



Catalogue

Crustea Indonesia

**February
2023**

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short profile!



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Let's Get to Know Crustea Indonesia!

Our Mission

To be an aquaculture company and marine technology innovation and guaranteeing food security in Indonesia, also ensuring the supply chain and productivity of the aquaculture and marine fisheries sector that are in good and optimal condition.

Crustea Indonesia
Efficient Economic Green

*“Advancing
the Future of
the Pond in
your Hand”*

What's Crustea?

Crustea Indonesia is a technology procurement company that focuses on aquaculture sector. We are determined to contribute to creating environmentally friendly IoT-based technology that meets the needs of Indonesian pond farmers to maximize the shrimp pond production as well as increase productivity and efficiency in every shrimp cultivation process.

Moreover, we will continue to develop and provide our best services, which will have a significant impact on pond farmers throughout Indonesia.

**Let's Upgrade your Pond
with Crustea!**



06

ECO-AERATOR

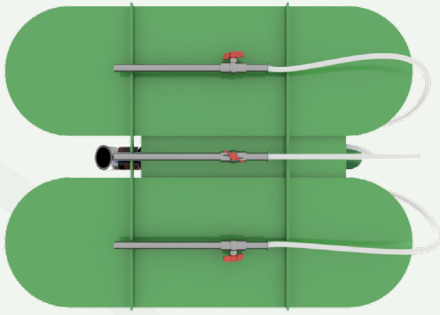


Overpriced Electrical Cost?

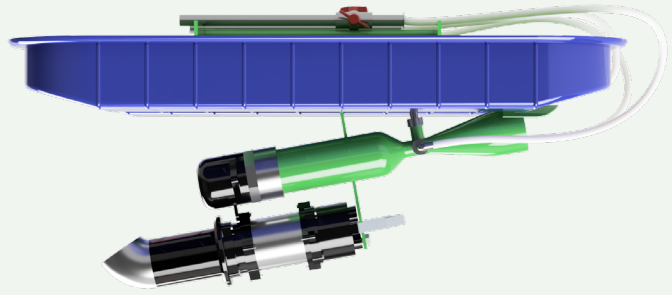
Using Solar Panel is the Solution!

Eco-Aerator is the ultimate solution for improving water quality in your ponds. With its advanced technology, Eco-Aerator can supply Dissolved Oxygen (DO) levels that are essential for fish and shrimp farming, resulting in healthier and more

productive aquatic environments. Equipped with an SCC (Solar Charge Controller) and battery, Eco-Aerator stores up energy during the day using solar panels, ensuring that it can keep running efficiently even in low light conditions or at night.



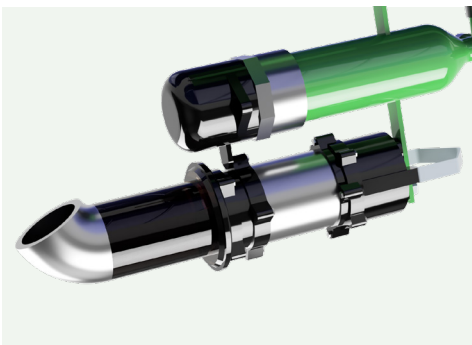
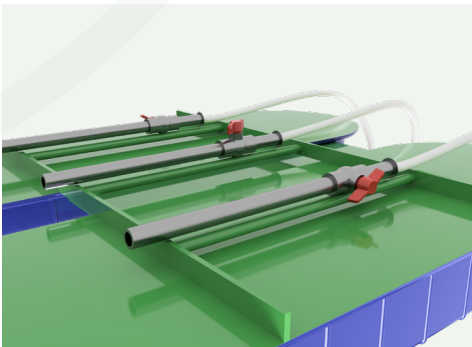
Top View



