

Marine

RELIABLE
COMPUTING
FOR SAFE
MARITIME
OPERATIONS.



About Winmate

Headquartered in Taipei, Taiwan, Winmate Inc. has been dedicated to researching, developing and manufacturing the latest in industrial displays and rugged devices for 20 years.

Today, Winmate creates intelligent systems that advance the Internet of Things (IoT) and enterprise-level communications across the globe for industrial and high-tech clients. High standards for technology and quality control have established Winmate as a leader for the last 20 years and set the standard for continued excellence.

Value-added partner

Strong Rugged Design Team

To Meet Environmental Challenges (EE, ME)

Talented Software Team

To Enable IoT & Industrial Application

System Integration Experience

For Rugged & Industrial Mobile Devices

Customized solutions

Years of experience allow Winmate to offer customized solutions for different applications. From product design to creating accessories, our engineering team designs and supports your needs throughout the whole system integration process.

CUSTOMIZED INTERFACES

CUSTOM OS IMAGE

CUSTOM BIOS

ENCLOSURE DESIGN

PERIPHERALS AND OPTIONS

CUSTOM-DESIGNED ACCESSORIES

Marine

Overview




Winmate understands the needs of the marine industry and provides solutions to the unique challenges that the industry faces.

- **Ruggedness:** Winmate reliability tests ensure optimal performance in harsh environments, including exposure to humidity, shock and vibration.
- **Panel Options:** Transflective screen or a high brightness display.
- **Viewability:** Numerous combinations of display and touch technologies as well as backlight intensities help enable sunlight viewability.
- **Design and Electronics:** Powder coated aluminum housings feature anti-corrosion protection.

Technology

Certificate

Winmate marine products are built and tested according to the DNV 2.4 Standard, IEC60945 and IACS-E10.

	DNV GL is an independent foundation with the objectives of safeguarding life, property and the environment at sea and on shore. DNV certification pertains to the quality of ships, offshore units and installations of the system and components. DNV requirements are harmonized with IACS Unified Requirements E10 and IEC publication 60945.
	International Association of Classification Societies (IACS) is an organization that provides technical support and guidance for promoting the safety of life, property and the environment through the verification of compliance with technical and engineering standards for the design, construction and life-cycle maintenance of ships, offshore units and other marine-related facilities.
	Equipment wished to be use in navigation and radio communication systems is to comply with IEC 60945, “Maritime navigation and radio communication equipment and systems – General Requirements- Method of testing and required test results”.

ECDIS Color Calibration

Winmate Marine Displays and Panel PCs can be adjusted to day, dusk or night mode to accommodate any lighting situation. Color settings are calibrated at the factory for the accurate color reproduction according to the IEC 61174 ECDIS Standard.

Marine Display ECDIS Series

Custom configuration



Color
Calibration



AR
Glass



Application



Automated Identification System

“COMPLY WITH MARINE
INDUSTRY STANDARDS
IEC 62376 & RTCM
10900.5.”

AIS solution for yacht with
19-inch marine panel PC
features multitouch screen and
waterproof front panel.

“ COLOR CALIBRATION FOR ECDIS COMPLIANCE. ”

- 15/19/24/26-inch screen with P-Cap touch
- Color calibrated for ECDIS compliance
- IEC 60945, DNVGL-CG-0339, IACS E10



HDMI, VGA, Display Port, DVI-D

Capacitive touch keys for display control

Day, dusk, and night mode

0%~100% backlight brightness dimming control

Panel mount, VESA mount

Vibration resistant DNV 2.4 (Class A)

Wide power input 9-36V DC with isolation

Front IP66 waterproof and dustproof

Wide operating temperature -15~55°C

Accessories

Standard

AC Adapter

Power Cord

3pin Terminal Block

HDMI Cable

VGA Cable

Display Port Cable

RS232 Cable

DVI Cable

Marine Panel PC

ECDIS Series



“ PROCESSING POWER AND USER-FRIENDLY INTERFACE. ”

- 15/19/24/26-inch screen with P-Cap touch
- Intel® Core™ i5-5250U
- Windows 10/8/7
- IEC 60945, DNVGL-CG-0339, IACS E10



RS-232/422/485, RS-232, two USB 3.0
Capacitive touch keys for display control
Day, dusk, and night mode
0%~100% backlight brightness dimming control
Panel mount, VESA mount
Vibration resistant DNV 2.4 (Class A)
Wide power input 9~36V DC with isolation
Front IP66 waterproof and dustproof
Wide operating temperature -15~55°C

Accessories

Standard			
AC Adapter	Power Cord	3pin Terminal Block	Black Screw Bolts
Optional			
Four 5-pin Terminal Block 3.81(Phoenix Type)			

Custom configuration

Color Calibration	AR Glass
NMEA 0183	DIDO

Application



Bridge System

“ECDIS COMPLIANCE TO REPRODUCE ACCURATE CHART DISPLAY.”

Marine panel PC featuring a flat edge-to-edge surface and projected capacitive multitouch screen. Large screen and responsive touch allow for intuitive user controls of the bridge system.

Marine Panel PC

W10IB3S-MRH2

Custom configuration



GPS



Wi-Fi



3G



Application



Yacht Navigation System

“COMPACT WATERPROOF DESIGN AND WIRELESS CONNECTIVITY.”

