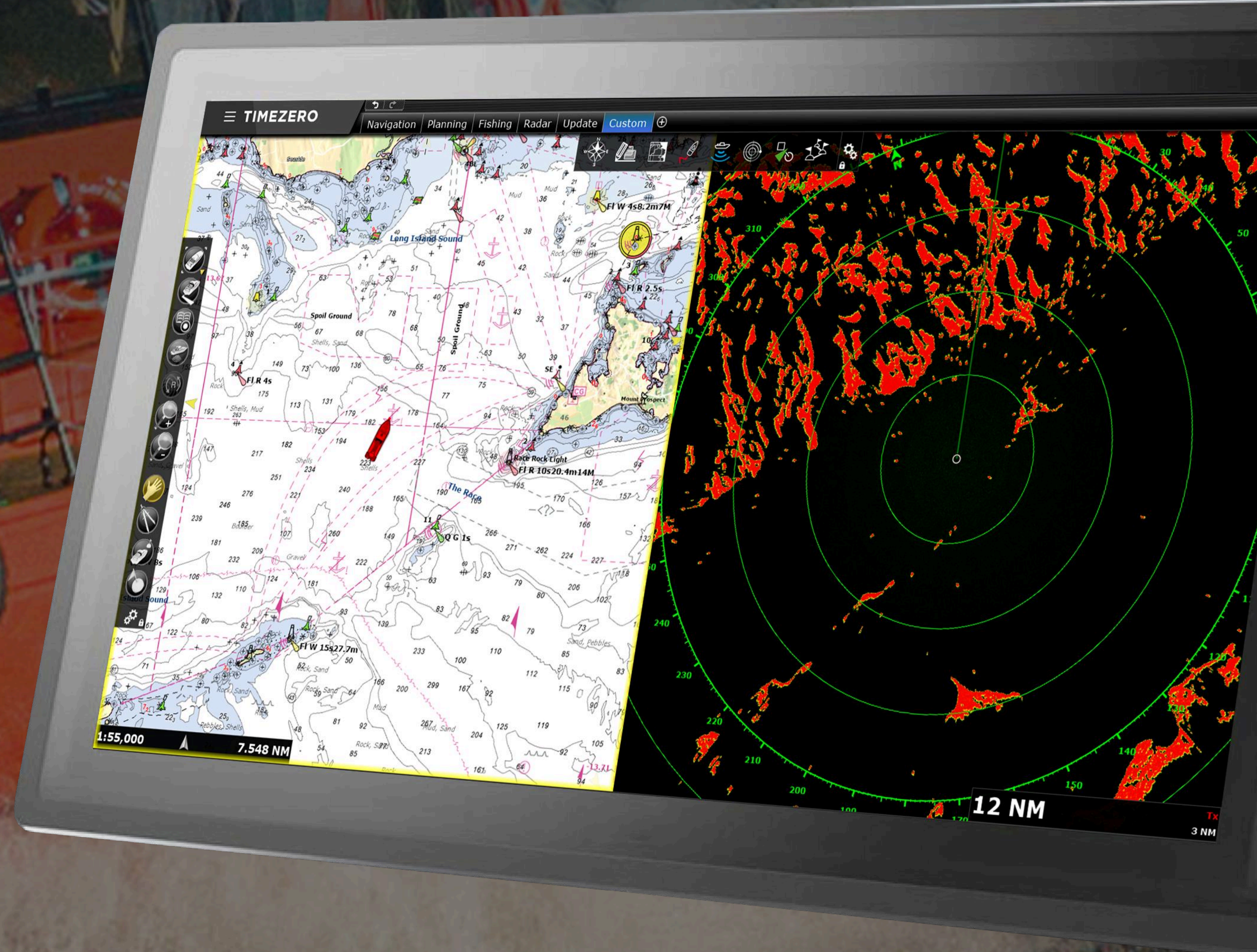


**DIGITAL  
DEEP SEA**

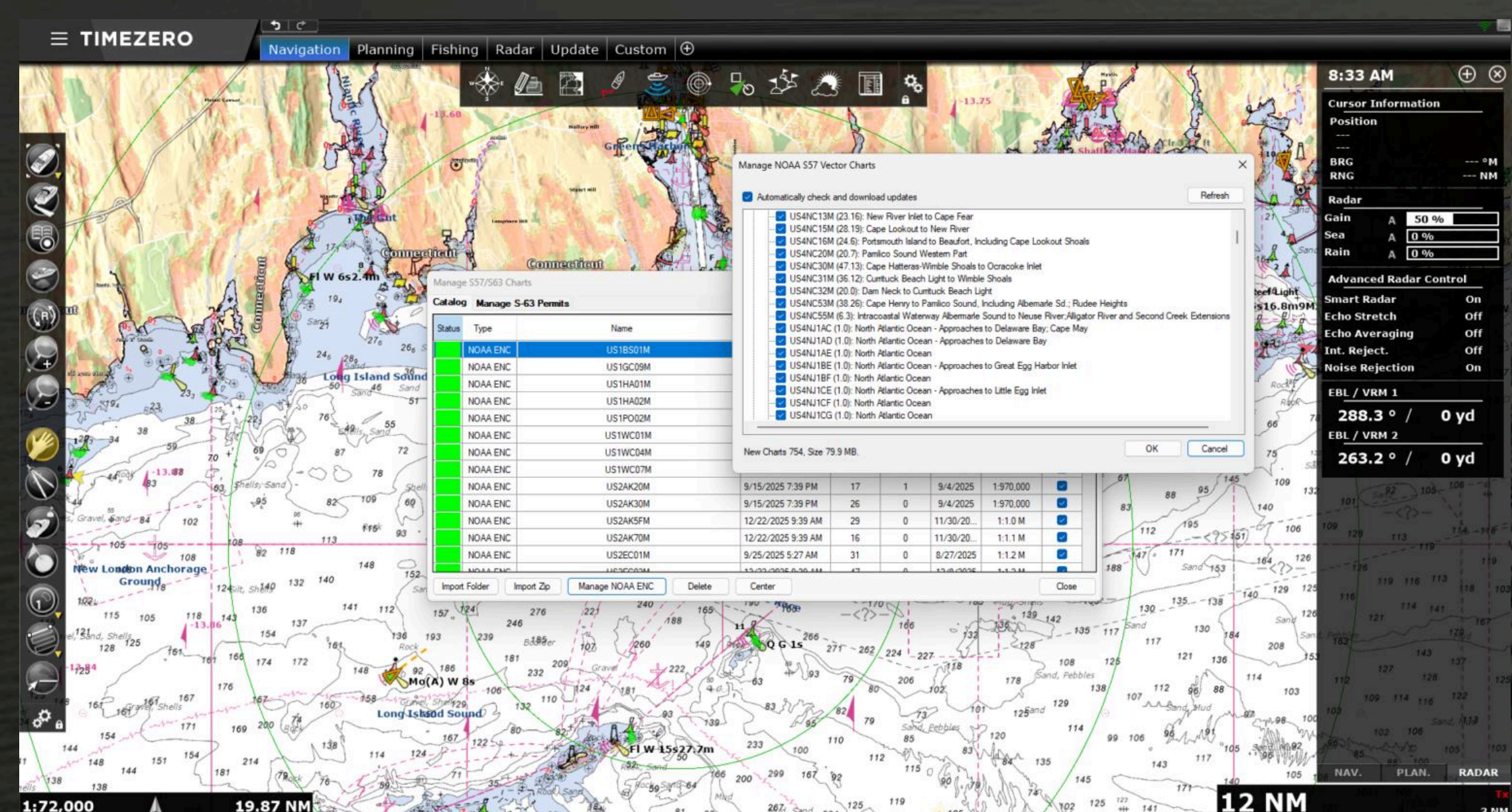
# **ECS1000** **TYPE APPROVED** **SV-ECS & COMMERCIAL** **ELECTRONIC CHART** **NAVIGATION SYSTEM**

APPROVED MARINE NAVIGATION AND ELECTRONIC CHART PLOTTER SOLUTION FOR COMMERCIAL WORKBOATS, PILOT, FISHING AND PASSENGER VESSELS PLUS SUPER-YACHTS AND LARGER RECREATIONAL CRAFT



