Fish Cage Monitoring System

Video surveillance and remote monitoring of the fish cages are available with the collaboration of solar power system, cloud technology and mobile network.

The solar panels mounted on the offshore fish cages generate electricity energy to power the Fish Cage Monitoring System. The system collects sensor data (sea surface temperature, ocean current direction/velocity, wind direction/velocity, etc.), and monitors the fish cages by camera image or video footage, adopting cloud storage. It is possible for you to check Weather/Oceanographic data and monitor your fish cages remotely from a web browser, whenever and wherever you want.

**Features**

- **Collaboration of “Fish Cage”, “Solar Power” and “Sensor + Cloud”**
  The monitoring of fish cages from shore, which enables you to remotely monitor the current status of each fish cage, is now realized in combination with solar power system, camera/sensor, cloud technology and mobile network.

- **Sensor Data Collection** (Sea surface temperature, Ocean current direction/velocity, Wind direction/velocity, etc.)

- **Perimeter Monitoring of Fish Cage via Camera Image or Video Footage**
  This system allows you to monitor the perimeter of the fish cages via the latest monitor picture, a live streaming and the recorded videos.

- **Adoption of Maintenance-free Storage Battery and Solar Panels**

- **Data Transmission via Mobile Network / Satellite Link** (ORBCOMM satellite, Iridium satellite)
Fish Cage Monitoring System

24-hour monitoring of suspected boats approaching “fish cages”

The “fish cages” are monitored by the radar system on a 24-hour basis to prevent the intrusion of suspected boats. The radar system is operated by the Solar Power Island installed in the vicinity of the fish cages. If a suspected boat crosses the intrusion detection line, the fish cage administrator is informed of it by e-mail and the suspected boat is exposed by the irradiation of the flashlight for crime prevention. The administrator can access to the J-Marine Cloud on Internet to monitor the situation of the fish cages from a remote place.

Features

■ Collaboration of “Fish Cages”, “Solar Power Generation” and “Radar and Cloud”

The monitoring of suspected boats from shore that has been impossible so far is realized by the collaboration of the solar power generation installed near the fish cages at sea, the radar system and the data transmission via mobile phone network. The situation of each fish cage can be monitored from a remote place.

■ Monitoring of Suspected Boats by Radar

The radar system monitors suspected boats approaching the fish cages. The radar system provides a wide range of surveillance and can detect suspected boats at sea even under nighttime conditions or in poor visibility. If the radar system detects a suspected boat, the boat is irradiated by the flashlight to demonstrate the anti-theft effect.

■ Monitoring of Fish Cages by Use of Cloud

If a suspected boat is detected by radar, the intrusion of the boat is informed to the administrator by e-mail, who can immediately monitor the situation of the fish cage and trace the track of the suspected boat on escape on a smart-phone or a tablet.