

CHASING

# CHASING GREEN SHIP INSPECTOR

Underwater Inspector for Intelligently  
Monitoring hull Antifouling Coating



A remote-operated underwater vehicle specially designed for monitoring hull antifouling painting and ship antirust primers. The equipment has its own 4K high-definition camera, and the crew can easily obtain real-time image transmission data such as video or pictures of hull by remote control on deck. In addition, the equipment can complete the general visual inspection of some key parts of ships, such as propeller, rudder and sea chest, etc., and automatically output the hull inspection report.

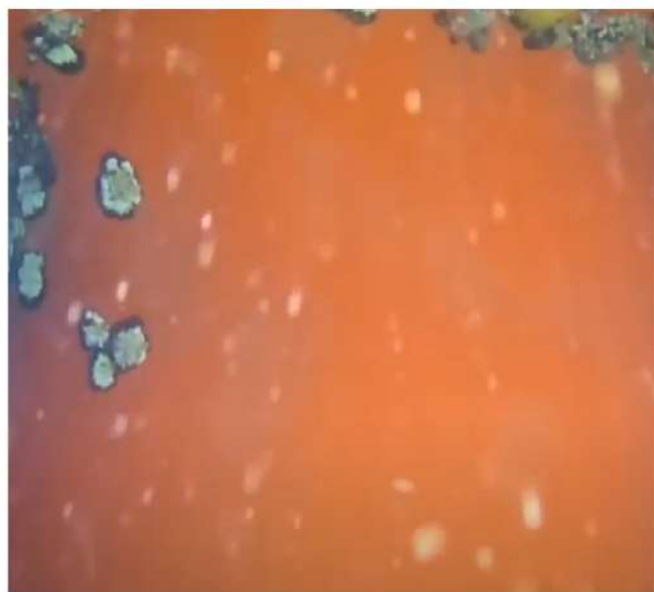


# Intelligent Monitoring of Ship Anti-Fouling

## Why to Choose CHASING Green Ship Inspector?

According to the statistics of the United Nations, the maritime shipping industry consumes 300 million tons of fuel every year, and emits about 3% of the global carbon dioxide emissions into the atmosphere. With the promotion of the decarbonization goal of "achieving global net zero emissions by 2050" by the United Nations, the International Maritime Organization took the lead in putting forward the concept of "Green Ship", and advocated that the maritime shipping industry actively adopt intelligent, unmanned and other deep-water development technologies to achieve the goals of reducing and controlling carbon emissions and improving fuel efficiency.

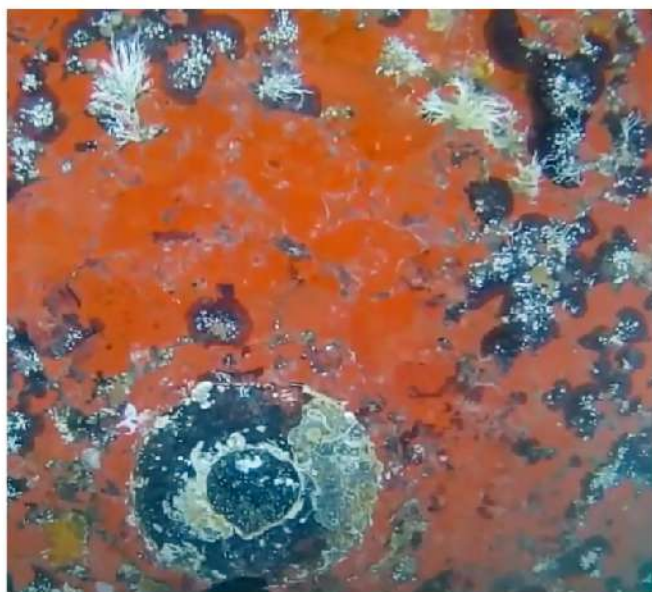
CHASING is the industry-leading high-tech company for portable underwater drones, headquartered in Shenzhen, known as China's Silicon Valley. In 2022, CHASING actively responds to the green ship plan put forward by IMO, launched the "Underwater Inspector for Intelligently Monitoring Ship Anti-fouling Coating", allowing ship owners and ship managers can easily conduct regular inspections on the conditions of ship anti-fouling coatings and the marine growth, so as to scientifically arrange hull maintenance work, manage fuel oil reasonably and improve fuel utilization rate. CHASING uses underwater intelligent ROV technology to help ship owners and ship managers build "Green Ship", which will greatly and effectively promote the reduction of carbon emissions into the maritime shipping industry.



**Ship A** operaed for 5 years

**Hull inspection:** CHASING ROV conducts inspection MONTHLY at least, and arrange regular ship maintenance service based on the ROV inspection result.

