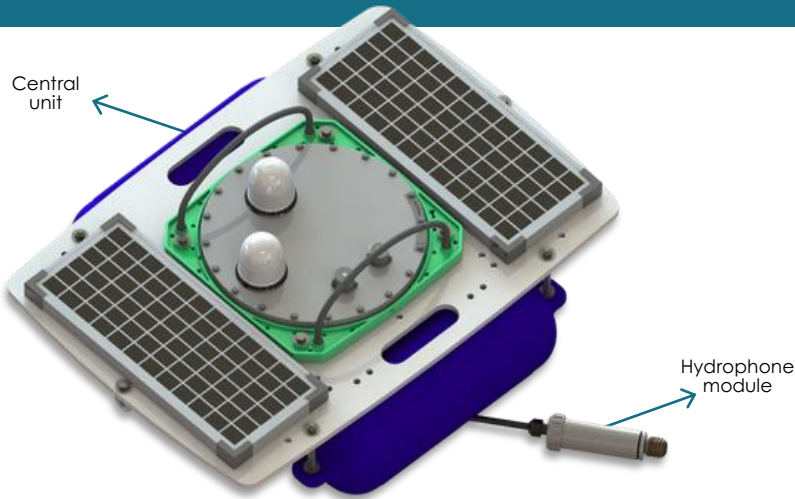


SMART SHRIMP-FEEDING SYSTEM



SYSTEM FEATURES

Smart radio-based wireless system with two core components:

- **Central unit:** Receives all the information needed to manage feeding. Features solar panels for 100% power autonomy and GPS for real-time tracking.
- **Hydrophone module:** Consists of hydrophone, water sensor, temperature sensor, and sensor and communications electronics.

Optimizes high-efficiency feed release

Automatically calculates feed release quantity and frequency to ensure 100%-efficient operation. Acoustic detection.

Maximizes shrimp growth rate

Shortens the shrimp production cycle and boosts shrimp growth rate by +30%.

Increases pond yield

Increases the feed conversion ratio (FCR), lowering costs and raising pond yield by up to 40%.

Rapid return on investment

Generates a return after just one or two use cycles.

Monitors pond status

Monitors the shrimp activity index to detect potential issues.

Fully wireless system

Easily transferable from pond to pond and operational within just a few minutes, meaning each unit can be used 365 days a year.

Easy to install

Easy to assemble and use. Minimal maintenance.

SMART SHRIMP-FEEDING SYSTEM

TECHNICAL SPECIFICATIONS

Transmission frequency

915 MHz

GPS frequency

1575 MHz

Radio range

Central unit – base station: 10 km

Central unit – feeder: 1 km

Weight

Central unit: 13 kg

Hydrophone module: 400 g

Operating temperature

0–45 °C

Battery

6 Ah

Voltage

12 V



MANAGEMENT SOFTWARE

- Receives pond data from the central unit and hydrophone module.
- Identifies feeding patterns in real time to optimize feed use and save money.
- Generates graphs showing changes in pond status.
- Developed in Spain exclusively by Marine Instruments.