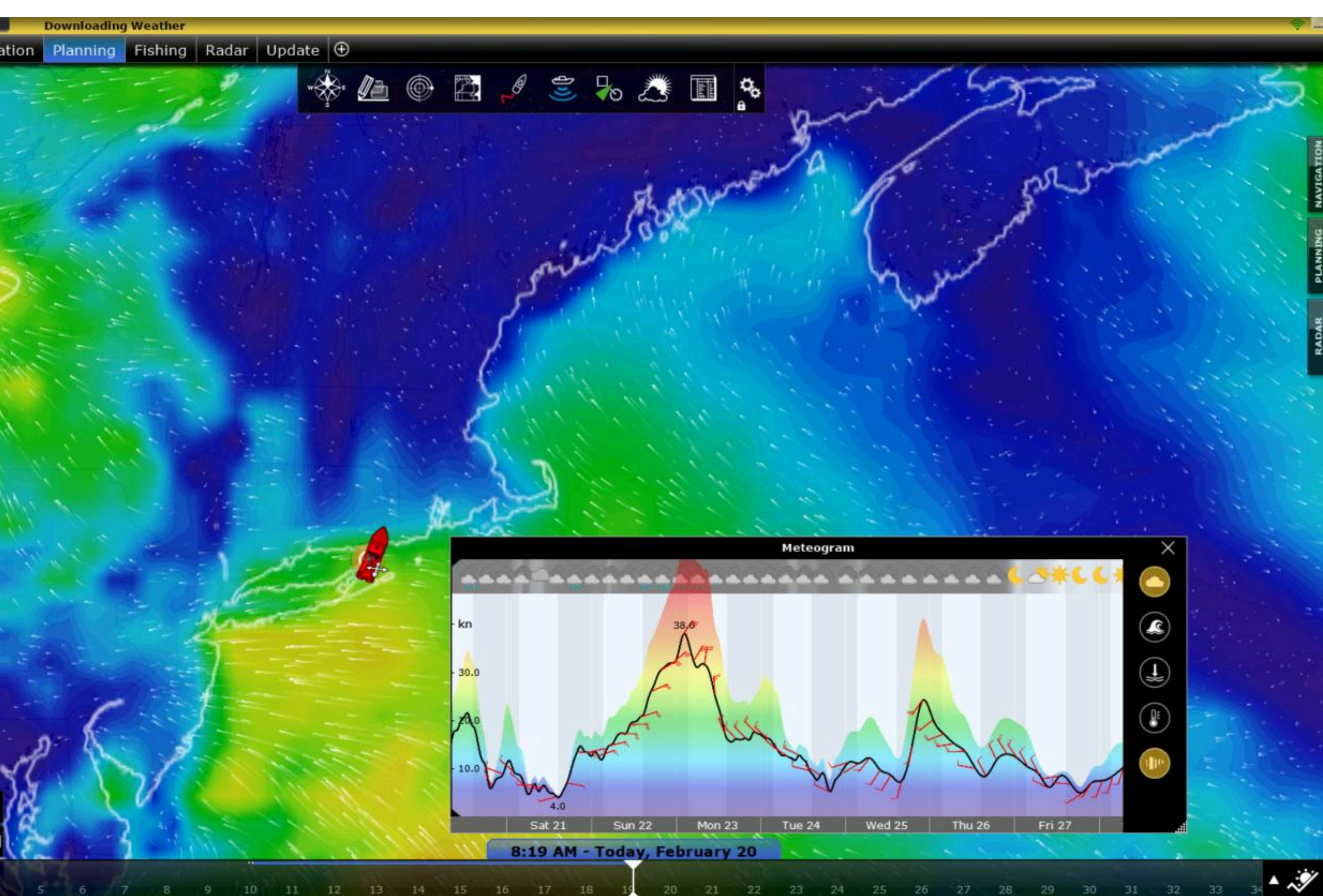
# A NEW ERA FOR WORKBOAT NAVIGATION

Regulations are changing and in many jurisdictions: commercial tugs, workboats, pilot vessels, super-yachts and fishing vessels are now required to have an approved electronic chart system (SV-ECS) installed rather than rely on recreational MFDs for navigation. An approved SV-ECS is similar to a commercial ship ECDIS system and utilises approved electronic charts that can be weekly updated to provide safer and more secure navigation. ECS systems allow for the best voyage planning, real time navigation and present charting displays to navigators in a consistent format to allow for better crew familiarity and operation



