

SPECIFICATIONS: TECDIS 2434P

TECDIS 2434P is an all-in one ECDIS panel computer.

It is type-approved according to IMO regulations, allowing paperless navigation¹.

The integrated design makes it perfect for retrofit installation.



STANDARDS COMPLIANCE

TECDIS 2434P conforms to the following standards:

Marine Equipment Directive 2014/90/EU of the EC council.

Regulation (EU) 2018/773:	Item No. MED/4.30
SOLAS 74 as amended	Regulations V/18, V/19 & X/3
IMO Resolutions	A.694(17) MSC.36(63) MSC.97(73) MSC.191(79) MSC.232(82) MSC.302(87)
IMO Circulars	MSC.1/Circ 1503
IEC Standards	Performance testing – IEC 61174 (2015) Performance testing, presentation – IEC 62288 (2014) Environmental testing – IEC 60945 (2002) Serial interface testing – IEC 61162 (2010)

GENERAL SPECIFICATIONS

Usable Charts	S-57 ed.3 S-63 (including Primar and AVCS) CM-93/3 (C-Map ENC / ENC+ / CAES / Professional+ ²)
Display	24-inch TFT LED display <ul style="list-style-type: none"> · Native Resolution : 1920 x 1080 (FHD) · Pixel Pitch (RGB) : 0.276 (H) x 0.276 (V) mm · Response Time : 25 ms (typical), "black" to "white" · Contrast Ratio : 3000:1 (typical) · Light Intensity : 300 cd/m² (typical) · Viewable Angle : +/- 89 deg. (typical) (Up/Down/Left/Right) · Active Display Area : 531.36 (H) x 298.89 (V) mm · Max Colors : 16.7 millions (RGB 8-bit)
Operating system	Windows® 10 IoT Enterprise 2019 LTSC (64bit), English
Processor	Intel® Dual Core Celeron™ G3900TE, 2.3/2.3GHz
Memory (RAM)	8 GB
Storage	240 GB SSD-3DT – Mounted in removable bay

¹ Paperless navigation requires a dual ECDIS installation.

² C-Map Professional+ is not an official chart service, it does however provide world scale charts

Display of data

Own Ship:	GPS Position, COG, HDG, SOG, STW
Route:	Active route name, DTG, ETA, and CTS-, DTG-, TTG to selected WP
ARPA targets:	BRG, DIST, COG, SOG, POS User selectable: ARPA Target color, ARPA target track color, «Save» ARPA target track.
Others:	EBL, VRM, EBL list, Parallel index lines, Cursor position, True or relative cursor bearing
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: Nator, 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 style="list-style-type: none"> • Night/Day presentation • MOB • SAR • Log w/replay functionality • docking Conning display • Tooltip • User defined chart presentation, easy transfer of installed configuration to replacement cold standby unit • Easy screen dump facility when in navigation mode.

Optional features

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

Seismic streamers	Streamer configuration with up to 24 streamers displayed graphically in chart.
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.
Piracy overlay	Piracy Information is available as an overlay on top of C-MAP charts in OceanView. The C-Map OceanView navigation planning tool visualizes information to help navigators and operators identify, understand and manage risks posed by maritime crime.

TELCARE

TELCARE gives power to the TECDIS users.

TELCARE is a subscription service for new features in TECDIS.

The following main features are only available with a valid TELCARE subscription:

Radar Overlay	Display of radar echoes from Furuno radars: 2xx7, 2xx8, 15xx
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.
T-click chart loading	Available for Global Navigation Solutions – GNS

For a full list of TELCARE features see the following link:

<https://telko.no/wp-content/uploads/2022/10/TELCARE-Feature-Guide-1.01.pdf>

Power Supply

Power supply

Power cons. max

Power cons. typ.