Side View

Product Specifications

- **Dimension**
200 cm x 110 cm
- **Motor**
750 watt / 1 HP / 1 Phase
- **Pump**
Submersible
- **Operational Volt**
AC 220V-240V, 50 Hz
- **Operating Current**
4 Ampere
- **Maximum Reach**
 $\pm 2-3$ meter

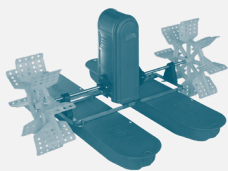
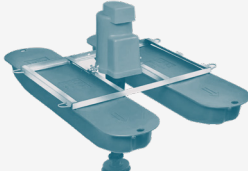


The Benefits You Will Get After Using Eco-Aerator

Eco Aerator can increase microbubble levels with higher oxygen levels with operational cost savings of up to 73%

What Makes Eco-Aerator Different?

Eco-Aerator uses the best environmentally friendly technological innovations. The following is a comparison of the **Eco-Aerator** with other conventional pond aerators.

	Conventional Aerator IDR 6-8 Millions 	Eco-Aerator 	RE Aerator IDR 30-40 Millions 
Source of Energy	Electricity/Diesel	Sunlight (Renewable Energy)	Sunlight
Environmental Impact	Air Pollution	Eco-Friendly	Eco-Friendly
Machine Life	± 5 years	± 8 years	± 5 years
Monitoring System	☐	Smart IoT	☐
Aeration System	Paddle Wheel	Impeller with more DO	Paddle Wheel



Eco-Friendly

The use of sunlight and batteries as the main source of energy



Smart IoT System

The convenience of monitoring and controlling pond quality remotely through a website



Save Operational Cost up to 73%

Saving operational costs for pond farmers with Eco-Aerator

Crustea's Solar Panel

Photovoltaic is another name for solar cells that convert sunlight into electrical energy. These photovoltaic cells are connected to an inverter which then channels the electricity to the Eco-Aerator.



Solar Panel
3 x 410 WP

ELECTRICAL DATA

CS1U	410MS
Nominal Max. Power (PMax)	410 WP
Opt. Operating Voltage (Vmp)	44.5 V
Opt. Operating Current (Imp)	9.23 A
Open Circuit Voltage	53.6 V
Short Circuit Current	9.70 A
Module Efficiency	19.89%
Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500V or 1000 (IEC/UL)
Module Fire Performance	TYPE 1 (UL 1703) or CLASS C (IEC 61730)
Max. Series Fuse Rating	20 A
Application Classification	Class A
Power Tolerance	0 ~ + 5 W

MECHANICAL DATA

Specification	Data
Cell Type	Mono-crystalline
Dimensions	2078 x 992 x 35 mm
Weight	23.4 kg
Front Cover	3.2 mm Tempered Glass
Frame	Anodized Aluminium Alloy
J-Box	IP67, 4 bypass diodes
Cable	-40°C 4.0 mm (IEC), 12 AWG (UL)
Connector	T4 series
Per Pallet	30 pieces
Per Container (40' HQ)	600 pieces

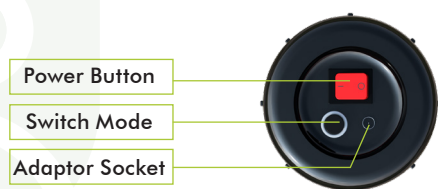
EBII Monitoring & Controlling System

EBII Monitoring & Controlling System is a sensor device that has several outstanding sensor features to help pond farmers control the condition of their ponds anytime, anywhere.

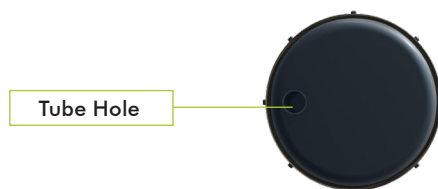
With several sensor features that can monitor **pH, temperature, salinity, and dissolved oxygen (DO)** levels in the pond, which can be connected to the microcontroller system on the Eco Aerator installed in the pond.

