

#### 21.5" Marine Panel PC with 10th Gen Intel® Core™ i Processor

## **Overview**

MP-210 is a fanless 21.5-inch marine Panel PC, powered by 10th generation Intel ®Core ™i5/i7 Processor, used for highperformance computing. It adopts a modular design, which facilitates CPU board or I/O board upgrades and ensures stable system structure and reliable industrial performance. Adopting a large-sized and high specification display screen, a multi-point touch capacitive screen, and optional AG AF treatment on the glass surface, combined with the front panel brightness adjustment knob, it is more suitable for ship applications. The aluminum alloy front panel, metal body, and excellent heat dissipation performance ensure that the electromagnetic compatibility design of the entire machine complies with the ship's electrical specifications.

### **Features**

- 21.5" LED-backlit LCD with capacitive touch screen Optional AG AF glass surface treatment
- Rugged aluminum enclosure and fanless design
- 10th Gen Intel<sup>®</sup> Core<sup>™</sup> i5/i7 processor
- 3x COM, 4x USB, 4x LAN, 1x HDMI
- DC 9~36V
- Supports VESA 100 mount and panel mount
- Front panel integrated switch, brightness adjustment knob
- IP65 compliant front panel











Operating Temp.

IP65

**Touch Display** 



## I/O Interfaces





# **Specifications**

| Display                |  |                                     |  |
|------------------------|--|-------------------------------------|--|
| Size                   | 21.5 inch  |                                     |  |
| Touch Type             | Multi touch capacitive screen  |                                     |  |
| Display Type           | TFT-LCD  |                                     |  |
| Transmittance          | 87% (capacitive)   |                                     |  |
| Control Interface      | USB  |                                     |  |
| Surface Hardness       | ≥7H  |                                     |  |
| Resolution             | 1920 x 1080  |                                     |  |
| Luminance              | 500 nits   |                                     |  |
| Contrast Ratio         | 1000: 1  |                                     |  |
| View Angles            | 85 (left), 85 (right), 85 (up), 85 (down)  |                                     |  |
| LED Lifetime           | 50,000 hrs   |                                     |  |
| Color                  | 16.7M  |                                     |  |
| System                 | 10.7141  |                                     |  |
| System                 | Intel® Core™ i5-10210U (1.6 GHz) Intel Core™ i7-10710U (1.1 GHz) Six                                     |                                     |  |
| CPU                    |  | Intel Core™ i7-10710U (1.1 GHz) Six |  |
| Managari               | quad-core eight-thread processor   | Core Twelve Thread Processor        |  |
| Memory                 | 2x DDR4 2666 SO-DIMM (up to 64GB)  | 2x DDR4 2666 SO-DIMM (up to 64GB)   |  |
| Storage                | 1x 2.5" SATA HDD/SSD (optional)  |                                     |  |
| L/O Doute              | 1x full length Mini PCIe for mSATA SSD   |                                     |  |
| I/O Ports              | 4LICD 0.0  |                                     |  |
| USB                    | 4x USB 3.0   |                                     |  |
| Serial                 | 3x COM (COM1 supports RS-232, COM2 and COM3 support RS-232/422/485)                                      |                                     |  |
| Ethernet               | 4x GbE LAN   |                                     |  |
| Display                | 1x HDMI  |                                     |  |
| Antenna                | 2x SMA antenna holes   |                                     |  |
| Expansion Slot         |  |                                     |  |
| Mini PCle              | 1x full length Mini PCle for Wi-Fi   |                                     |  |
|                        | 1x full length Mini PCle for mSATA   |                                     |  |
| RF Communication       |  |                                     |  |
| Wi-Fi                  | Mini PCIe expansion (optional)   |                                     |  |
| Cellular               | Mini PCIe expansion (optional)   |                                     |  |
| Bluetooth              | Mini PCIe expansion (optional)   |                                     |  |
| Audio                  |  |                                     |  |
| Audio                  | Mic in, line out   |                                     |  |
| Speaker                | 2Ω5W speaker(optional)   |                                     |  |
| Power                  |  |                                     |  |
| Button                 | Yes  |                                     |  |
| Remote Power On/Off    | 1x Remote switch connector   |                                     |  |
| DC Input               | 9 to 36VDC   |                                     |  |
| Power Connector        | M12  |                                     |  |
| Power Consumption      | 27W  | 29W                                 |  |
| Ignition On/Off        | 1x AC loss   |                                     |  |
| Power Adaptor          | AC-DC, 12V@7.5A, 90W   |                                     |  |
| Operating System       |  |                                     |  |
| Windows                | Windows 10, Windows 11   |                                     |  |
| Mashaniaal             |  |                                     |  |
| Mechanical             | 534 x 351 x 75 mm (21 x 13.8 x 2.9 inches)   |                                     |  |
|                        | 534 x 351 x 75 mm (21 x 13.8 x 2.9 inche   | 5)                                  |  |
| Dimensions (W x D x H) |  | 5)                                  |  |
|                        | 534 x 351 x 75 mm (21 x 13.8 x 2.9 inche<br>7.8 kg (17.2 lbs)<br>Panel mount, wall mount bracket VESA 10 |                                     |  |



| Environment           |   |  |
|-----------------------|---|--|
| Operating Temperature | -10 to 50°C (14 to 122°F)   |  |
| Storage Temperature   | -20 to 60°C (-4 to 140°F)   |  |
| Relative Humidity     | 10% to 95% @ 40°C (104°F), non-condensing                                 |  |
| Vibration             | 5 to 500Hz, 0.026 G <sup>2</sup> /Hz, 2.16 Grms, X, Y, Z, 1 hour per axis |  |
| IP Rating             | IP65 compliant (for front panel)  |  |
| Certification         |   |  |
| EMC                   | CE, FCC   |  |
| Packing List          |   |  |
| Packing List          | 1x MP-210   |  |
|                       | 12x panel mounting buckles  |  |
|                       | 1x warranty card  |  |

## **Dimensions**

