



**VISOR**

**ENHANCING VISION**

TECHNICAL DATA SHEET

# TABLE OF CONTENT

# VISOR EDGE

With our advanced technology, captains can navigate with increased confidence and dock more accurately, knowing their field of vision is complete and unobstructed.

## INTRODUCTION

Summary	05
Target audience	05
Short description	05

## TECHNICAL SPECIFICATIONS

Camera and display	07
Night vision capability	08
Onboard computer	08
Recording time and storage	09
dotOcean Cloud Software	09

## INSTALLATION PROCEDURE

Step-by-step guide	11
--------------------	----

## EXTRA'S AND OPTIONS

Extra IP Camera's	13
Motion Highlighting	13

## GENERAL OVERVIEW

Included / Not Included	14
General summary specs	14

# 01

## INTRODUCTION

This Technical data sheet aims to provide an in-depth technical explanation of dotOcean's innovative VISOR product, specifically designed for workboats & CTV's (crew transfer vessels). It will detail the technical specifications, recording capabilities, and potential applications of this advanced 360° solution.

### SUMMARY

The Visor system from dotOcean introduces a groundbreaking way to oversee deck operations on workboats and CTVs. By integrating and analyzing video feeds from two strategically positioned bird's-eye cameras, this advanced software delivers a comprehensive, top-down view of the deck and surrounding waters directly to the bridge. This enhanced visibility allows the captain to monitor the entire deck with unparalleled clarity.

### TARGET AUDIENCE

This document is intended for maritime operations managers, fleet supervisors, safety managers (HSQE), superintendents and technical buyers who are seeking enhanced vision and monitoring solutions for workboats and CTV's.

### SHORT DESCRIPTION

The system includes a dedicated **display** in the bridge that displays this fused panoramic view, completed with **distance markers at 5m and 10m** intervals to support in precise manoeuvring.

To further enhance safety, dotOcean offers an overlay **feature** known as "**motion highlighting**." This functionality illuminates crew members on the deck in bright colors, making it easy for the captain to identify and track their locations. This additional layer of visibility is crucial for improving crew safety and ensuring efficient deck operations.



## SOMETHING MORE TECHNICAL

In the next chapter, you'll find the comprehensive technical specifications for our Visor product. These details are carefully curated to provide you with a thorough understanding of the product's features, capabilities, and performance metrics. We believe this information will help you appreciate the advanced technology and innovation that make Visor a standout choice.

02

## TECHNICAL SPECIFICATIONS



### TWO FISH-EYE CAMERAS

Mounted high in the mast on port and starboard side.

2 x 9MP fish-eye Cameras  
Power over Ethernet PoE  
IP66  
IK10  
Operating temperature: -40°C to +50°C  
Two standard mounting plates  
Included



### 27" DISPLAY

Display mounted on the bridge for Live streaming.