Furthermore, the water condition data in the pond can be viewed directly through the Eco Aerator application and website.





Top View



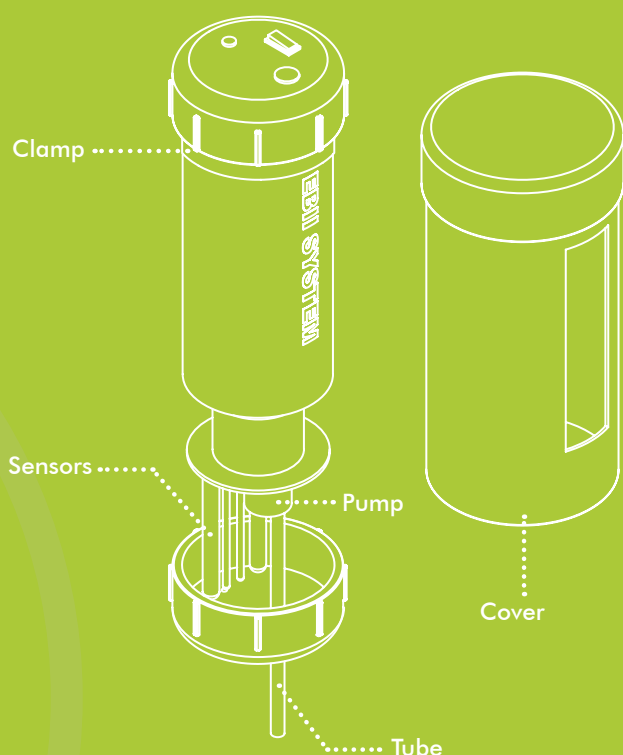
Bottom View



Without Cover



with Cover



**1 Product,
Real Time Reading,
4 Parameters**



Different than Other Water Sensors!

EBII System equipped with 4 crucial parameters that can be directly accessed through the Crustea website. Shrimp farming becomes much easier with Crustea!

PARAMETER	PRECISION	RANGE	ACCURACY	UNIT
DO	0.01 mg/L	0 to 20 mg/L 20 to 0 mg/L	0.1 mg/L	mg/L, % saturation, pm
Salinity	0.1 PSU	0 to 350 ppt	-	ppt, PSU
pH	0.01 pH	0 to 14 pH	0.1 pH	pH
Temperature	0.01 °C	-5 to 50 °C	0.1 °C	Celcius



Integrated with Eco-Aerator

EBII Monitoring & Controlling System is directly connected to the Eco-Aerator. You can easily monitor your pond through your mobile device.

Easy to Calibrate

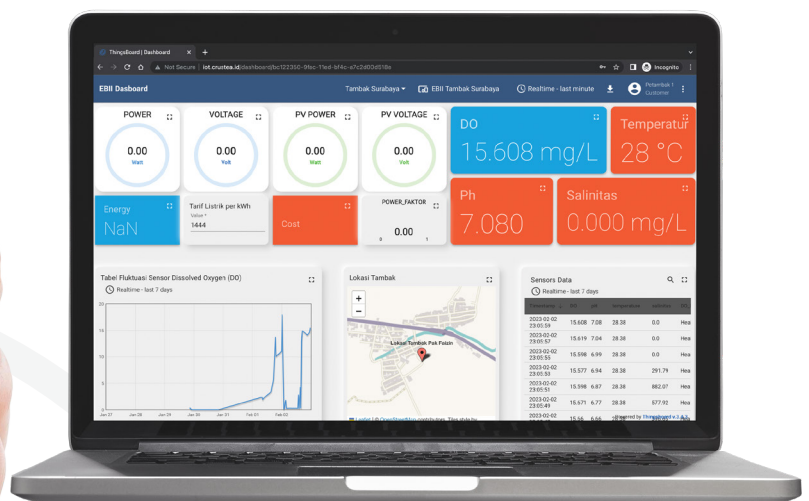
The calibration process of the EBII Monitoring & Controlling System is very easy. The calibration steps are listed in the manual book.

