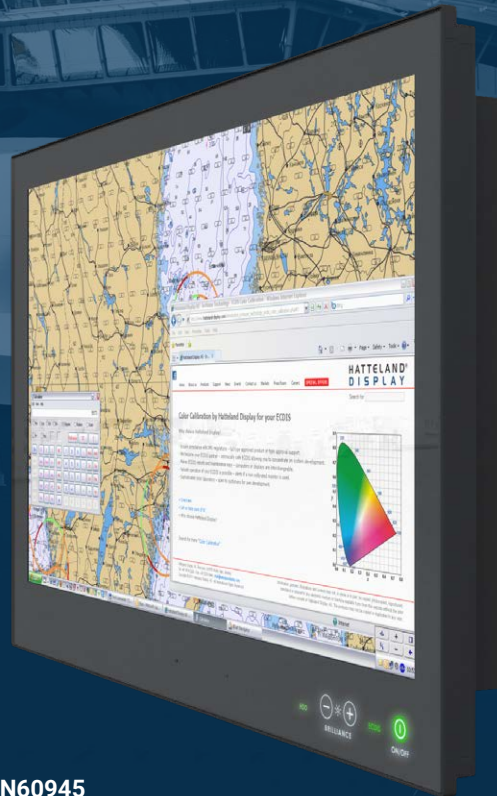


# Panel Computer

Combining state of the art technology with over 30 years of industry-specific experience and expertise, the all-in-one HATTELAND® panel computers fulfill the strict requirements of manufacturing and process automation in the maritime industries.

From the most cost effective to our highest quality option, all our models can be customized with added features, such as high definition displays and multi-touch user interfaces, and come with a wide range of size and mounting options (i.e. control cabinet or mounting arm).



## Features



**Multi  
Touch**



**Optical  
Bonding**



**ECDIS**



**Rugged**



**IP66**



**IoT  
Enabled**



**EN60945**



## Form Fit

Form fit system hardware ensures that components may be exchanged seamlessly throughout the life span of a ship – whether due to component errors and repairs, or upgrades to keep pace with technological advancements – without the need for a system redesign.

This reduces the time and cost of hardware replacement and system upgrades.



## Lifecycle Management

Lifecycle management guarantees the continued production and delivery of industrial-grade embedded components in a ship's critical systems.

By choosing a hardware partner that provides lifecycle management you ensure that all networking, data processing, and display hardware and software will be supported throughout 7 years.



## Backward Compatibility

Backward compatibility eliminates the risk of a software image becoming outdated and unusable due to hardware upgrades.

By integrating backward compatible, marine approved and providing support for all communication modules (i.e. serial bus, ethernet, rich I/O and modular), new and old, as well as a range of previous OS releases, you extend the life span of your system.

# Panel Computer sizes - 8 to 27 inch

## Brief Features & Specifications

Intel® processor & Fan-Less Design (where applicable)  
 LED Backlight - Runs Cool and Efficiently  
 Full Dimming - Adjustable Brightness from 0-100%  
 Moderate to Low Power Consumption  
 Hatteland Technology GLASS DISPLAY CONTROL™ Interface  
 AC/24VDC Multi-Power with most sizes  
 Waterproof Front / Resistant Back. (IP66 / IP22)  
 Type Approved (IEC 60945, EU-RO-MR) / ECDIS Compliant  
 Wide Range of Hardware Configuration options  
 Multi-Touch Option & Wide variety of mounting/console options  
 Daylight Viewable with Superior Optical Bonding  
 Sunlight Viewable / High-Bright Versions Available



**Supported Microsoft® OS (where applicable):** Windows® 10 IoT Enterprise 2019 LTSC / 2016 LTSB, Windows® 7 Pro/Ultimate, Windows® Server 2003/2008/2008R2/2012/2012R2 and variations of Linux.

Small Sizes	Size, Resolution & Format	Contrast Ratio, Light Intensity & View Angle	Power Inputs & Consumption (typ/max)
HD 08T30 MMC	8.0", 1280 x 720, 16:9, HD	1000:1, 750 cd/m², 85° (L/R/U/D)	12-24VDC - 17W / 20W
Specification	<b>CPU:</b> Atom® x5-E3930, 1.30GHz / 1.80GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB, 128GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, and via additional HD IO-Board: CAN, NMEA COM, Digital IN+OUT, COM		
HD 13T30 MMC	13.3", 1920 x 1080, 16:9, FHD	600:1, 600 cd/m², 85° (L/R/U/D)	12-24VDC - 28W / 22W
Specification	<b>CPU:</b> Atom® x5-E3930, 1.30GHz / 1.80GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB, 128GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, and via additional HD IO-Board: CAN, NMEA COM, Digital IN+OUT, COM		
Common Sizes	Size, Resolution & Format	Contrast Ratio, Light Intensity & View Angle	Power Inputs & Consumption (typ/max)
HD 12T21 MMC	12.1", 1024 x 768, 4:3, XGA	700:1, 600 cd/m², 80° (L/R), 70° (U/D)	115-230VAC + 24VDC - 26W / 60W
Specification	<b>CPU:</b> Core™ i7-620LE / Celeron® P4505, 2.0GHz / 1.86GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 320GB/1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 15T21 MMC	15.0", 1024 x 768, 4:3, XGA	1500:1, 400 cd/m², 85° (L/R/U/D)	115-230VAC + 24VDC - 52W / 59W
Specification	<b>CPU:</b> Core™ i7-620LE / Celeron® P4505, 2.0GHz / 1.86GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 17T21 MMC	17.0", 1280 x 1024, 5:4, SXGA	1000:1, 350 cd/m², 85° (L/R/D), 60° (U)	115-230VAC + 24VDC - 43W / 60W
Specification	<b>CPU:</b> Core™ i7-620LE / i5-520E / Celeron™ P4505, 1.86Ghz / 2.40GHz / 2.0GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 19T21 MMC	19.0", 1280 x 1024, 5:4, SXGA	1500:1, 350 cd/m², 85° (L/R/U/D)	115-230VAC + 24VDC - 49W / 125W
Specification	<b>CPU:</b> Core™ i7-620LE / i5-520E / Celeron™ P4505, 1.86Ghz / 2.40GHz / 2.0GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 19T22 MMC	19.0", 1280 x 1024, 5:4, SXGA	1500:1, 350 cd/m², 85° (L/R/U/D)	100-240VAC + 24VDC - 78W / 93W
Specification	<b>CPU:</b> Core™ i7-7700T / i5-6500TE / Celeron™ G3900TE, 2.9/3.8GHz / 2.3/3.3GHz <b>RAM:</b> 8GB, 16GB, 32GB   <b>Storage:</b> SSD/m.2 (240>960GB) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		

