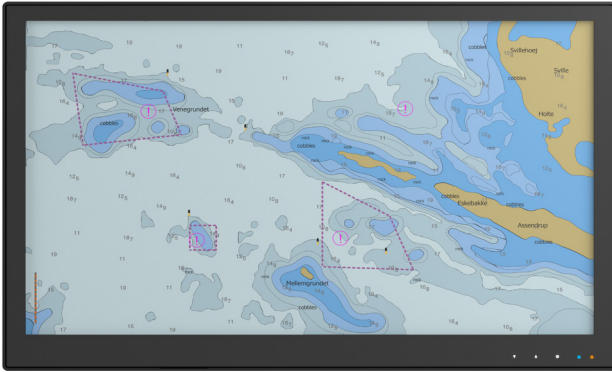


# DuraPANEL 24" S-Line

## Wide Screen Panel PC for Radar & ECDIS



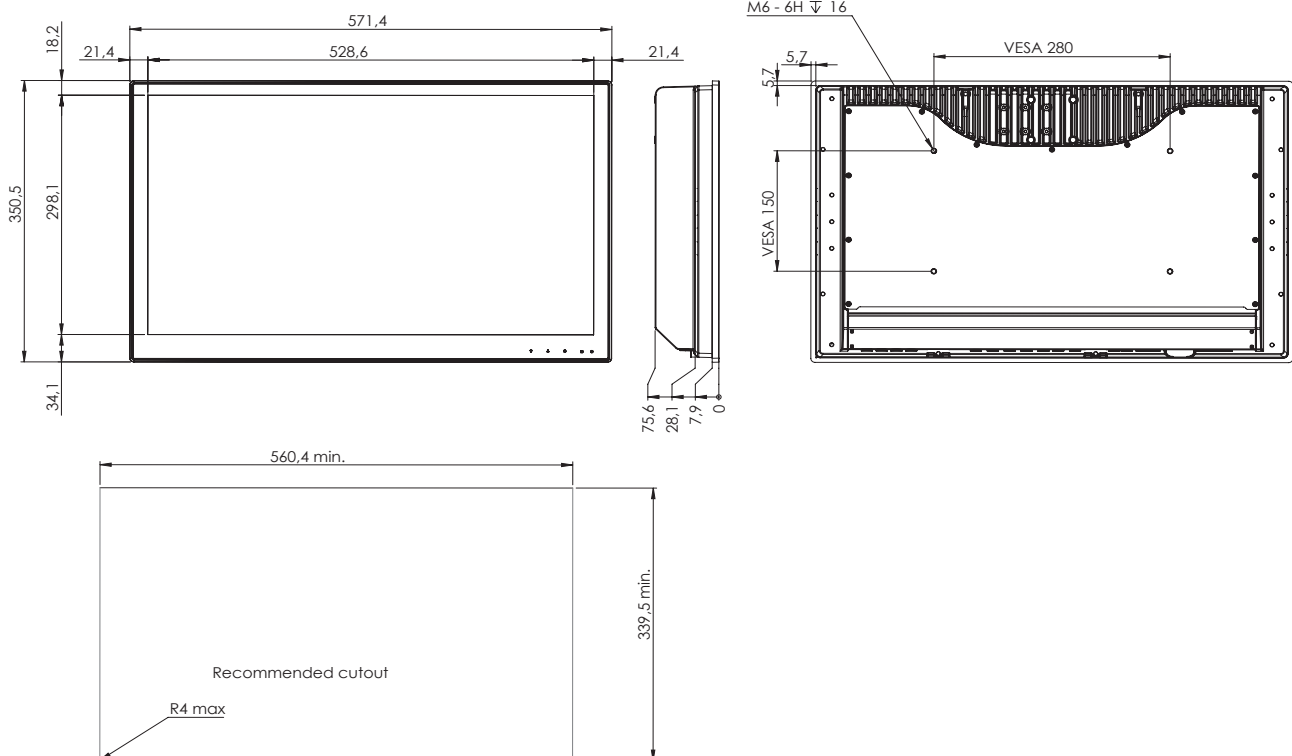
**DuraPANEL 24" S-Line** Panel PCs are designed for marine, naval and other demanding environments where reliable and durable hardware is required. Applicable for CAT 2 Radar.

