# **SPECIFICATIONS: COASTAL-E 2224**

COASTAL-E 2224 is the ultimate ECDIS<sup>1</sup> for workboats, fishery, SAR, and other smaller crafts.

It is based on the IMO-approved TECDIS software and built with an IEC 60945-approved panel PC, measuring 22 inches diagonally.



- Approved Chart system (mini ECDIS) for Workboats, Fishery, SAR & Combat Crafts
- Go paperless with Coastal E
  - o Monthly Chart update of the officials ENC's
- Accepted by the Norwegian Maritime Authority Sjøfartsdirektoratet
  - o Circular RSV 14-2022 issued 2022-07-01.
  - o Circular RSV 16-2022 issued 2022-07-01.
- Vessels from 8 to 24 meters

#### HARDWARE SPECIFICATIONS

Operating system Windows 10 64-bit, English
Screen 21.5 inch Full HD, LED VA panel

**Processor** Intel Atom x7- E3950 1.6 GHz processor

**Chipset** Intel Apollo Lake

Memory (RAM) 4 GB

**Storage** 240 GB M.2 SSD (approx. 210GB free)

32 GB eMMC

### SOFTWARE SPECIFICATIONS

Software version	TECDIS 4.8.3.x
Usable Charts	S-57 ed.3
	S-63 (including Primar and AVCS)
	CM-93/3 (ENC / ENC+ / CAES / CEES / Professional+²)
Display of data	
Own Ship:	GPS Position, COG, HDG, SOG, STW

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Route:	Active route name, DTG, ETA, and CTS-, DTG-, TTG to selected WP
Targets:	BRG, DIST, COG, SOG, POS User selectable: ARPA Target/target track color, «Save» ARPA target track.
Others:	EBL, VRM, EBL list, PI lines, Cursor position, True/relative cursor bearing

 $<sup>^{\</sup>rm 1}$  COASTAL-E 1624 is subject to national approvals, for national waters.

<sup>&</sup>lt;sup>2</sup> C-Map Professional+ is not an official chart service, it does however provide world scale charts



#### **Functions**

Framegrabber	View input from other onboard systems such as radars, CCTV, fish finding systems and more. Viewed either in full screen or as picture in picture (PiP). This functionality requires the <b>Framegrabber</b> version of Coastal-E 2224.		
Maritime Calculation	Can calculate Range/Bearing to or from a position, with Rhumb-line or Great Circle routes, distances selectable in meters or NM. TTG, ETA, datum conversion		
Route monitoring	Off track, Waypoint, Arrival, Grounding, Depth		
1-click chart loading	Available for charts from the following providers: Navtor, ChartCo, Nautisk Forlag		
Alarms	Off track, Index Lane, Channel limit, Waypoint approach, Depth, Non ENC dangers, Restricted Areas, Cautions Areas, Possible danger, Harbour Mode		
Autopilot output	Output of: APB, RMB, RMC, RTE		
AIO overlay	Show Temporary and Preliminary Notices as an overlay on the chart, with the Admiralty Information Overlay (AIO) service by UKHO.		
Other Functions	<ul> <li>Night/Day presentation</li> <li>MOB</li> <li>SAR</li> <li>Log w/replay functionality</li> <li>Docking Conning display</li> <li>Tooltip</li> <li>User defined chart presentation</li> <li>Easy transfer of installed configuration to replacement unit</li> <li>Easy screen dump facility when in navigation mode.</li> </ul>		

#### **TELCARE**

TELCARE gives power to the Coastal-E users.

TELCARE is a subscription service for new features in TECDIS and Coastal-E. The following features are only available with a valid TELCARE subscription:

TotalTide	Show Tides from Admiralty TotalTide in the chart. Requires a TotalTide subscription from UKHO.
Rendevous	With Rendevous TECDIS will predict where on your route you will meet that target. This function works for targets within 1 NM of your route, and predicts where the target will meet your vessel (assuming the target will move along the same path your route shows)
	Rendevous supports up to 8 targets simultaneously, and the prediction is updated every second.
Transit conning	The most important sensor and voyage information is displayed with bigger text, in a clear and very readable conning window. The conning window can be moved around on the screen.
Edit route lane	Edit the route corridor and turn radius visually in the chart with the cursor.
1-click chart loading	Available for Global Navigation Solutions – GNS

## **Optional features**

The following options are available for purchase with a perpetual license (onetime fee):

Radar Overlay	Display of radar echoes from Furuno radars: 2xx7, 2xx8, 15xx
Navtex	Connects to all Navtex receivers sending in the NRX format. You can display Navtex messages with position references.
Weather overlay	Advanced weather overlay feature using top quality commercial maritime weather forecast data available as a subscription service from C-Map.

