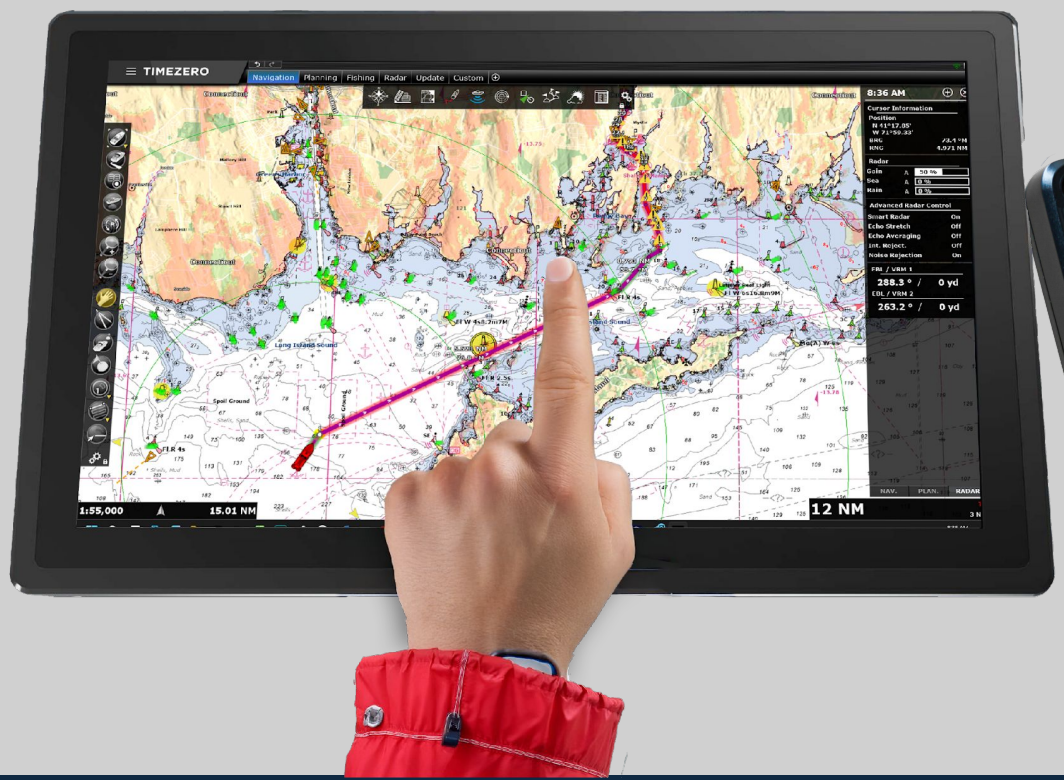




ECS1000 Commercial Electronic Charting Solution



- IEC60945 Approved electronic charting system (ECS) for workboats, fishing vessels, tugs and other ECS mandated commercial vessels
- 18.5" HD high bright touch display
- Powerful navigation functions
- S63 Approved charts with daily updates*
- Optional Class A AIS/GPS option with IMO approval
- Simple installation and compliance
- Optional radar, 2nd displays with multi purpose charts, internet connectivity, VDR and sounder

* Requires internet connectivity for chart updates



Dear Captain

In 2019 NOAA announced the decision to discontinue production of paper maritime charts and in 2024 they released VR3 of their online chart printing tool. However, printing large format local charts on a regular basis as required and mandated for safe passage is impractical for most users.

In August 2025, the Coast Guard issued NVIC 01-16 Change 3, which outlines regulations for carriage of an electronic charting system (ECS). Impacted vessels include non-SOLAS US Vessels such as towing vessels (Sub-chapter M), small passenger vessels (Sub-chapter T/K), workboats, municipal boats and commercial fishing vessels including 6-pack charter boats (UPVs).

If you operate a commercial vessel in US waters that falls under the navigation safety rules in 33 CFR Part 164 (e.g., self-propelled vessels < 1600 GT, many towing vessels and vessels in VTS areas) you must carry approved charts/publications or use the accepted electronic equivalents on compliant ECS hardware/software. Failure to comply can lead to deficiencies and civil penalties under USCG regulations.