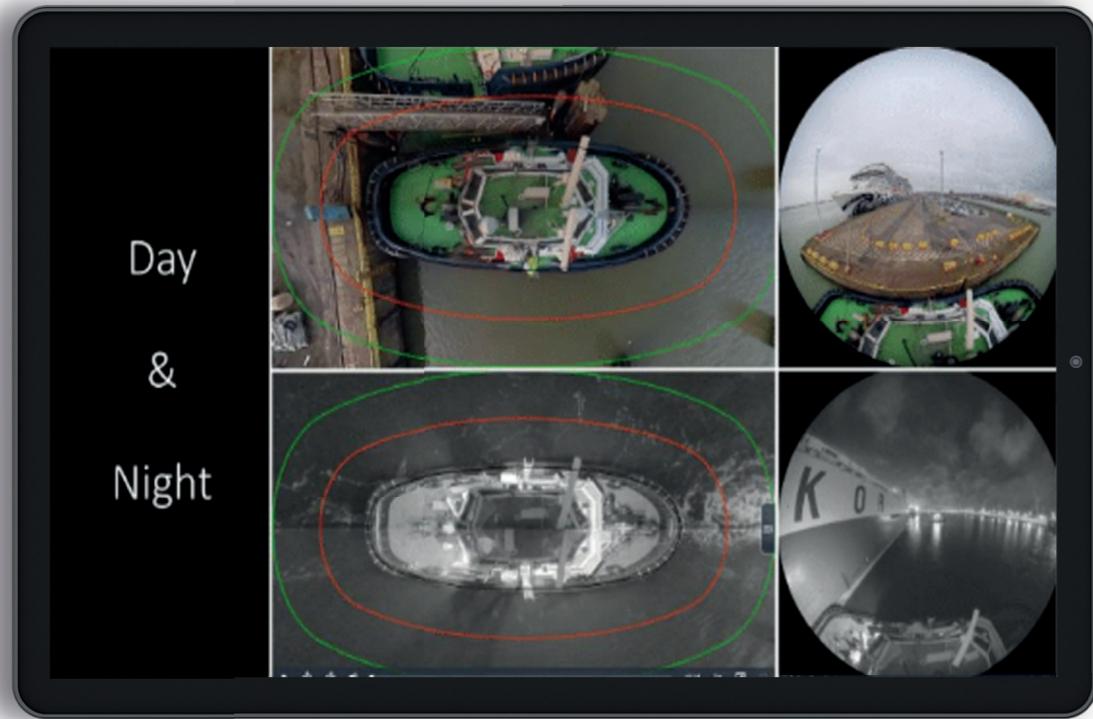


27" Display outer dimensions 374 mm x 674 mm  
25W  
Wall mount bracket included.  
Remote dimmer to adapt clarity



## NIGHT VISION CAPABILITY

The system includes night vision functionality, allowing the captain to operate effectively during nighttime or low-light conditions. The screen ensures clear visibility regardless of the time of day.



## ONBOARD COMPUTER

### FOR VIDEO PROCESSING AND RECORDING

The Visor system continuously processes and integrates video feeds to deliver a comprehensive bird's-eye view of the deck, along with detailed port and starboard perspectives.

This comprehensive recording capability allows for detailed post-incident reviews and provides valuable training material for new tugboat crew members.



240 x 82 x 267 (WxHxD)  
300W

12-48VDC (230VAC adapter on request)  
Operating temperature: from -40°C to +50°C

Wall mount or DIN rail mount  
DisplayPort to HDMI converter

## STORAGE CAPABILITIES

The processed and fused video streams from all connected cameras are recorded continuously at 10fps. For the two cameras, both the bird's-eye view and the original 360° view video streams are captured. When the onboard data storage reaches its maximum capacity, the system will start overwriting the oldest recordings.

An overview of the minimum number of recording days based on the amount of onboard storage and the number of connected cameras is provided in the table below. It is possible to prevent specific video segments from being overwritten by exporting those portions of the recording.