Multipower - 100 to 240 V AC, 50 ~ 60 Hz + 24 VDC

156W

88W

HW Connections

No. of serial ports	1x COM RS-232 / 422/485 DB9M (non-isolated) 4x COM RS-422/485 isolated NMEA 4 channel
Monitor	1x DisplayPort Female (Dual-Mode DP++)
Ethernet	5x GBLan (RJ-45)
USB ports	1x USB-C DP ALT mode, PD/DP (60W) 2x USB 2.0 ports 2x USB 3.0 ports
Audio ports	1x Mic. in (3.5mm jack) 1x Line in (3.5mm jack) 1x Line out (3.5mm jack)

Port description

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

EQUIPMENT LIST

Standard

1. Computer, HD 24T22 DEC
2. TECDIS code plug
3. Accessories Box
 - a. USB extension cable 1.0m
 - b. TECDIS Service Key (USB memory stick)
 - c. AC power cables 220 VAC/50Hz euro type F and 115 VAC/60Hz US type B power cable
4. RKCT92S1969-W-MC1 TELKO keyboard (SK2020)
5. Declaration of Conformity

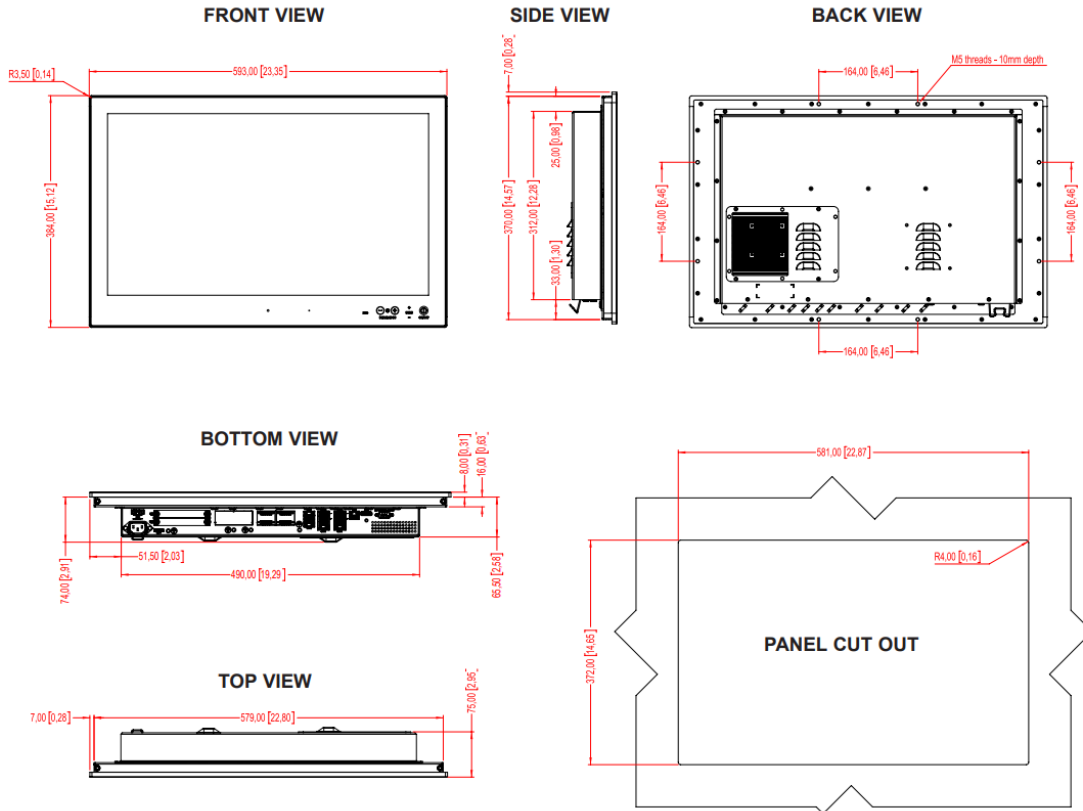
Options

1. Mounting brackets incl. screws for console mount
2. Mounting brackets incl. screws for table mount
3. External CD/DVD-drive via USB
4. Telko Alarm Interface TEA-01

Software options

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|--------------------------------|----------------------------------------------------------------------|
| 1. Conning software | Custom software for each vessel.
Requires design and programming. |
| <hr/> | |
| 2. Track Control System | |
| 3. Seismic streamers | TECDIS SW option |
| 4. Navtex | programmed in |
| 5. Weather overlay | code plug |
| 6. Piracy overlay | |
| 7. Radar Overlay | |

TECHNICAL DRAWING



DOCUMENT REVISION HISTORY

1.0	2 nd January 2024	Initial release	TH
2.0	27 th March 2024	Updated HW connections	TH