Clearly printing large format charts on a daily or weekly basis is impractical so the best solution is an approved ECS system which can automatically provide chart updates and meet the specifications for an approved ECS navigation device. It's powerful navigation functionality is also hugely beneficial

Some vessels may also require an approved positioning system (EPFD electronic position fixing device) and for this we recommend our CLA 2000 AIS transponder which acts not only as a full function Class A AIS transponder but also as a GPS/EPFD feed to the ECS system

Welcome to Digital DeepSea ECS1000 systems



ECS1000 Base System



Part number: ZDIGECS1000

Comprises:

ECS100 Processor plus S185 18.5" touchscreen monitor. Win 11 Pro operating system (no ECS software supplied)

The heart of the ECS1000 system is a high performance IEC60945 approved PC processor, with American Bureau of Shipping (ABS) certification. Features an Intel Core 5 processor with 16GB RAM and 1TB rugged hard drive for extensive chart storage. Support for up to 4 monitors

It is supplied with a hi-bright, HD resolution S185 touchscreen monitor which supports charting software control such as pinch to zoom and panning and an on-screen keyboard if a traditional keyboard and mouse is not required

Running Windows 11 Pro, it can be used with any compliant ECS software and is the ideal package for existing users of TimeZero Pro who require an approved hardware solution.

110v AC operation (optional 12/24v DC)



ECS1000A System with CLA2000 AIS



Part number ZDIGECS1000A

Comprises:

ECS100 Processor, S185 18.5" touchscreen monitor and CLA2000 Class A AIS transponder. Win 11 Pro operating system (no ECS software supplied)



All the features of the ECS1000 standard package but supplied with a CLA2000 Class A AIS transponder and associated ECS100 USB interface for full AIS and GPS integration.

The CLA2000 acts as a standalone, IMO approved full function Class A AIS transponder with its own display. It also features a wireless interface so AIS and GPS data can be used on iPad and android tablet apps for back up navigation



ECS1000TZ Complete ECS Solution



Part number ZDIGECS1000TZ

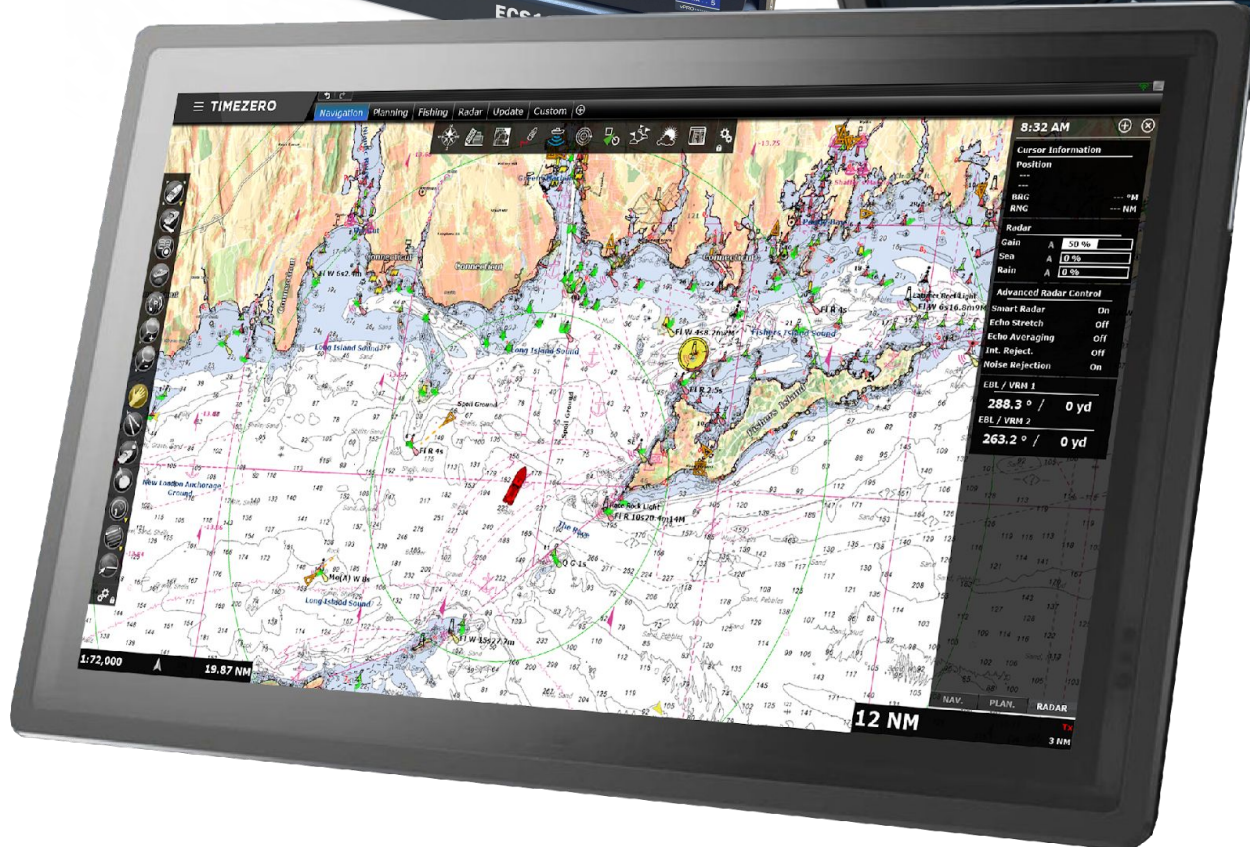
Comprises:

