

## Technical Specification – iECDIS™ Electronic Chart Display and Information System

Physical Characteristics	
Dimensions:	613 (W) x 414 (H) x 105.2 (D) mm
Mounting:	Comes complete with back plate for mounting into bridge console or optional desktop mounting brackets or freestanding console mount. See mounting instructions for further details
Weight:	17.4 kg, rugged marine metal construction, corrosion resistant
Cables:	Mounting at bracket to insure grounding and a robust connection of cables
Colour:	Black
Coating:	Front bezel military coating specification, rest of PPC standard
Monitor	
Display:	24" LCD LED TFT active-matrix, aspect ratio 16:9
Resolution (no. of pixels):	1920 x 1080 = 2,073,600 (Full HD resolution)
Max Colours:	16.7 million (RGB 8-bit)
Dimming Range:	0-100%, LED backlight. Controlled by mainboard interface
Response Time:	25 ms (typical), "black" to "white", or better
Contrast Ratio:	1000:1 (typical)
Light Intensity:	300 cd/m2 (typical) or better
Viewable Angle:	+/- 89 deg. (typical) (up/down/left/right), or better
Backlight Life:	50,000 hours at 25° C ambient temperature, or better
Glass:	LCD display protection & chemical strengthen for vandalism glass; anti-reflective
Controls:	Power On/Off
Computer	
Installed OS:	Microsoft® Windows® 7 Embedded
CPU/Processor:	1 No. Intel® Atom D2700 Core® 2 Duo, 2.13GHz, 1MB L2 cache memory
Installed Memory:	1 No. 4GB DDR3 204-pin SO-DIMM memory
Installed Storage:	1 No. 32GB SSD
Video Memory:	Support 1.5GB video share memory at 4G RAM
System Chipset:	Intel® NM10 Cedar Trail
VGA Controller:	Intel® GMA 3600 graphics chip
VGA Memory:	Shared 1.5GB or separate memory space
DVMT Technology	Support Intel intelligent high speed Dynamic Video Management Technology
Ethernet:	3 No. high speed Giga bit RJ-45 LAN supporting 100/1000 Mbps
Modem:	GSM 3G Modem with integrated SIM card (optional)
Modem Connector Type:	SMA connector
BIOS:	UEFI AMIBIOS
Speaker/Buzzer:	Buzzer / 2 No. 4 watts speakers
Cooling system:	Fan less cooling system
Power	
Power source:	In built DC 18-32V & AC adapter 90-264V, with automatic switch over from AC to DC (with no time delay)
Power Consumption:	Max 70 Watts, typical 40W
Connection:	AC: IEC power plug, three wires (1.5mm <sup>2</sup> ). DC: Screw type for two wires (5mm <sup>2</sup> )
Fuse	Internal fuse
Power switch	Power switch for AC and DC, next to each plug
Safety Approval:	Power adapter is UL, CSA, TUV, etc approval
Environment	
Operating Temp:	-15 deg C to +60 deg C
Storage Temp:	-20 deg C to +80 deg C
IP-Rating:	IP65
Input / Output Connectors	
Ethernet GB LAN :	2-4 Giga bit LAN support 10/100/1000 Mbps RJ45 <i>(located at bottom of panel)</i>
VGA/RGB Port:	VGA port support 2 <sup>nd</sup> independent display <i>(located at bottom of panel)</i>
HDMI Port:	Support high definition video & audio signals <i>(located at bottom of panel)</i>
USB Port:	5 No. USB 2.0 <i>(4 No. at bottom of panel &amp; 1 No. at front of panel, water tight, below the screen next to the menu buttons)</i>
PS2 Port:	1 No. PS2 keyboard & 1 No. PS2 mouse <i>(located at bottom of panel)</i>
Audio In-Out Port:	Audio-in & audio-out ports <i>(located at bottom of panel)</i>
COM (serial)	4 No. opto-isolated RS422 (RX/TX) COM ports as standard (option to upgrade to 8 No. opto-isolated RS422 COM ports)
COM Connector type:	D-sub 9-pin
Digital I/O (option)	Optional 4 digital input and 4 digital output
Mini PCI-e Slot:	2 No. mini PCI-express slot (1 for GSM 3G modem)
CF Slot:	1 No. compact flash slot for future expansion
SATA Slot:	2 No. SATA slot for SSD