Wide Sizes	Size, Resolution & Format	Contrast Ratio, Light Intensity & View Angle	Power Inputs & Consumption (typ/max)
HD 16T30 MMC	15.6", 1920 x 1080, 16:9, FHD	1500:1, 400 cd/m <sup>2</sup> , 85° (L/R/U/D)	100-240VAC + 24VDC - 44W / 57W
Specification	<b>CPU:</b> Atom® x7-E3950, 1.60GHz / 2.00GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 21T30 MMC	21.5", 1920 x 1080, 16:9, FHD	3000:1, 250 cd/m <sup>2</sup> , 89° (L/R/U/D)	100-240VAC + 24VDC - 44W / 54W
Specification	<b>CPU:</b> Atom® x7-E3950, 1.60GHz / 2.00GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 24T21 MMC	24.0", 1920 x 1080, 16:9, FHD	3000:1, 300 cd/m <sup>2</sup> , 89° (L/R/U/D)	115-230VAC + 24VDC - 50W / 125W
Specification	<b>CPU:</b> Core™ i7-620LE / i5-520E / Celeron™ P4505, 1.86Ghz / 2.40GHz / 2.0GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 24T22 MMC	24.0", 1920 x 1080, 16:9, FHD	3000:1, 300 cd/m <sup>2</sup> , 89° (L/R/U/D)	115-230VAC + 24VDC - 88W / 106W
Specification	<b>CPU:</b> Core™ i7-7700T / i5-6500TE / Celeron™ G3900TE, 2.9/3.8GHz / 2.3/3.3GHz <b>RAM:</b> 8GB, 16GB, 32GB   <b>Storage:</b> SSD/m.2 (240>960GB) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 24T30 MMC	23.8", 1920 x 1080, 16:9, FHD	1000:1, 250 cd/m <sup>2</sup> , 89° (L/R/U/D)	100-240VAC + 24VDC - 42W / 61W
Specification	<b>CPU:</b> Atom® x7-E3950, 1.60GHz / 2.00GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 26T21 MMC	25.54", 1920 x 1080, 16:10, WUXGA	1500:1, 350 cd/m <sup>2</sup> , 88° (L/R/U/D)	115-230VAC + 24VDC - 78W / 94W
Specification	<b>CPU:</b> Core™ i7-620LE / i5-520E / Celeron™ P4505, 1.86Ghz / 2.40GHz / 2.0GHz <b>RAM:</b> 2GB, 4GB   <b>Storage:</b> SSD/HDD (240>960GB / 1TB) <b>Default Connectivity:</b> USB1.1, USB2.0, GbLAN Ethernet, COM, DVI Out, VGA Out, Audio (Line Out+Mic), PS/2 (Keyboard+Mouse)		
HD 26T22 MMC	25.54", 1920 x 1080, 16:10, WUXGA	1500:1, 350 cd/m <sup>2</sup> , 88° (L/R/U/D)	115-230VAC + 24VDC - 79W / 110W
Specification	<b>CPU:</b> Core™ i7-7700T / i5-6500TE / Celeron™ G3900TE, 2.9/3.8GHz / 2.3/3.3GHz <b>RAM:</b> 8GB, 16GB, 32GB   <b>Storage:</b> SSD/m.2 (240>960GB) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 27T22 MMC	27.0", 1920 x 1080, 16:9, FHD	3000:1, 300 cd/m <sup>2</sup> , 89° (L/R/U/D)	115-230VAC + 24VDC - 72W / 84W
Specification	<b>CPU:</b> Core™ i7-7700T / i5-6500TE / Celeron™ G3900TE, 2.9/3.8GHz / 2.3/3.3GHz <b>RAM:</b> 8GB, 16GB, 32GB   <b>Storage:</b> SSD/m.2 (240>960GB) <b>Default Connectivity:</b> USB2.0, USB3.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		
HD 27T30 MMC	27.0", 1920 x 1080, 16:9, FHD	3000:1, 300 cd/m <sup>2</sup> , 89° (L/R/U/D)	100-240VAC + 24VDC - 43W / 60W
Specification	<b>CPU:</b> Atom® x7-E3950, 1.60GHz / 2.00GHz <b>RAM:</b> 2GB, 4GB, 8GB   <b>Storage:</b> eMMC (32GB), SSD m.2 (240GB ->) <b>Default Connectivity:</b> USB2.0, GbLAN Ethernet, COM, DisplayPort (DP) Out		



### High Bright

SERIES X High-Bright Panel Computers are enhanced to be clearly visible in direct-sunlight conditions, while maintaining the same form-factor as standard brightness displays. This is ideal for installations that require matching displays on the pilothouse and the fly-bridge. High-Bright are available in 17", 19" & 24" sizes.



### Contact us or need more information?

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