ECS100 Processor, S185 18.5" touchscreen monitor and CLA2000 Class A AIS transponder.

TZ Pro ECS software pre-installed and set up with S57/63 charting package (US) and meeting ECS workboat regulations

Supports power up into ECS charting mode (dedicated ECS operation)

Update charts via the internet (use on board cellular, Starlink or Digital Yacht 4G/5G Xstream) with compliant chart log update display

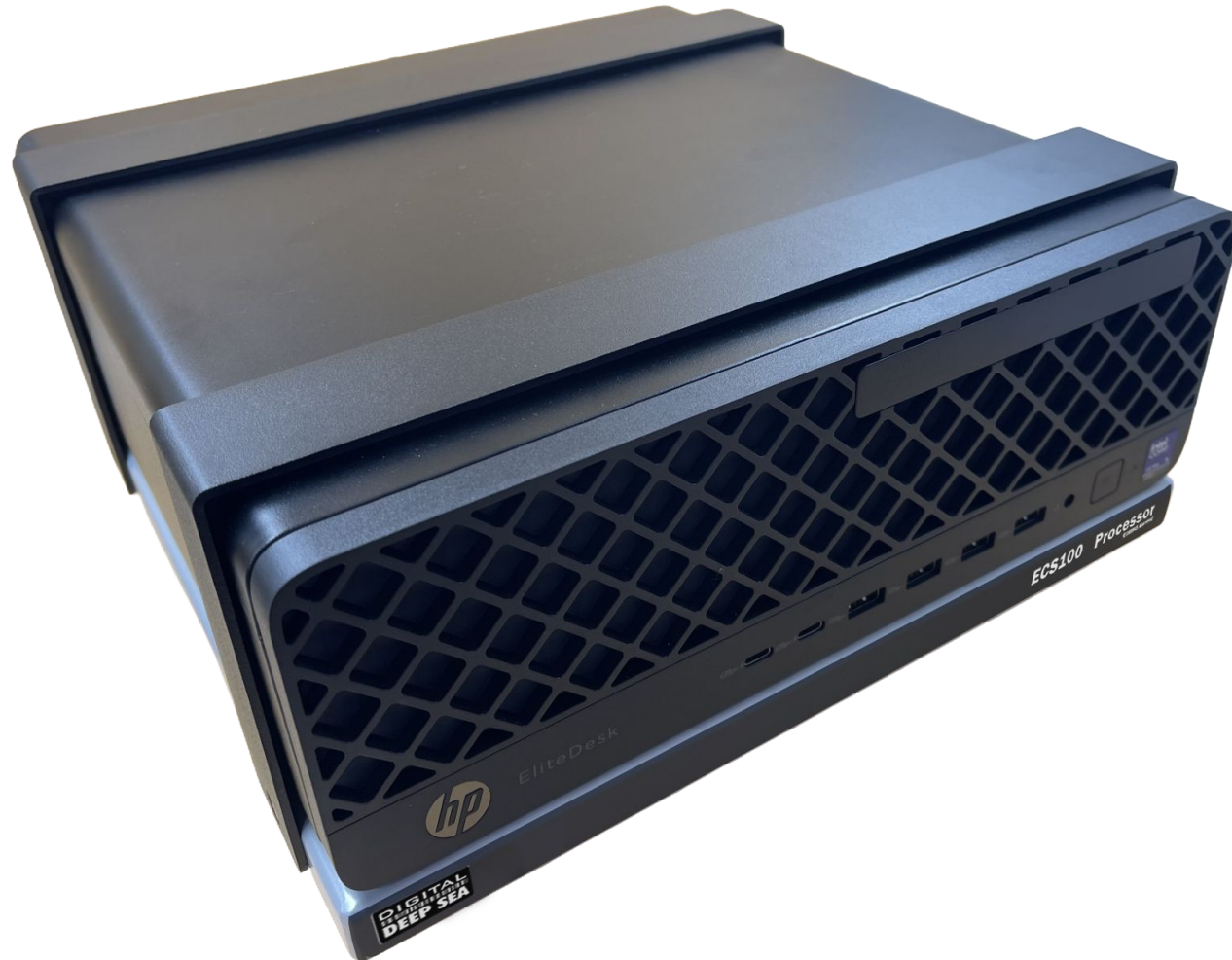


Individual Components

Specifications



ECS100 IEC60945 Approved Processor



The heart of the ECS1000 system is a high performance IEC60945 approved processor, with American Bureau of Shipping (ABS) certification (DNV and Lloyds due imminently).

Running Windows 11 Pro, its suitable for use with any approved ECS software or can be delivered as a turnkey solution with TimeZero Pro ECS operating system installed which fully meets US ECS requirements and utilises S57/63 NOAA based charts with.

Key features:

- Based on heavily modified HP Elite PC to meet and exceed IEC60945 requirements at an attractive price – high performance, reliable processor and with maritime capability
- Supplied with a custom anti vibration mounting frame and modified power supply
- Powerful Intel Core 5 processor for fast charting redraws and superior graphics.
- 16GB RAM and 1TB ultra rugged SSD for extended chart storage
- Four independent monitor outputs with Nvidia RTX400 additional graphics card
- Integrated wifi and Bluetooth
- LAN, USB and USB-C ports
- Standard 110/220v ac operation. Optional DC power supply



S185 – 18.5” Hi-Bright Touch Display



- Hi-Bright (1000cd) touchscreen display – 18.5”
- PCAP touchscreen supports pinch to zoom for easy chart redraws and panning plus on screen keyboard
- Designed for flush/console mounting – flush kit supplied
- HDMI input from ECS100 processor
- 1920 x 1080 pixel HD resolution
- 16:9 format for best chart presentation
- ECS100 supports up to 4 displays
- Auto dimming enabled
- Composite video input for cameras