- Recent regulations require relevant commercial vessels to install an approved ECS system today
- While nobody likes excessive regulation, the new standards do improve navigation and crew safety and make for a more efficient solution

To meet regulations, a full function traditional ECDIS could be installed but these systems are complex, expensive and cumbersome. Some manufacturers have produced ECDIS "lite" solutions based on proprietary hardware. However, the Digital DeepSea solution offers much better value, performance, flexibility and future proofing based on an approved PC hardware platform with high performance ECS software that forms the basis of the ECS1000 system



## ECS100 PROCESSOR - THE HEART OF THE SYSTEM

On board systems for SV-ECS must be approved to stringent IEC 60945 standards. The Digital Deep Sea ECS100 platform is a marine PC processor that can run the latest charting applications and meet these demanding approvals covering vibration, environmental constraints, interference and power supplies. Based around a well proven but heavily modified HP PC platform, it's supplied with a custom anti-vibration mounting plate and an approved power supply. What's more, its ABS, LR, DNV, KR, CCS and RINA approved as a stand alone PC processor so can be used for many certified bridge applications on vessels requiring approvals.

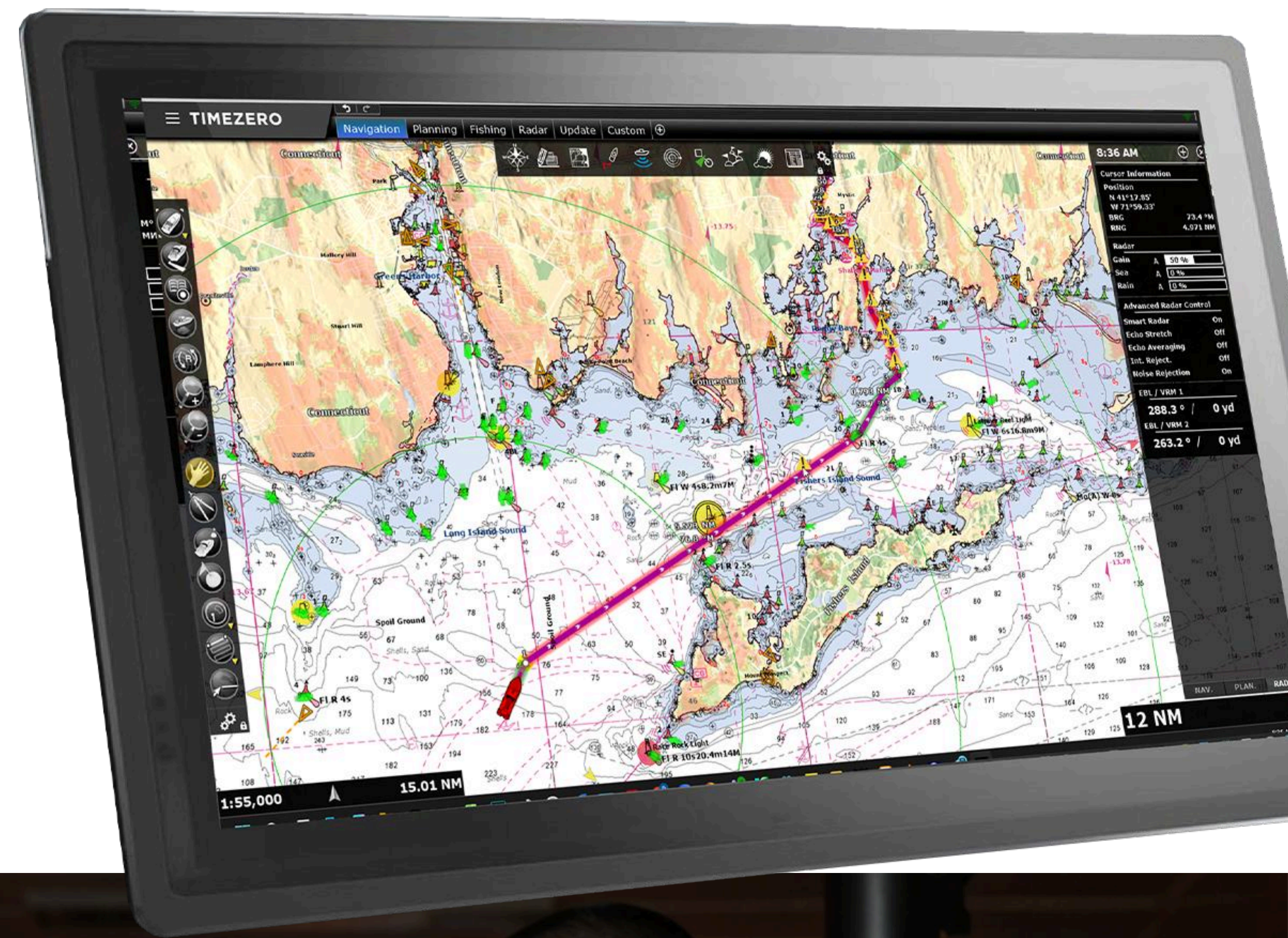


The ECS100 features an ultra powerful Core 5 processor with 16GB RAM and 1TB solid state storage. Up to 4 UHD 5K monitors can be connected to provide navigation displays unmatched by any proprietary or legacy ECDIS system. There's built in gigabit wired networking, Bluetooth and wifi. Windows 11 Pro is pre-installed as standard. Linux available as option.