The S-Line product family is an up-to-date and cost efficient design featuring super slim design, low weight, low power consumption and integrated touch keys for dimming on the front.

- ✓ 60945 Type Approval
- ✓ ECDIS Applications
- ✓ Radar Applications

## Mechanical outline

### DuraPANEL 24" S-Line



# Specifications DuraPANEL 24" S-Line

## Display properties

Size	23.8" wide screen
Aspect ratio	16:9
Active area	527.0 x 296.5 mm
Luminance	450 cd/m <sup>2</sup>
Contrast	1000:1
Native resolution	1920 x 1080 (full HD)
View angle	89° (L/R/T/B) typical
Glass	Anti reflective and thermal toughened

## Motherboard

Chipset	Intel® Q370 Express Chipset (8/9th Gen.)
TPM	dTPM 2.0
Watchdog timer	1-255 steps by software programming
HW monitoring	Temperature, Voltage and Fan
Wake-on-LAN/PXE	Yes (WOL/PXE)
Power state	S3, S4, S5
On board graphics	Intel® UHD 630 (Core Processors)
On board graphics	Intel® UHD 610 (Pentium and Celeron)
Graphics supports	DirectX 12, Open GL 4.5, Open CL 2.1

## CPU Options

Celeron G4900T	2.9 GHz 2 cores, TDP 35W
Pentium G5400T	3.1 GHz 2 cores, TDP 35W
Core i3-9100TE	3.2 GHz 4 cores, TDP 35W
Core i5-9500TE	3.6 GHz 6 cores, TDP 35W
Core i7-9700TE	3.8 GHz 8 cores, TDP 35W

## Memory and Storage

Memory	Up to 64 GB DDR4 RAM, SO-DIMM
Storage ports	SSD - 2 x 2.5" SATA 3.0, 1 x M.2
Storage size	128GB up to state of the art

## Power supply/power consumption

AC Power	230 VAC (90-264 VAC / 50-60Hz)
DC Power	24 VDC (18 - 31 VDC) optional
AC/DC dual power	230 VAC + 24 VDC combined optional
Consumption	XX W Typ. XX W Max.

## Operator interface front panel

Power	Power on/off (press for 10 sec. to turn off)
Up	Adjust backlight up
Down	Adjust backlight down

## OS options

Windows 7	Windows 10 IoT Enterprise 2019 LTSC
Linux	Ubuntu

## Input/output terminals

DisplayPort out	2 x DP++ up to 3840x2160 @ 60Hz
Ethernet ATM	1 x Gbit LAN, Intel PHY i219LM ATM 12.0
Ethernet	1 x Gbit LAN, Intel i210AT
USB	4 x USB 3.2 Gen. 2 Type A
Audio Mic-in	1 x 3.5 mm Jack
Audio Line-out	1 x 3.5 mm Jack

## Input/output options

Touch	P-Cap multi touch
NMEA	Up to 2 x 4 isolated RS422 (NMEA comp.)
Serial Port	RS232/422/485
Digital I/O	4 x Digital input + 4 x Digital output
Auxiliary	1 x 2.5mm Jack

## Physical dimensions

Dimensions	572 (W) x 351 (H) x 76 (D) mm
Dimensions in box	670 (W) x 490 (H) x 160 (D) mm
Weight	10 kg 12 kg in box

## Environmental

Operating temp.	- 15 to 55° C
Storage temp.	- 25 to 70° C
Humidity	8 to 95% RH (5 to 90% RH storage)
Protection	IP54 from front - IP22 from rear
Compass SD	XXX cm (stand.) XXX cm (steer.)

## Options & accessories

ECDIS	Colour calibration for ECDIS applications
Console bracket	Console mount bracket kit /10065-000
Table bracket	Table mount bracket (XXXXX-XXX)
Table bracket VESA	Table Mount VESA bracket (07317-000)
Wall bracket VESA	Wall mount VESA bracket (07317-001)
Buzzer	75-85 dBA
Removable SSD	2 x removable SSD trays on rear

## Approvals & Certificates

Marine	IEC 60945 ed. 4 & IACS E10 rev. 8
ECDIS	IEC 61174 ed. 4
Radar/Navigation	IEC 62388 ed. 2 & IEC 62288 ed. 2
Certificate	DNV Mutual Recognition, Pending