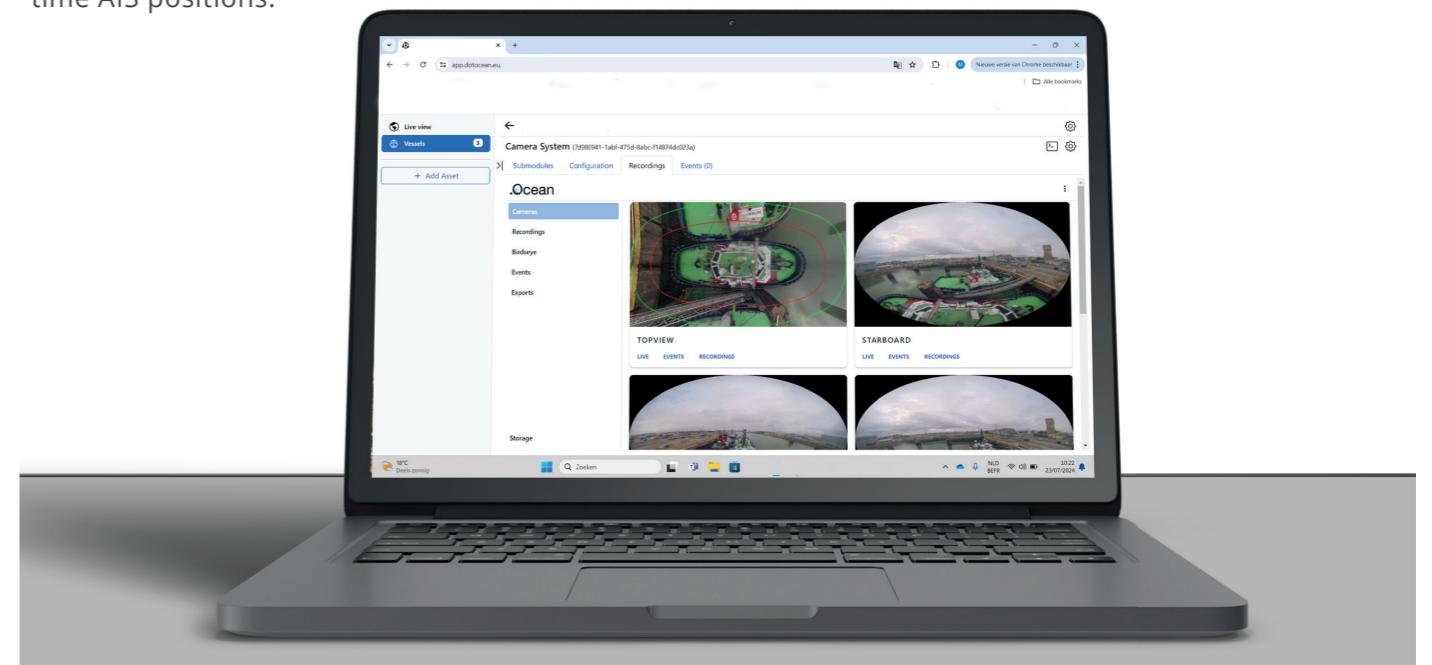
Minimum recording days	4 TB Storage (standard)	8 TB Storage (Option)	15 TB Storage (Option)
2 fish eye cameras (2x9MP, 10fps)	15 days	30 days	60 days
2 fish-eye Camera's (2x9MP, 10fps) + 3 IP Camera's (3x2MP, 10fps)	10 days	20 days	40 days

For more details about the additional cameras, please visit the options section.

**i** 4 TB (standard), 8TB (Optional) or 15TB (optional)  
Redundant storage for highly critical data can be provided as an option.  
10 GB monthly data limit for remote studio.  
+ €25 / GB additional data

## DOTOCLEAN CLOUD

Through our dotOcean Cloud software, all recorded footage can be viewed and downloaded via a secure web portal accessible from any internet-connected device, whether onboard the vessel or remotely. This Cloud system provides an overview of all operational vessels on an interactive map, displaying their real-time AIS positions.





## HOW TO INSTALL OUR PRODUCT?

In the following chapter, you'll find a detailed installation procedure for our Visor product. This step-by-step guide is designed to ensure a smooth and efficient setup, allowing you to maximize the product's performance and features with minimal effort.

# 03

## INSTALLATION PROCEDURE

### ONE

As a reference, dotOcean provides complete installation support for the first vessel at the customer's site. This initial installation serves as an example and training for future installations across the fleet.

The support includes on-site assistance with installing and interfacing the cameras, display, and onboard computer. The customer is responsible for designing and providing the brackets needed to mount the cameras on the mast, as well as a technical drawing detailing the vertical distances from the cameras to the deck and water, the horizontal spacing between the cameras, and the hull dimensions.

Once these preparations are complete, dotOcean will ship the necessary hardware including the cameras, onboard computer, and display—to the customer.

### TWO

For additional vessels in the fleet, the customer can install the hardware themselves. This includes two cameras, an onboard computer connected to both power and an Ethernet cable with internet access (using marine-grade CAT 6A cables to link the cameras and the computer), and a display on the bridge connected to power and an HDMI cable running to the onboard computer.

### THREE

Once installed, dotOcean provides an online service to get the system up and running and to fine-tune the installation parameters. The MAC address of the onboard computer is provided to facilitate network configuration and ensure internet access. The customer is responsible for supplying the vessel's MMSI number for configuring the dotOcean Cloud software. Additionally, the customer must provide the IP address, username, and password for any additional IP camera RTSP streams to be integrated into the system.



# 04

## SOMETHING ON TOP!

This section details the various enhancements and additional features that you can select to customize your Visor experience according to your specific needs and preferences.