Robust & Secure Casing

The durable and rust-resistant casing of EBII extends the lifespan of the product.



Effective • Easy • Budget-Friendly



**Monitor Your Ponds
Anytime, Anywhere
with Ease!**

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Smart Energy System

Smart Energy System is a technology that aims to **determine the level of efficiency and energy savings generated** when pond farmers apply Crustea technologies in their aquaculture processes.



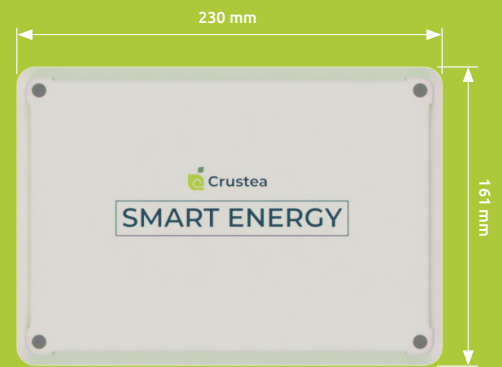


Product Specification

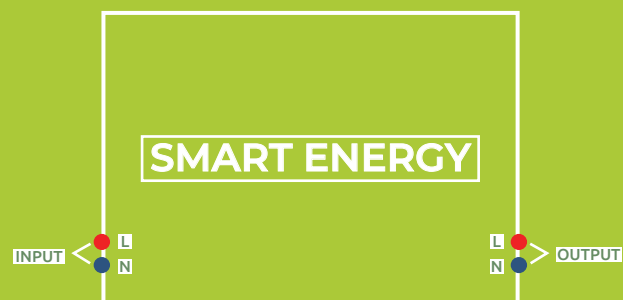
INPUT: 220 V AC
CT: 100 A

- Voltage : Volt
- Current : Ampere
- Power : Watt
- Energy : kWh
- Power Factor : Cos Phi
- Frequency : Hz
- Calculation of Tariffs and Savings : Rupiah

All of your pond savings data can be directly viewed on the Crustea website!