**Hull Condition:** 15% of marine growth covered;  
10% of the anti-fouling coating was fallen off.



**Ship B** operaed for 5 years

**Hull inspection:** Commercial divers inspection was arranged based on experience without any pre-check by ROV, and the frequency of hull maintenance work was uncertain.

**Hull Condition:** 40% of marine growth covered;  
30% of the antifouling coating was fallen off.

# CHASING Green Ship Inspector

Underwater Inspector for Intelligently Monitoring Ship Antifouling Coating

## 4K Image Quality Clear visibility

The Green Ship Inspector brings has 4K high-definition camera, 2000 lumens underwater lighting lamp, and adjustable angle supplementary light lamp, which can avoid the influence of floating objects on the definition of underwater observation picture. It is suitable for various underwater application scenarios with dim light, and provides clearer inspection picture for the inspection below the waterline of ships.



4k  
High-definition  
Camera



2000 Lumens  
Underwater  
Lighting Lamp



Adjustable Angle  
Supplementary  
Light Lamp



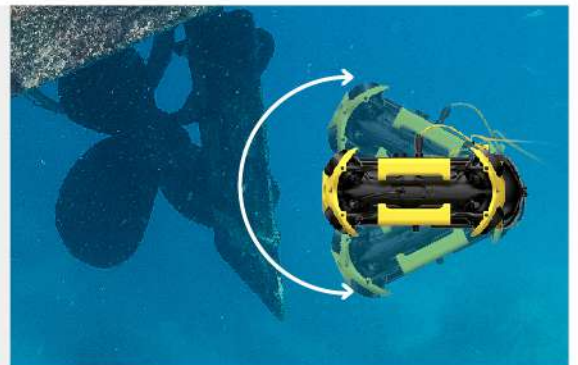
## Remote Control and Real-time Image Transmission

The Green Ship Inspector has cable control design, and the crew can remotely control the equipment on the deck or on the port shore to easily obtain the picture or video data of the hull condition below the waterline. The video and picture data are directly transmitted to the mobile phone or tablet, and the shore staff make real-time observation.



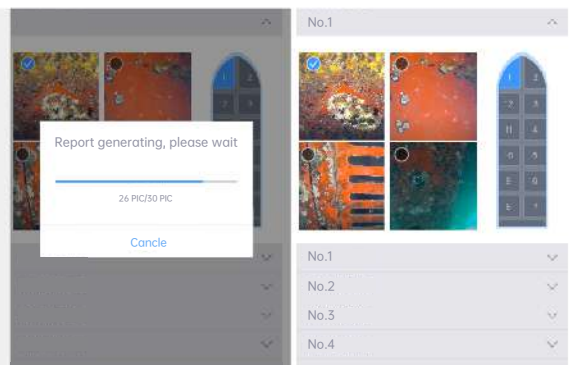
## 360-degree Omni-directional Flexible Movement and Large Inspection Coverage Area

7.The Green Ship Inspector has the full vector layout design of 8 propellers, which can realize **360-degree** Omni-directional flexible movement underwater, with a maximum speed of **1.5m/s** and a maximum horizontal movement radius of **200m**. It can inspect large-area antifouling coating and marine growth conditions along the hull side and the flat bottom of the ship.



## One-click Output of hull Inspection Report

After inspection, the crew can directly select the inspection picture file on the APP and output the inspection report marked with the relative position of the hull, which is convenient for the ship manager to quickly grasp the hull inspection results.





## One-click Storage and Download of Shooting Content and Simple Data Recovery

The Green Ship Inspector supports Caching and viewing the shot content on the APP, and also supports downloading the shot content directly from the APP to the mobile device for viewing.

**In addition, the built-in 64G SD memory card can support 512G at most.** Users can also directly insert the SD card into the computer to download data for viewing. In addition, users can choose Micro SD cards with different capacities as needed, which can support up to 512G.



## Replaceable Batteries Fully Guaranteeing Underwater Inspection Time

It supports a minimum of **100Wh battery** and a maximum of **700Wh battery**.

It is equipped with 2 replaceable batteries for alternate use, ensuring at least a single inspection time of 2-6 hours.



## Portable Design and Carrying Case Storage

The Green Ship Inspector is easy to operate, can be connected with mobile phones and tablet mobile devices, and can be deployed quickly in 3 minutes by a single person. The carrying case device is portable and easy to carry, which solves the storage problem of products and accessories in one stop.



### CHASING M2 Green Ship Inspector



8-thruster  
full-vector layout



Working time  
**1-2 hours**



Motor power  
**100W**



Maximum dive  
of **100m**



Maximum  
speed **3 Kn**

### CHASING M2 PRO Green Ship Inspector



8-thruster  
full-vector layout



Working time  
**2-4 hours**



Motor power  
**150W**



Maximum dive  
of **150m**



Maximum  
speed **3 Kn**

**Longer battery life, Higher power performance, Stronger current resistance**

## When to use CHASING Green Ship Inspector?

**01**

After the ship operates for a period of time, check the damage degree of antifouling paint on the side and bottom of the ship, and decide whether it is necessary to arrange the service company to repair the paint.

