



DATAHUB™

DataHub™ provides the ability for applications to connect to real-time navigation sensors and retrieve information using standard processes. End users can dynamically connect to vessel sensors for recording and distribution to other software applications.

Using a modular design architecture, multiple DataHubs can be connected for a holistic presentation of vessel or even fleet sensor data.



Ease of Integration with Third-Party Applications

- Supports real-time sensor data collection, parsing, recording, and distribution.
- Allows high-level geospatial navigation applications and tools to focus on the final product without low-level hardware integration code having to be written, reducing development costs.
- Includes a defined Application Programming Interface (API), a mechanism for external systems to interact and retrieve information.

Typical Applications

DataHub can be used in both civil and military maritime domains. Applications include:

- Recreational navigation devices
- Unmanned systems charting services and analysis
- Command and Control solutions
- e-Navigation Solutions
- Inland and Coastal Electronic Charting System (ECS)
- Electronic Chart Display and Information System (ECDIS), Navy ECDIS (N-ECDIS) and World ECDIS (WECDIS)
- Integrated Bridge Systems (IBS)
- Combat systems
- Harbor and coastal solutions
- Voyage Data Recording (VDR) Applications
- University Geospatial Labs

Functionality

- Protocols and Standards: Ethernet / RS232 / RS422 / CANBus, J1939, NMEA0183, NMEA2000
- Multi-DataHub connection and synchronization
- Multi-Client Connection
- Custom Client Data setup and requests
- Interfaces
 - Protocol Buffers
 - gRPC
 - DataHub Client DLL (C++, C# only)

Application Technology

- C#
- .NET
- Docker

Supported Operating Systems

- Windows 11 and Windows Server
- Linux Desktop and Server

Next Generation Navigation Decision Support Tools

GeoNavigation Technologies FairSeas products are here to assist the mariner in safe navigation from port to port.



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