10.1-inch rugged marine HMI was installed in a space-restricted yacht as a part of navigation system. The customer installed GPS and Wi-Fi for wireless connectivity.

“**FITS IN CONFINED SPACES.**”

- 10.1-inch, 1280 x 800 with P-Cap touch
- Intel® Celeron® N2930 Bay Trail-M
- Windows 10/ 8/ 7
- IEC 60945 Test Report



4 GB DDR3L

64 GB mSATA SSD

Two RS-422, USB 2.0

Gigabit LAN

Panel mount, VESA mount

Vibration resistant DNV 2.4 (Class A)

Wide power input 9~36V DC with isolation

Front IP65 waterproof and dustproof

Wide operating temperature -15~55°C

Accessories

Standard

AC Adapter

M12 Power Cable

3-pin Terminal Block

M12 USB/LAN Cable

M12 RS-422 Cable

I/O Protective Caps

Optional

External Wi-Fi Antenna

External WWAN Antenna

Marine Display

VR Knob Series



“**BRIGHTNESS CONTROL
WITH DIMMING KNOB.**”

- 10.4~24-inch screen with resistive touch
- IEC 60945, DNV 2.4, IACS-E10 certified



RGB, composite video

VGA, S-Video, DVI-D

PIP function

RAM mount, VESA mount

Vibration, shock resistant DNV 2.4 (Class A)

Power input 24V DC with isolation

Front IP66 waterproof and dustproof

Wide operating temperature -15~55°C

Accessories

Standard

DVI Cable

VGA Cable

RS232 Cable

S-Video Cable

Composite Cable

Screw bolts

Optional

Power Cord

Custom configuration



Resistive
Touch



SAW
Touch



AR
Glass



Mounting
Bracket

Application



Navigation Simulator

“FAST DEPLOYMENT WITH
EXISTING NAVIGATION
SYSTEM.”

Winmate 24-inch marine monitor with resistive touch was installed in a navigation system of a marine training center. Transmission of RGB and composite video signal was required to integrate with existing systems.

Marine Panel PC VR Knob Series

Custom configuration



Memory



AR
Glass



Resistive
Touch



Mounting
Bracket



RS-422/
485



Application



Boat Command Center

“GREAT VIZUALIZATION.
OF THE DASHBOARD.”

The marine panel PC installed in a boat command center allows you to view all of your boat’s vital signs directly from your computer. Customized dimming setting increase the visibility in dusk or night time.

“
CORROSION RESISTANT.
”

- 10.4~24-inch screen with resistive touch
- Intel® Dual Core Atom N2600
- Intel® Core i7-3517UE
- Windows 10/8/7
- IEC 60945, DNV 2.4, IACS-E10 certified



4 GB SODIMM DDR3

VGA

Two USB 2.0

Two RS-232, RS-232/422/485

RAM mount, VESA mount

Vibration, shock resistant DNV 2.4 (Class A)

Power input 9-36V DC with ignition

Front IP65 waterproof and dustproof

Wide operating temperature -15~55°C

Accessories

Standard

Screw bolts

Optional

Power Cord

Marine EAC Box PC

I330EAC-IKW



Custom configuration



Memory



2nd Storage



NMEA 0183



DIDO

Application



Bridge System

“EFFECTIVE
MARINE DEVICES
COMMUNICATION.”

High-performance embedded system that feature an NMEA 0183 interface and digital input/output for effective marine device communication.

“ABUNDANT INTERFACES AND RUGGED CONSTRUCTION.”

- Intel® Core™ i5-7200U Kaby Lake
- Windows 10
- IEC 60945 Test Report



64 GB mSATA SSD

Four USB 3.0

HDMI, VGA, DVI output

RS-232/422/485

Two LAN ports

Aluminum housing

Power input 9~36V DC with 1.5KV isolation

Vibration, shock resistant DNV 2.4 (Class A)

Wide operating temperature -15~55°C

Accessories

Standard

AC Adapter

Power Cord

Marine EAC Box PC I330EAC-ID3

Custom configuration



Memory



Storage



2nd Storage



Application



Engine Room

“SURVIVE DUST,
VIBRATION AND HIGH
TEMPERATURE.”

Electronic components installed in an engine room must be able to survive in extreme conditions. Our fanless EAC box PC feature efficient heat dissipation and ensures reliable operation in engine rooms with vibration resistance. An Ethernet switch allows working in a single network.

“ **DNV-CERTIFIED
EMBEDDED SOLUTION.** ”

- Intel Atom® D2550
- Windows 10/8/7
- IEC 60945, DNV 2.4, IACS-E10



32GB mSATA SSD

Two USB 2.0

VGA output

RS-232/422/485

Two LAN ports

8 Channel GPIO

PS/2 interface for keyboard and mouse

Aluminum housing

Power input 9~36V DC with 1.5KV isolation

Vibration, shock resistant DNV 2.4 (Class A)

Wide operating temperature -15~55°C

Accessories

Standard

AC Adapter

PS/2 Y Cable

MARINE SOLUTIONS

SAFE SEALING
WITH WINMATE
RUGGED COMPUTING.



Winmate



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