**02**

After the ship operates for a period of time, check the marine growth on the hull side and decide whether it is necessary to arrange the service company to clean it up.

**03**

When the ship berths at the port/anchorage, check whether the key parts such as propeller/rudder and sea chest are damaged

**04**

When a ship collides at sea, check whether the bow or stern of the ship is damaged by collision.

## Where to use CHASING Green Ship Inspector?

Due to the limited ability of carrying current/resisting wind and waves, The Green Ship inspector is recommended to be used in the **environment of calm, weak current and good visibility in anchorage/port.**



✓ **Suggested:** Calm sea and good visibility



✗ **Not Suggested:** Strong current and poor visibility

## How to use CHASING Green Ship Inspector?

Simple operation, clear picture, real-time image transmission

**01**

Deployment



**02**

Underwater inspection



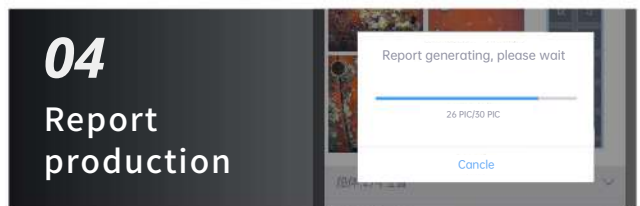
**03**

Shooting record



**04**

Report production



ROV	
SIZE	CHASING M2: 380×267×165mm
	CHASING M2 PRO: 480×267×165mm
WEIGHT	CHASING M2: 4.5kg
	CHASING M2 PRO: ≈5.7kg
MAX DEPTH	100m
	150m
MAX SPEED	1.5m/s ((3 Kn)
RUNTIME	Up to 4H
BATTERY1、2	CHASING M2: 97.68Wh、200Wh
	CHASING M2 PRO: 300Wh、300Wh
Operating Temperature	-10°C~45°C

CAMERA	
CMOS	1/2.3
LENS	F1.8
FOCUS	1m
ISO RANGE	100-6400
FOV	152°
MAX RESOLUTION	1200万
FORMAT	JPEG/DNG
VIDEO	UHD: 3840*2160 (4K) 30fps
	FHD: 1920*1080 (1080p)
	30/60/120fps
SLOW MOTION	720p: 8x (240fps)
	1080p: 4x (120fps)
TIME LAPSE	4K/1080p
VIDEO STREAM	60M
VIDEO FORMAT	MP4
SD Card	CHASING M2: 64G
	CHASING M2 PRO: 128G

LED	
BRIGHTNESS	2 x 2000lm
COLOR TEMPERATURE	5000K~5500K
CRI	85
DIMMING	THREE GEARS

SENSOR	
	Axis gyro
IMU	Accelerometer
	Compass
DEPTH SENSOR	< ±0.25m
TEMPERATURE SENSOR	< ±2°C

Remote Controller	
SIZE	160×155×125mm
WEIGHT	685g
BATTERY	2500mAh
RUNTIME	≥6H (depending on the environment)
WIRELESS	Wi-Fi
HDMI	Support
PHONE/TABLET HOLDER	10 inches Maximum

E-REEL Winder	
SIZE	280×150×270mm
WEIGHT	2.9kg
MAX STORAGE LENGTH	200m
Battery capacity	4800mAh
Number of battery charge cycles	>300 times
BATTERY LIFE	30times
SPEED GEAR	THREE GEARS
Take-up speed (200m)	Fast 200s Slow 9min
Operating Temperature	-10°C~45°C

CHASING Searchlight 2	
Dimension of the widest part of lamp tube	418mm
WEIGHT	≈432g
Depression angle of lamp tube	10°
Horizontal angle of lamp tube	360° adjustable
Depth of withstand voltage	150m
Single lamp brightness	2000lm

CHASING Carrying Case	
Material	Modified PP alloy
Boundary dimension	560×455×365mm
Internal dimension	517×392×329mm
Box cover depth (mm)	51mm
Box bottom depth (mm)	278mm
Design protection level	IP67
Design impact resistance	IK08

CHARGER	
POWER	CHASING M2: 2.9A/25.2V
	CHASING M2 PRO: 8A/25.2V
ROV CHARGING TIME	2.5H
RC CHARGING TIME	2H

**CHASING**

Official website: [www.chasing.com](http://www.chasing.com)

After-sales support: [support@chasing-innovation.com](mailto:support@chasing-innovation.com)