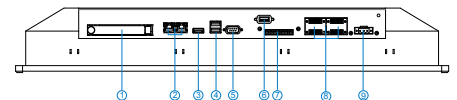
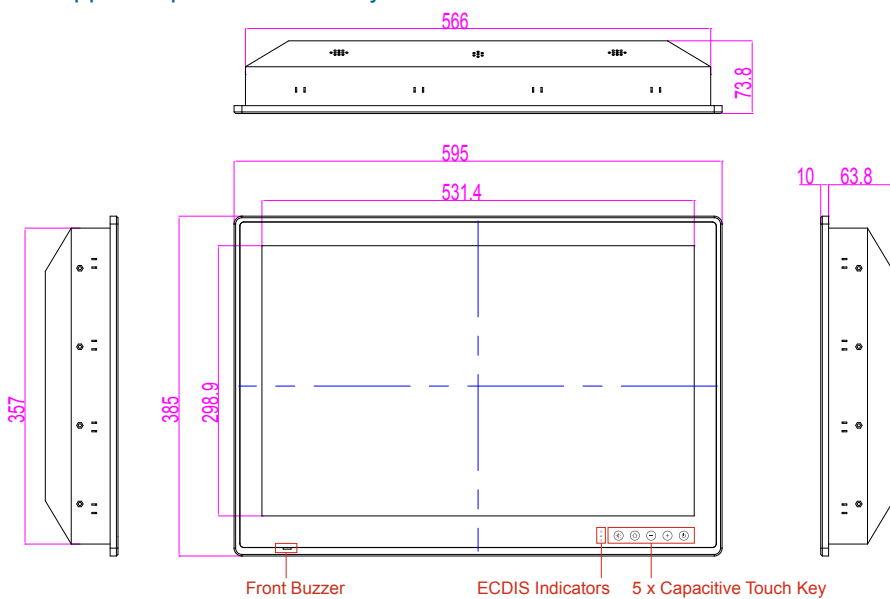


# 24" Flat P-CAP Marine Panel PC

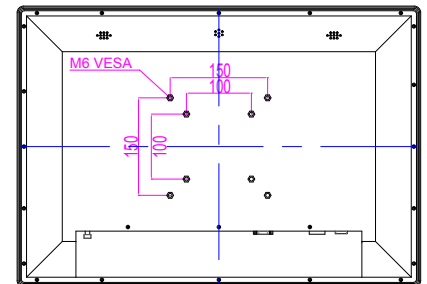
Model#: W24IH3S-MRA1FP

## Features :

- 24" 1920 x 1080 resolution with projective capacitive multi-touch screen
- Edge-to-edge narrow bezel design and fanless cooling system
- Color calibrated for ECDIS compliance (Optional)
- Capacitive touch keys for quick function access and display control (Support ECDIS DAY, DUSK, and NIGHT mode switching)
- Optional 4 x COM port (NMEA 0183 protocol) 422/485 switchable via software
- Meet the requirements of Industrial marine standards, including IEC60945 4<sup>th</sup> Edition, DNVGL-CG-0339, IACS E10
- Support capacitive touch key lock / touchscreen lock function



1. 1 x 2.5" Removable HDD
2. 2 x LAN
3. 1 x HDMI
4. 1 x USB 3.0, 1 x USB 2.0
5. 1 x RS232/422/485
6. 1 x USB 2.0
7. 1 x 8 Channel DI/DO (Optional)
8. 4 x NMEA 0183 Port (Optional)
9. 1 x DC Power Input



\* Note: this is a simplified drawing and some components are not marked in detail. \*Please contact our sales representative if you need further product information.

### Display Specifications :

Resolution	: 1920 x 1080
Pixel Pitch	: 0.276 (H) x 0.276 (V) mm
Contrast Ratio	: 5000:1 (typ.)
Brightness	: 350 cd/m <sup>2</sup> (typ.)
Viewable Angle	: 89°/89°/89°/89° (typ.) (Up/Down/Left/Right)
Active Display Area	: 531.36(H)x 298.89(V) mm
Max Colors	: 16.7 M colors, 8 bits/color
Touch Screen	: Projective Capacitive Multi-touch (Optional AR Protection Glass)

### System Specifications :

Processor	: 5 <sup>th</sup> Gen. Intel® Core i5-5250U Broadwell, 1.60 GHz (turbo up to 2.70 GHz)
System Memory	: 1 x DDR3L-1066 SODIMM (Default 4GB, Max 16GB)
Ethernet	: Dual Ethernet Gb LAN
Storage	: 64GB mSATA SSD (Up to 256GB)
Second Storage	: 2.5" Removable Storage Tray
Speaker	: 2 x 2W Speaker
Buzzer	: 75 dB~80 dB, 2300 Hz, 1m

### Power Specifications :

Power Input	: *24V DC-in with Isolation (9~36V acceptable)
Power Consumption	: 80W (Max)

### Certification

DNVGL-CG-0339, IEC60945 4th, IACS E10, CE, FCC

\*Only 24V DC have approval by DNVGL certificate

### Mechanical

Mechanical Mounting	: Panel Mount, VESA Mount
Dimension	: 595mm x 385mm x 63.8mm
Panel Mount Cutout	: 572mm x 363mm
Housing	: Anodized Aluminum Bezel
IP Rating	: IP66 (Front Side)

### Environmental

Operating Temperature	: -15 to 55 deg.C
Operating Humidity	: 5% to 95% (non-condensing)
Anti-Vibration	: 0.7g@DNVGL CG-0339 (Class A)
Anti-Shock	: 15G, 11ms duration

### Input / Output Connectors

Ethernet LAN	: 2 x RJ45
COM (D-SUB)	: 1 x RS232/422/485
USB	: 2 x USB2.0, 1 x USB3.0
HDMI	: 1 x HDMI
NMEA Interface	: 4 x NMEA 0183 Port (Optional)
Digital IN/OUT	: 8 Channel Isolated Digital Input/Output (Optional)
DC power	: 1 x 3-Pin Terminal Block (Phoenix type)

### OS Support :

Operating System (Optional) : Windows 10 IoT Enterprise  
 Windows Embedded 8.1 Industry PRO  
 Windows Embedded 8 Std.  
 Windows Embedded Std. 7  
 Windows 7 PRO for Embedded System

# 24" Flat P-CAP Marine Panel PC

Model#: W24IH3S-MRA1FP

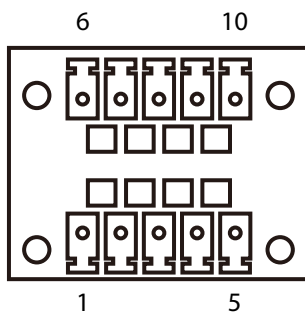
## Optional Digital Input / Output Connector

Eight channel isolated digital input and output connector with on-board optical isolation protection output up to 1.5KVdc.



Pin No.	Symbol	Description
1	DO_COM	DO Port Reference Voltage Level
2	DO_0	Digital Output 0
3	DO_1	Digital Output 1
4	DO_2	Digital Output 2
5	DO_3	Digital Output 3
6	ISOGND	Isolated Ground
7	DI0	Digital Input 0
8	DI1	Digital Input 1
9	DI2	Digital Input 2
10	DI3	Digital Input 3

## Optional NMEA 0183 Port



Pin No.	Symbol	Pin No.	Symbol
1	TxD1-	6	TxD2-
2	TxD1+	7	TxD2+
3	GND	8	GND
4	RxD1-	9	RxD2-
5	RxD1+	10	RxD2+