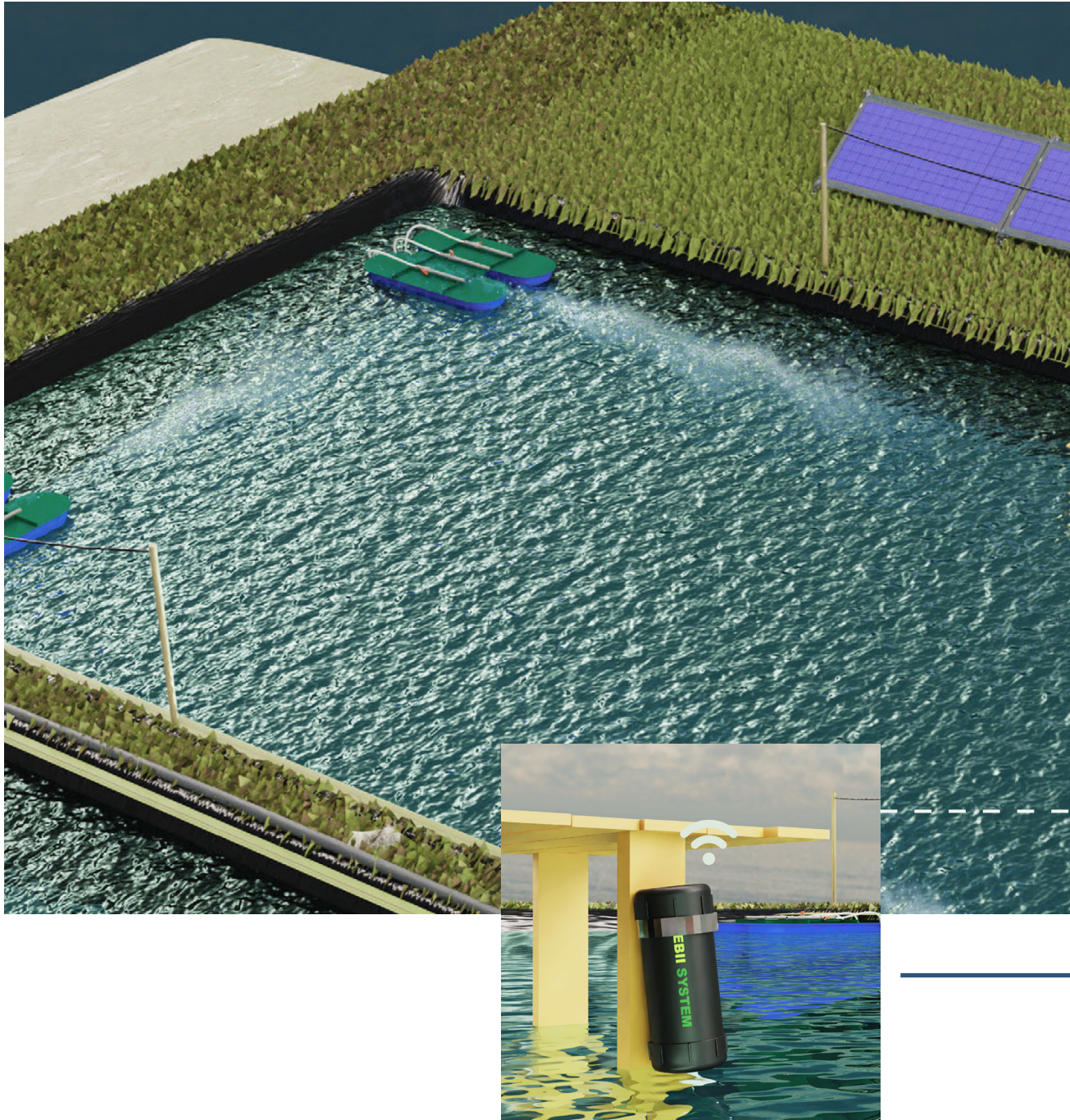


Top View



Control sends data from EBII System and give feedback that will automatically drive the aerator based on the water quality and indicator that have been set.

Smart Energy performs aerator energy loads monitoring in 4 aspects: voltage, power, current, power factor, and frequency.

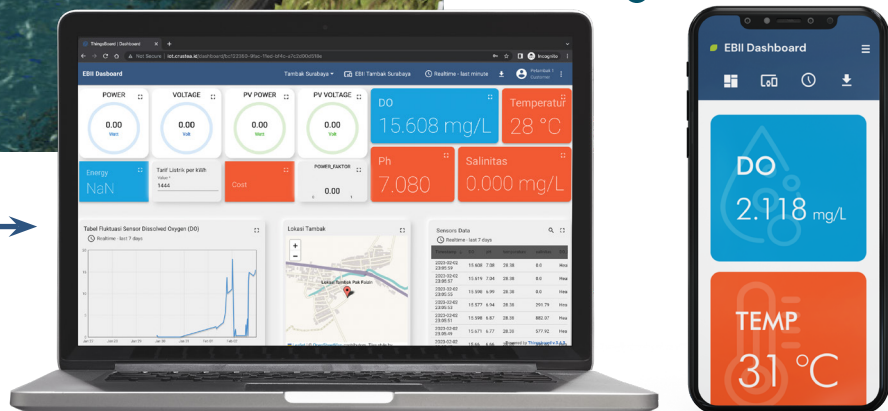


How Crustea Technologies Work?

Inverter converts PV electrical power from DC into AC and performs switching between PV supply and PLN grid. The aim is to supply aerator load installed in the pond.



EBII System sends water quality data into cloud database through WiFi every 5 minutes





Crustea Indonesia

Advancing the Future of your Pond in your Hand