# ECS1000 — THE COMPLETE CERTIFIED SV-ECS SOLUTION

The ECS1000 complete solution comprises ECS100 processor, S185 display and ECS operating software connected to a suitable on board GNSS/GPS device. The S185 is a hi-bright (1000cd) 18.5" touchscreen HD display. Up to 4 displays can be connected to the main processor allowing for a glass bridge with multiple displays to be integrated.

For the ECS operating system, TimeZero Professional is pre-installed and the system setup to operate in shell mode so the mode of operation appears as a dedicated chart plotting device without the complexity of a PC. Official S57 charts can be downloaded and updated



## ECS1000 SYSTEM

- Comprises powerful charting processor, 18.5" touch screen display and compliant TZ Pro ECS charting software
- Full S57/63 charting compliance with chart update log
- Add multiple monitors for full glass bridge approach with multiple charting screens and optional radar and sounder displays
- Optional Class A AIS transponder provides full AIS functionality and GNSS/GPS input to system

## POWERFUL NAVIGATION FEATURES

- Multiple layers with choice of north up, course up or split screen chart options
- Pinch to zoom and fast panning of charts thanks to powerful processor and touch screen display with on screen keyboard
- Unlimited waypoints, markers, tracks, user boundaries and routes
- Multiple user alarms for CPA/TCPA (AIS collision warnings), depth, anchor, boundary incursion and planning route safety check
- Interface with NMEA 0183 devices via supplied interface or to NMEA 2000 via optional iKonvert interface

## ECS1000 OPTIONS - RADAR - SOUNDER - AIS AND MULTIPLE DISPLAYS



### FURUNO SOUNDER

Add amazing sounder capability to the system using the Furuno DFF1UHD+ black box sounder. Choose from regular 50/200KHz sounder modes or CHIRP and CHIRP side scan options depending upon type of transducer installed



### FURUNO RADAR

The ECS1000 is compatible with Furuno's latest line up of FAR and NXT doppler solid state radars. Choose from radome or open array antenna options to add radar and radar overlay functionality to the ECS1000 system.

