



# Marine Drone

## Unmanned Maritime Vessel



# Marine Drone

Marine Drone is a Unmanned Maritime Vessel for working on the water. This product is useful in various applications, for example the fishing industry, security, tourist business.

## Introduction

Marine Drone is intended on the fishing industry and any other works on the water. It will automate and improve your target works, by applying expand functions. It has a generator with an engine so that it can be used for a long time works.



Automation and efficiency improvement for workings.



Automation and efficiency for workings /  
Relieve shortage of labor

### Auto feeding



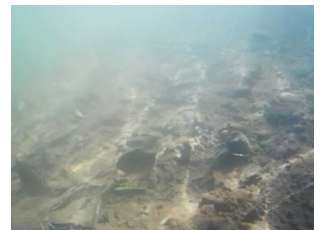
### Water survey



### Defend damages from wildlife



### Underwater photography



## Remote Control

You can let the ship's hull move back and forth and around using the radio system controller. When you extend the ships, you can also perform those remote operations. For example, turning on / off of the lighting, swinging of the pan / tilt camera, controlling automatic feeder, and operating the water quality inspection device.

In addition, you can operate it likewise from a tablet PC.



## Autonomous Mobile

Marine Drone performs autonomous movement based on GNSS information. Specifically, it works shown below.

- Follow the course you inputted in advance.
- Follow the above course repeatedly.
- Move around randomly within the specified area.

You can specify the time when the ship starts to move. According to your purpose, you can take advantage of the above functions.



## Portability

You can transport Marine Drone without using track and trailers because it adopts a split hull. The transportation costs will be reduced.



## Ship's Hull

The maximum load of the ship is 150 kg. It is possible to extend its function. Up to two people can also ride.



## Application Examples

### Environment survey



### Patrol / Security



### Shipping



### Guide / Navigation



### Life saving / Disaster response



### Sightseeing



# Main specifications

<b>Model</b>	RBBA0002A
<b>Length / Width *1</b>	2,500 [mm] / 1,270 [mm]
<b>Boatload *2</b>	150 [kg]
<b>Travelling direction</b>	Forward / Astern / Turning left and right
<b>Outboard motor *3</b>	500 [W] × 2
<b>Power generator</b>	1 [kW]
<b>Maximum boat speed</b>	4 [knot] (7.4 [km/h])
<b>General light</b>	Fit to various sensor devices / Head lamp (white)
<b>Ship's light *4</b>	Bulbous bow warning light, Stern light, Anchor light (white) / Starboard light (green) / Port light (red)
<b>Camera module</b>	Bow camera / Stern camera
<b>Controls</b>	Outdoor radio system

# Controller specifications

<b>OS for basic functions</b>	F-OS/PIC24F 5.1-RELEASE 16 MIPS, RAM 8 KB, ROM 128 KB
<b>Basic functions</b>	Built-in motor output / Radio system input / 6 axis motion sensor, Voltmeter, Ammeter, Temperature sensor / Relay 2ch / Lighting output 6ch / Warning buzzer
<b>OS for extended functions</b>	Linux
<b>Extended functions</b>	WiFi / GPIO 3ch, A/D 3ch, I2C 1ch, GPS, USB
<b>Operating environment</b>	-20 ~ 40 °C / Splash-proof (IPX4)
<b>Power supply</b>	DC 9 ~ 28 V, 15W

- Specifications are subject to change without notice.
- Depending on usage conditions, loading capacity, speed and any others may change.

\*1 You can choose the hull.

\*3 It can be changed.

\*2 It depends on the hull.

\*4 It will follow ship safety standards.

**Retail store** : For detailed product consultation, please contact the following information.

## Development / Manufacturer



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