Port description Sensor	Sentences	<u>c</u>	IEC 61162-1 Ed 4.0	Proprietary
Position 1:	GNS, GGA, GLL, RMC	_	<u> </u>	
Position 2:	GNS, GGA, GLL, RMC, VDO	<b>~</b>	~	
COG/SOG1:	VTG, RMC, OSD, VDO		<b>~</b>	
COG/SOG1:	VTG, RMC, OSD, VDO	<b>✓</b>	~	
Heading 1:	HDT, OSD, VHW, VDO, THS		~	
Heading 2:	HDT, OSD, VHW, VDO, THS	<b>~</b>	~	
Water speed:	VHW, OSD, VBW	<b>~</b>	~	
Radar ARPA 1:	TTM	<b>~</b>	~	
Radar ARPA 2:	TTM	<b>~</b>	~	
Radar cursor 1:	RSD	<b>~</b>	~	
Radar cursor 2:	RSD	<b>~</b>	~	
AIS (In- and output):	Alxxx	<b>~</b>	~	
Depth:	DPT, DBT	<b>~</b>	~	
Rel. wind:	MWV	<b>~</b>	~	
Route:	WPL + RTE	<b>~</b>	<b>~</b>	
Alarm ctrl. (In- and output)	ALR + ACK		~	<b>~</b>
Navtex	NRX	<b>~</b>	<b>~</b>	
Search	FLIR		<b>~</b>	
Option 1		<b>~</b>	~	<b>~</b>
Option 2		<b>~</b>	~	<b>~</b>
Option 3		<b>~</b>	~	<b>✓</b>
Option 4		<b>~</b>	~	<b>~</b>
Printer:	USB port printer connection only			

#### **Power Supply**

**Power supply** Multipower - 115 & 230 VAC, 50 ~ 60 Hz + 24 VDC

Power cons. max 54W Power cons. typ. 44W

#### **Ports**

**Monitor** 2x Displayport(DP)

Monitor input 1x HDMI (for Framegrabber version only³)

**COM** 4x RS422/485 isolated com ports, on phoenix 5-pin connectors

1x RS232/422/485<sup>4</sup> non-isolated com port, on DB9M connector

**Ethernet** 2x 10/100/1000 Mbps Gigabit LAN on RJ45 connectors

**USB** 4x USB 2.0 (type A)

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<sup>&</sup>lt;sup>3</sup> Framegrabber is an optional hardware configuration for COASTAL-E

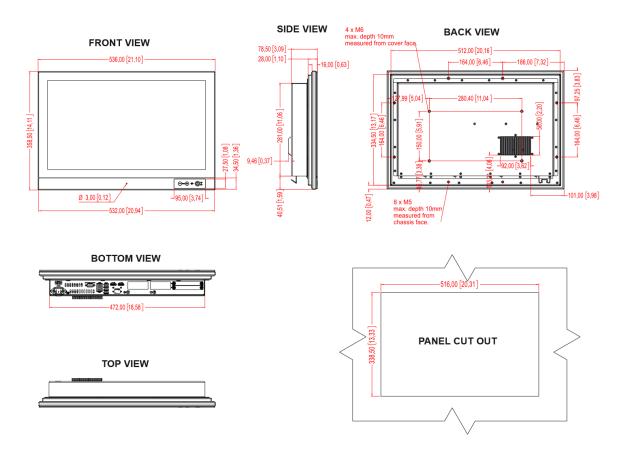
<sup>&</sup>lt;sup>4</sup> Change RS mode in BIOS



# **EQUIPMENT LIST**

- Computer, HD 22T30
- COASTAL-E/TECDIS 4.8.3.x software
- 3. COASTAL-E code plug
- 4. RKC T92S 1969-W-MC1 TELKO keyboard

## HARDWARE DIMENSIONS



# **DOCUMENT REVISION HISTORY**

1.0	18 <sup>th</sup> September 2019	Initial release	Cato Haugland
2.0	8 <sup>th</sup> January 2020	Added Circular number	Cato Haugland
3.0	9 <sup>th</sup> January 2023	Made changes to the equipment list	Thomas Holtan
4.0	8 <sup>th</sup> November 2023	Updated the Circular RSVs from Norwegian Maritime Authority	Thomas Holtan