Just add a Digital DeepSea NS8 network switch for simple plug 'n' play connectivity



### CLASS A AIS TRANSPONDER

Add the Digital DeepSea CLA2000 Class A AIS transponder for AIS overlays and GPS/EPFD sensor compliance

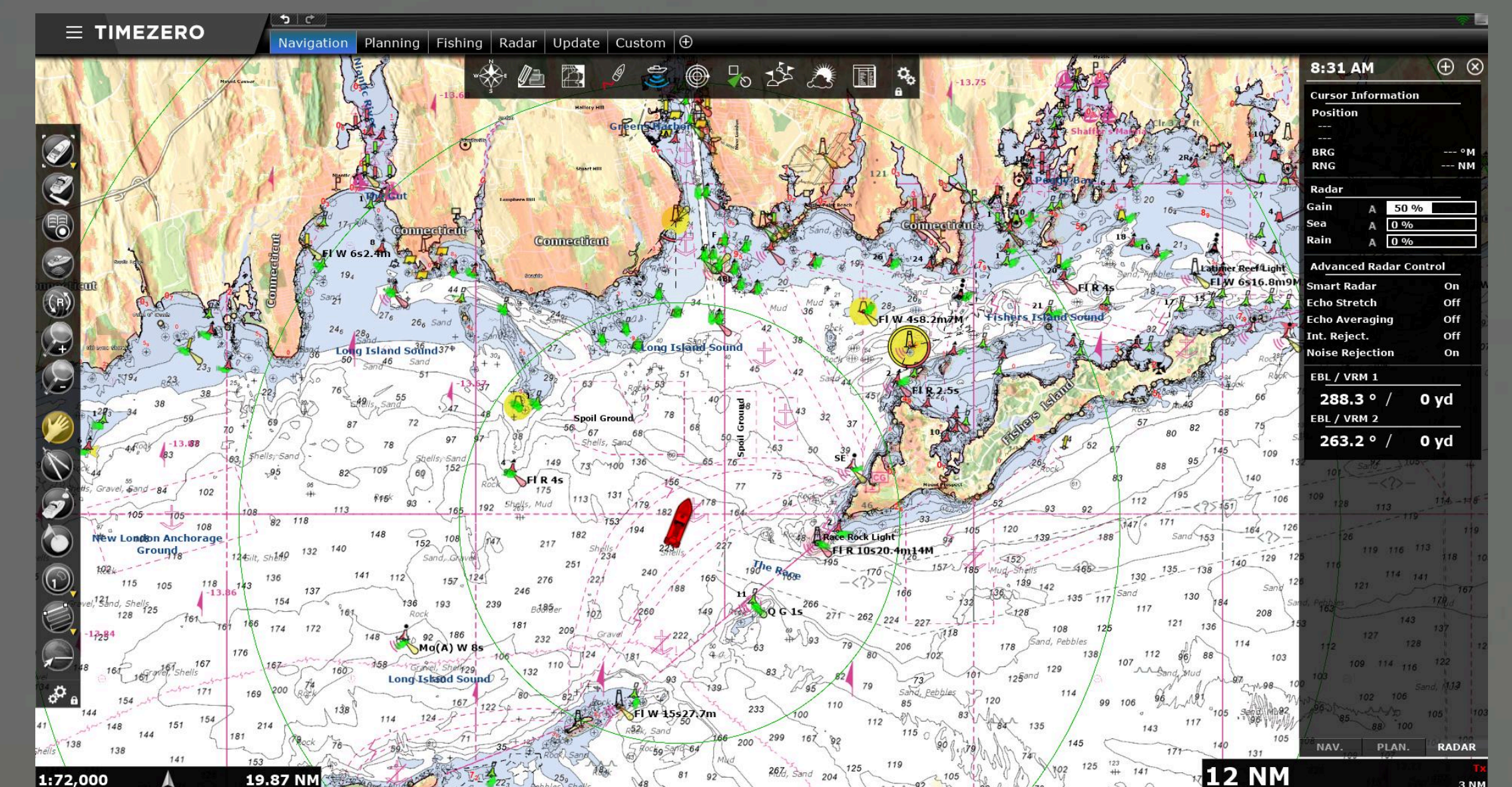
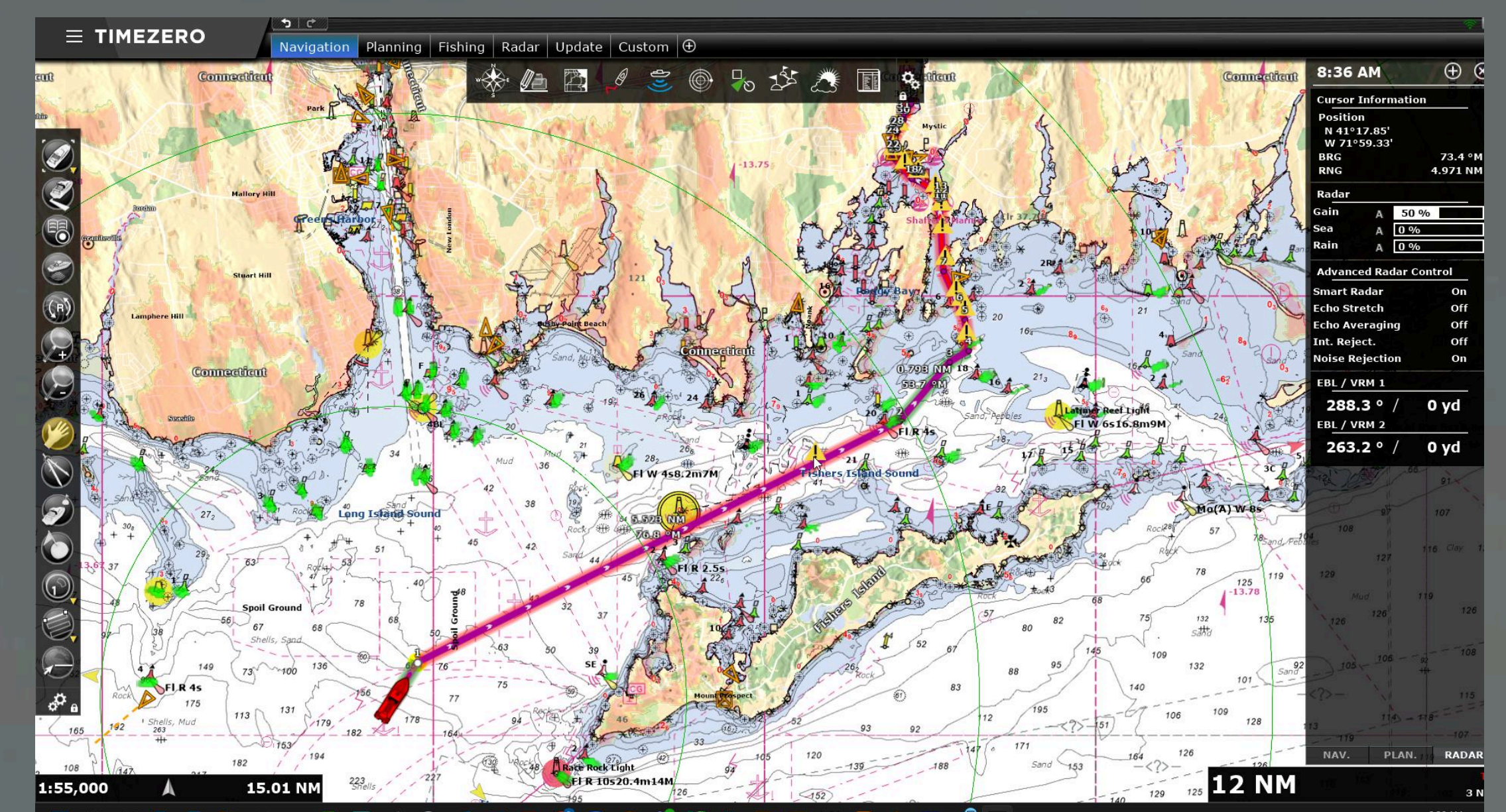


