

KEY BENEFITS FOR SHIPOWNERS & OPERATORS

1. Unmatched Cybersecurity Compliance

- **Fully compliant** with IACS UR E26/E27, by major classification societies (CLASSNK, DNV, CCS, ABS, LR).
- **Network isolation and encryption** prevent unauthorized access and cyber threats.
- **Regular penetration testing and automated security checks** ensure continuous protection.
- **Automated compliance reporting** simplifies inspections and audits.
- Cybersecurity hardware is continuously maintained in an up-to-date and secure condition through remote software updates.

2. Real-Time Monitoring & Predictive Maintenance

- **Visualize equipment health** with trend graphs and thresholds.
- **Detect anomalies early** to prevent failures and reduce downtime.
- **VDR data extraction** for incident analysis, audits, and crew training.

3. Remote Troubleshooting & Support

- **SOTBOT (Chatbot):** Instant troubleshooting guidance for crew, reducing shore-to-ship communication.
- **Remote access** for configuration changes, software updates, and diagnostics.
- **Detailed equipment status and alert data extraction** for faster root-cause analysis.
- **Predictive maintenance** based on real-time data trends.

4. Seamless Integration & Data Security

- **Secure data exchange** between onboard systems and shore-based services.
- **One-way communication** to protect operational technology (OT) networks.
- **Firewall with port control and network segmentation** for enhanced security.
- **Automatic chart updates and voyage optimization** powered by NAPA and FFOY.

5. Cost Savings & Operational Efficiency

- **Reduce engineer dispatch** with remote diagnostics and updates.
- **Minimize downtime** with proactive maintenance and rapid issue resolution.
- **Streamline inspections** (e.g., VDR APT) in under 1 hour without onboard visits.
- **Lower total cost of ownership** with flexible subscription plans.

6. Future-Proof & Scalable

- **Adaptable to new regulations** and evolving cyber threats.
- **Scalable for all vessel types**—merchant, offshore, coastal, and port operations.
- **Integration with existing Furuno systems**

WHY CHOOSE FURUNO?

- ✓ **Trusted partner** in maritime innovation for over 70 years.
- ✓ **Proven cybersecurity expertise** with Level 3 accreditation.
- ✓ **Seamless integration** with existing Furuno systems.
- ✓ **Dedicated customer portal** for 24/7 access to system status and reports.

🌐 Visit furuno.gr/hermace for more information.



UNIFIED CYBERSECURITY & REMOTE MONITORING PLATFORM

Furuno's HermAce is a **unified cybersecurity and remote monitoring platform** designed to protect maritime vessels, ensure compliance with international standards, and enhance operational efficiency. Built with **advanced digital twin technology and Cyber Security Level 3 accreditation by LR**, HermAce delivers **real-time monitoring, predictive maintenance, and secure remote access**—all from shore.

FURUNO

HermAce: Secure, Efficient, and Future-Ready Maritime Cybersecurity

HOW IT WORKS:

HermAce: Secure, Efficient, and Future-Ready Maritime Cybersecurity



MONITOR:

Real-time status visualization and automated alerts.



SECURE:

Network isolation, encryption, and compliance checks.



MAINTAIN:

Predictive maintenance and remote troubleshooting.



OPTIMIZE:

Voyage planning, chart updates, and data-driven decisions.

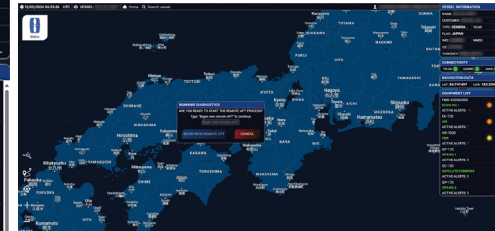
Real Time Monitoring

HermAce collects and transmits real-time critical vessel equipment data to the cloud, making it instantly accessible to users via a web portal anytime.



Next Generation Annual Inspections

HermAce enables remote annual VDR inspections anytime, reducing costs and operational burden by eliminating the need for technician dispatch.

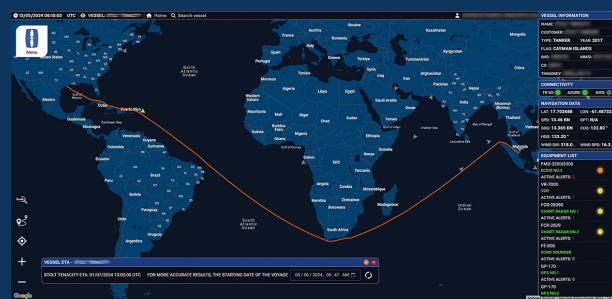


Data Distribution

Next Generation Annual Inspections HermAce enables remote annual VDR inspections anytime, reducing costs and operational burden by eliminating the need for technician dispatch.

Pre-survey Check

HermAce's pre-survey check ensures VDR data is correct in advance, reducing inspection issues and improving service completion rates.



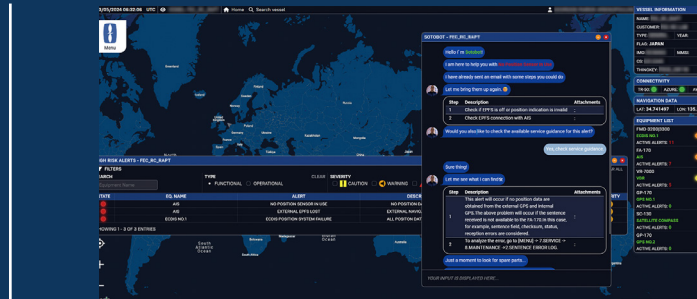
Voyage Optimization

HermAce's Portal enables users to optimize ship routes for improved operational efficiency, remotely monitor planned routes with ETA, and receive optimized routes back to the vessel.



Predictive Maintenance

Predictive maintenance of radar magnetrons is achieved efficiently by extracting and visualizing health status data with thresholds, allowing parts to be replaced based on actual measured usage instead of less accurate recommended replacement times.



Furuno Tips

Furuno Tips combines alert and health status data to identify symptoms and spare parts, providing digitized technical know-how for self-troubleshooting without contacting the manufacturer.