**DIGITAL
DEEP SEA**

CLA2000 Class A AIS & EPFD

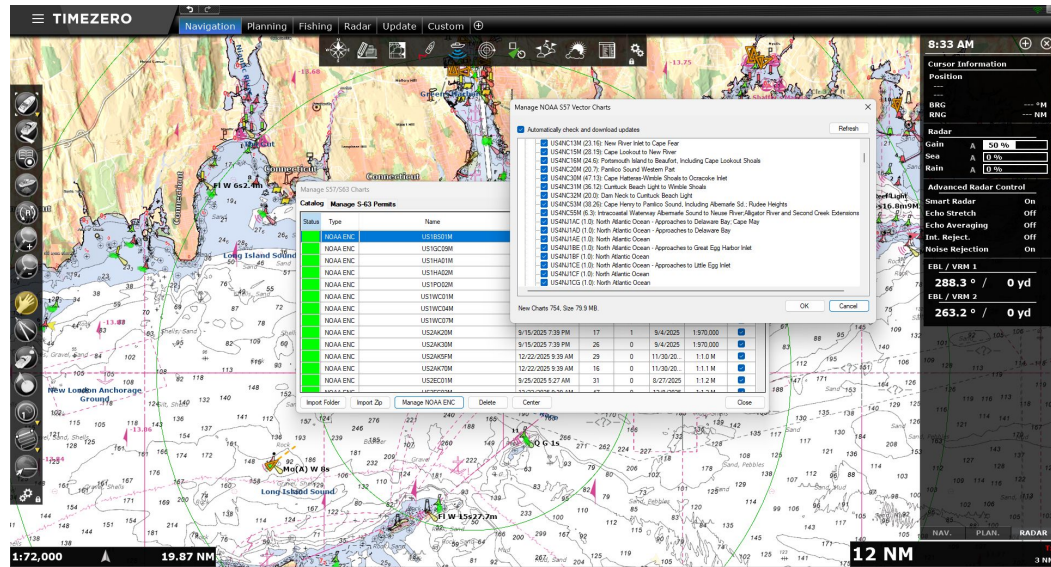
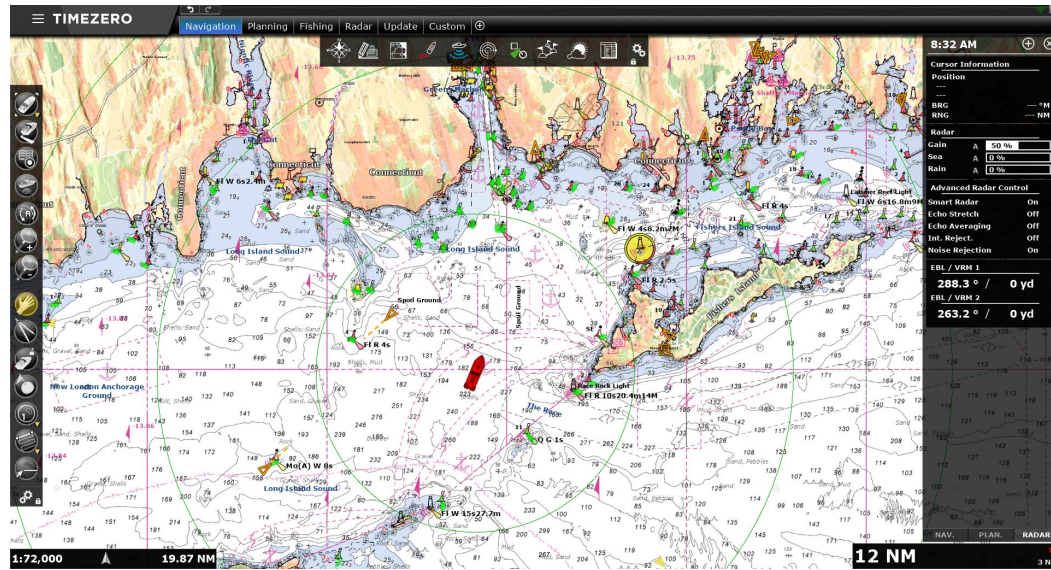


- IMO Approved Class A AIS transponder with integrated GPS (EPFD) suitable for use with ECS1000 system
- Provides GPS and AIS information for ECS1000
- Full function display for user input of voyage data and simple AIS plot displays and alarms
- Integrated wireless for iPad and tablet AIS and GPS connectivity – ideal for use with TZ iBoat or Navionics app
- Sophisticated AIS SART MOB alarm and display capability
- User programmable alarms for CPA and TCPA
- Advanced filtering of targets
- Optional C-Map mapping via plug in card
- Optional hi-gain CX4A AIS tuned antenna





ECS1000 TZ Charting System



Detailed S57 approved charting displayed on the TZ ECS system

Documented charting data status and updates available through the ECS

- TimeZero Professional ECS software meets workboat regulations
- S57 NOAA charting with auto updates. S57 module included in package
- Multiple chart display and split screen options (eg: North Up/Course Up)
- Multi monitor capable with independent displays or mirroring
- Multiple chart layers
- Planning route safety check
- Unlimited waypoints, marks, tracks, user boundaries, routes etc
- Tidal database with US tidal heights and currents
- Full AIS target overlays
- Easy touch screen operation with user keyboard keys for specific operations
- Interface to CLA2000 or other marine GPS and instruments. AIS and MARPA Graphic CPA/TCPA
- Multiple user alarms – depth, CPA, TCPA, anchor etc
- Weather overlays
- NMEA 2000 integration with optional iKonvert interface
- Optional radar (Furuno FAR and DRS) and sounder integration