### S185 TOUCHSCREEN DISPLAY

Add upto 4 S185 displays. These hi bright, 1000cd HD resolution displays are ideal for chart and navigation viewing. Configure data display windows and various chart layer presentations across all screens for a true glass bridge approach, customisable for any navigation scenario including chart, radar, sounder, digital data etc

# TZ PRO ECS FEATURES

- **Official ENC Support:** Full support for S-57/S-63 official Electronic Navigational Charts (ENCs), ensuring secure weekly chart updates. Access to free NOAA ECS charts in US and compatible with charting from other leading hydrographic offices such as UKHO (note chart subscriptions for these regions are chargeable by the relevant authority)
- **Security Cone & Anti-Grounding Alarm:** Evaluates the safety of the route by monitoring the vessel's trajectory for shallow waters and isolated dangers. Advanced route creation with instant, colour-coded (red/green) safety checks based on draft of vessel and safe water limits
- **Navigation & Safety Parameters:** Allows setting custom Safety Depth Contours (Deep Contour, Shallow Contour) to match the vessel's draft.
- **AIS Management:** A complete AIS module for configuring navigational status and destination, plus the ability to send and receive AIS text messages
- **Efficient Interface:** The UI is designed to minimize clutter while providing instant access to critical data for professional crews. Rather than replicating the complexity of full ECDIS, TZ ECS delivers modern, intelligent navigation tools through a clean, elegant, and intuitive interface. Every function has been designed with working captains, fishermen and operators in mind — ensuring powerful capability without unnecessary complexity. The result is a system that combines regulatory alignment with true operational usability
- **Weather and Ocean Data:** Includes free weather forecasting and specialized Ocean Data Services (SST, currents, plankton) available as subscription option

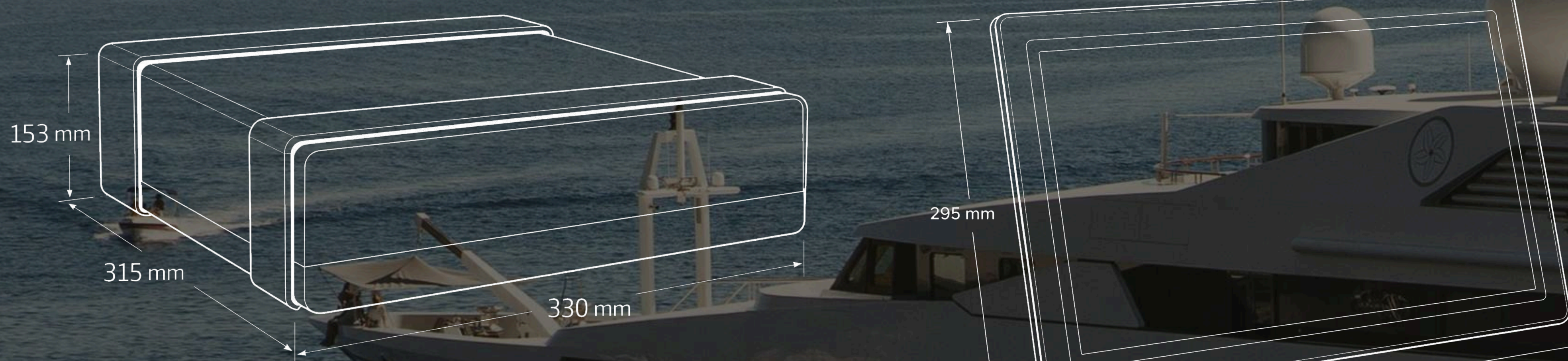


## ECS100 SPECIFICATIONS

- **Processor** - Intel Core 5 with 16GB RAM and 1 TB hard drive
- **Connectivity** - 1 GBs wired networking, 11 x USB, WiFi 6 and Bluetooth
- **Compliance** - IEC60945. Approvals with ABS, KR, BV, CCS, RINA and LR
- **Operating software** Windows 11 Pro. Linux option. Recommended ECS software TimeZero Pro with S57/63 module
- **Power** - AC 110/220V Typical 50W, 250W max. DC 12/24V option available
- **Video** - UHD display ports (x4) with 5120 x 2880 pixel resolution. Recommended display is S185 HD touch screen display for IEC60945 compliance

ECS 100 Processor Dimensions

S185 Display Dimensions



## THE BEST ADVICE AND HELP?

Reach out to our dedicated ECS help team for expert advice on system configuration

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