## OPTIONS & EXTRA'S

### EXTRA IP CAMERAS

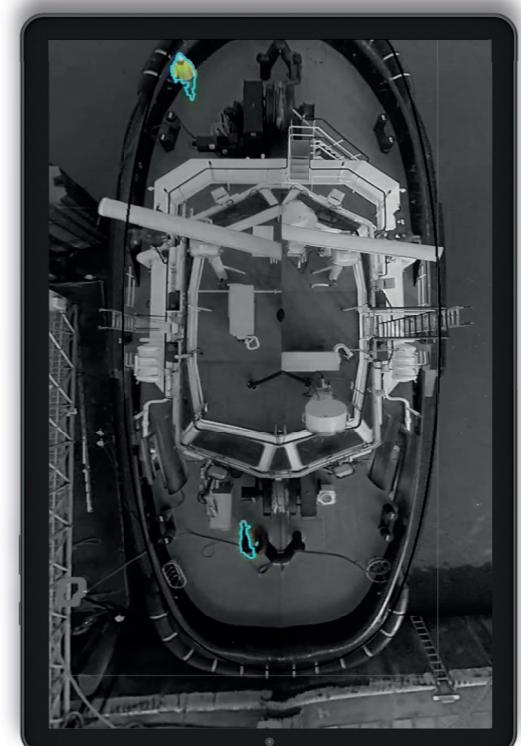
Existing IP cameras can be seamlessly integrated into the Visor vision system if they are connected to the vessel's network. Their video streams can be combined and fused, providing an integrated view on an existing bridge screen connected to a computer via a specific web page in a web browser. These additional camera streams will also be recorded and can be accessed, viewed, and downloaded through the Atlantis Cloud web app.



### MOTION HIGHLIGHTING

For enhanced safety, dotOcean offers an overlay feature. This "motion highlighting" functionality illuminates crew members on the deck in bright colors, making it easier for the captain to track their location and ensure their safety.

Visit our website for more information and video material about this feature



# GENERAL OVERVIEW



	Included	Not Included
CAMERA	<ul style="list-style-type: none"> <li>• 2 x fish-eye cameras</li> <li>• Standard mounting plate</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x ethernet cables (min. Cat5e/FTP)</li> <li>• Bracket to fix the mounting plate to the mast</li> </ul>
DISPLAY	<ul style="list-style-type: none"> <li>• 27" Display</li> <li>• Remote dimmer</li> <li>• Wall mount bracket</li> </ul>	<ul style="list-style-type: none"> <li>• Standard HDMI cable</li> </ul>
ONBOARD COMPUTER	<ul style="list-style-type: none"> <li>• Computer</li> <li>• Wall mount or DIN rail Mount</li> <li>• DisplayPort to HDMI converter</li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet cable with onboard network connected to the internet</li> </ul>
DOTOCEAN CLOUD SOFTWARE	<ul style="list-style-type: none"> <li>• Cloud-hosted platform allowing for secure access to the onboard recordings of all the vessels in your fleet</li> </ul>	<ul style="list-style-type: none"> <li>• The internet connection for the vessel</li> </ul>
ADDITIONAL CAMERAS	<ul style="list-style-type: none"> <li>• Software for recording visualize and download the additional camera streams</li> </ul>	<ul style="list-style-type: none"> <li>• The additional camera and their power supply</li> <li>• A display on the bridge to which the video from these additional cameras can be streamed</li> </ul>

## CAMERA

2x 9MP fish-eye cameras  
Power over Ethernet (PoE)

IP66, IK10

Operating temperature: -40 °C to +50 °C

## DISPLAY

27" diagonal  
Outer dimensions: 374 mm x 674 mm

25W

9-33VDC (230VAC adapter can be provided upon request)

5m wire to remote monitor dimmer

## ONBOARD COMPUTER

Dimensions (WxHxD): 240 x 82 x 267 mm

300W

12-48VDC (230VAC adapter can be provided upon request)

Operating temperature: from -40 to 50°C

Storage: 4 TB (standard), 8 TB (option), 15 TB (option)

Redundant storage for highly critical data can be provided as an option.



**dotOcean NV**

WWW.DOTOCAN.EU

BELGIUM

