

CON.AR™

AI-POWERED INTEGRATED NAVIGATION ASSISTANCE SOLUTION

CON.AR™ is an AI-powered navigation assistance solution designed to enhance maritime situational awareness and operational safety.

CON.AR FusionNav™

Intelligent navigation
system using multi-
sensor fusion

CON.AR NightNav™

Enhanced navigation
system with AI-driven
day and night vision

CON.AR FusionNav™

CON.AR FusionNav™ is an AI-powered navigation assistance system that fuses camera, radar, AIS and electronic navigational chart (ENC) into a single, coherent operational picture. By transforming fragmented sensor data into clear, scene-level awareness, it enables operators to understand situations faster and make more confident navigation decisions.



HOW IT WORKS

Sense

Camera + Radar + AIS + ENC

Align

Time & geo alignment across sensor inputs

Fuse

Correlate targets and tracks into one coherent scene

Assist

Present prioritized, actionable navigation insights

HOW IT HELPS

Unified Situational Awareness

Creates a single, clear operational picture from multiple onboard sensors.

- Fuses camera, radar, AIS and electronic navigational chart into one coherent view
- Eliminates fragmented sensor interpretation
- Provides a clear, real-time operational picture

Intelligent Target Correlation

The system ensures that every detected object is accurately identified and aligned across sensors.

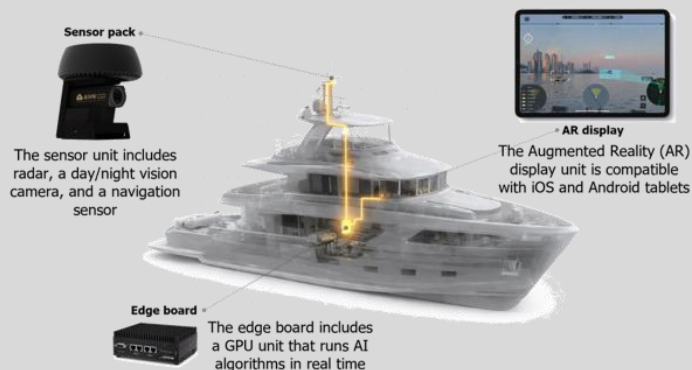
- Correlates radar plots, AIS tracks and visual objects into a single confirmed target
- Reduces false interpretation and duplicated targets
- Enhances detection reliability in complex environments

Decision Support & Risk Anticipation

CON.AR FusionNav™ helps operators anticipate risks and act with greater confidence.

- Highlights priority targets automatically
- Provides CPA / TCPA and closest-approach insights
- Enables faster, safer and more confident navigation decisions

HOW THE PACKAGE COMES



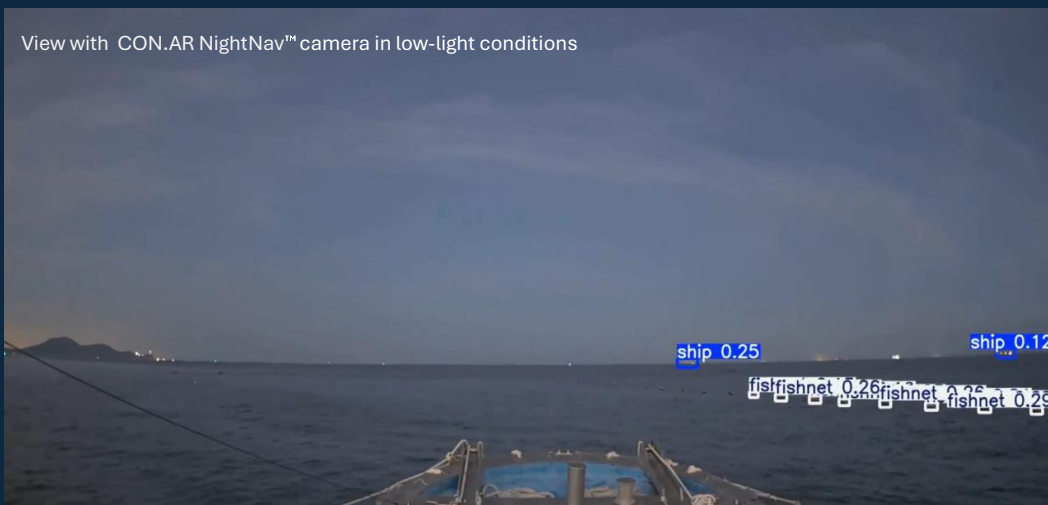
CON.AR NightNav™

CON.AR NightNav™ is an innovative AI-powered navigation solution that redefines night-time maritime operations. By visualizing environments beyond human vision and intelligently detecting hazards, it delivers daylight-like awareness even in darkness and glare.

View with conventional camera in low-light conditions



View with CON.AR NightNav™ camera in low-light conditions



Advanced Night Vision System

Clear visibility even in backlight, glare, and ultra-low-light environments.

- Minimum illumination of 0.02 lux
- Up to 4K ultra-high-definition video
- Optical zoom support
- Image optimization tailored for marine environments

AI Automatic Object Detection

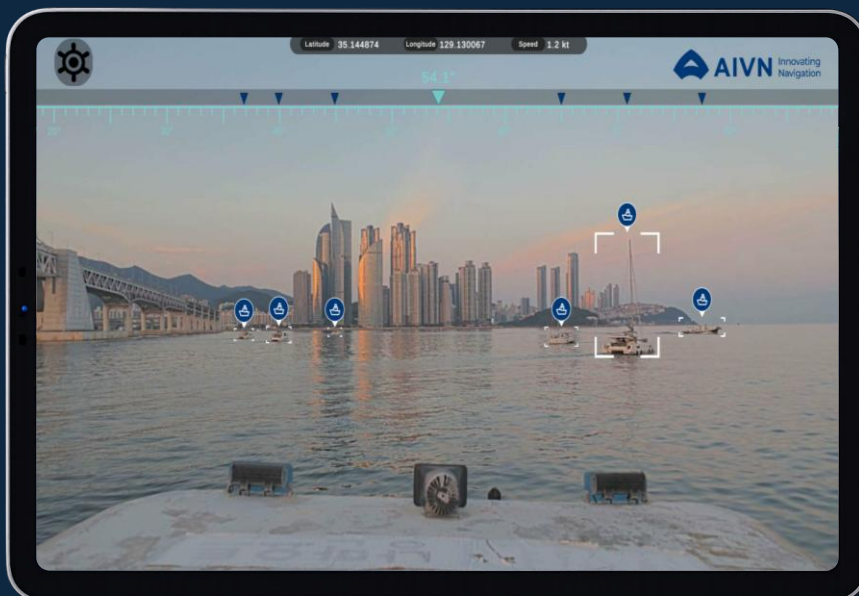
Intelligent navigation assistance that recognizes risks in advance.

- Deep learning-based automatic detection of vessels, buoys and floating objects
- Edge-based real-time processing (6 ~ 7 fps based on FHD)
- Automatic object location display
- Enhanced operator situational awareness support

AR Display

Real-time video sharing via wired and wireless connectivity.

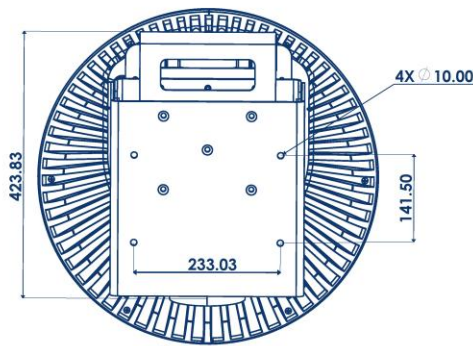
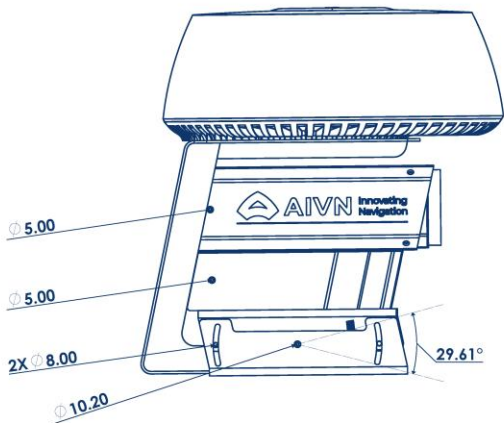
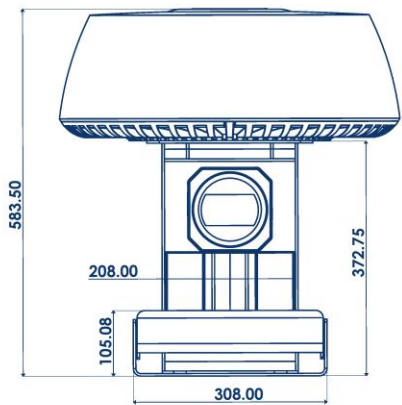
- AR-based real-time visual interface
- Video visualization on smart devices (IOS / Android)
- HDMI(or DP)-based video output support
- Built-in dashcam recording for video logging



CON.AR Sensor pack



Technical Specifications



Overall Dimensions*	308 x 423 x 372mm
Total Weight*	18.8kg
Housing Material	Aluminium 6061-T6
Maximum Power Consumption**	66.7W
System Protection*	IP66
Application	AI-based Navigation Assistance System
Sensor Fusion	Radar, Camera, AIS, IMU, and GNSS
Object Detection & Recognition	Attention by Radar, YOLO
Main Features	Integrated Target Monitoring Real-time Collision Risk Warning

*Sensor pack only
**Edge com & sensor pack, excluding radar

Contact Information

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