USER'S MANUAL

AIO-200-ASL-3L Series

All IN One Touch Panel PC

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Prefaces

Revision

Revision	Description	Date
1.0	Manual Released	2025/01/06

Disclaimer

All specifications and information in this User's Manual are believed to be accurate and up to date. Premio Inc. does not guarantee that the contents herein are complete, true, accurate or non-misleading. The information in this document is subject to change without notice and does not represent a commitment on the part of Premio Inc.
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Environmental Protection Announcement

Do not dispose this electronic device into the trash while discarding. Please recycle to minimize pollution and ensure environment protection.

Safety Precautions

Before installing and using the equipment, please read the following precautions:

- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The power outlet shall be installed near the equipment and shall be easily accessible.
- Turn off the system power and disconnect the power cord from its source before making any installation. Be sure both the system and the external devices are turned OFF. Sudden surge
- of power could ruin sensitive components. Make sure the equipment is properly grounded.
- When the power is connected, never open the equipment. The equipment should be opened only by qualified service personnel.
- Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
- Disconnect this equipment from the power before cleaning. Use a damp cloth. Do not use liquid or spray detergents for cleaning.
- Avoid the dusty, humidity and temperature extremes.
- Do not place heavy objects on the equipment.
- If the equipment is not used for long time, disconnect it from the power to avoid being damaged by transient over-voltage.
- The storage temperature shall be above -20°C and below 60°C.
- The computer is provided with a battery-powered real-time clock circuit. There is a danger of explosion if incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.
- If one of the following situation arises, get the equipment checked be service personnel:
    - The power cord or plug is damaged.
    - Liquid has penetrated into the equipment.
    - The equipment has been exposed to moisture.
    - The equipment does not work well or it cannot work according the user's manual.
    - The equipment has been dropped and damaged.
    - The equipment has obvious signs of breakage.

Technical Support and Assistance

1. Visit the Premio Inc website at https://premioinc.com/ where you can find the latest information about the product.
2. Contact your distributor, our technical support team or sales representative for technical support if you need additional assistance. Please have following information ready before you call:
   - Model name and serial number
   - Description of your peripheral attachments
   - Description of your software (operating system, version, application software, etc.)
   - A complete description of the problem
   - The exact wording of any error messages

Conventions Used in this Manual

WARNING This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.

CAUTION This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.

NOTE This indication provides additional information to complete a task easily.

Package Contents

Before installation, please ensure all the items listed in the following table are included in the package.

Item	Description	Q'ty
1	AIO-200-ASL-3L Series All IN One Touch Panel PC	1
2	Adapter 60W 12V 5A	1
3	128G M.2 B key SATA SSD	1
4	8GB DDR5 4800 MT/s	1

Ordering Information

Model No.	Description
1-E09A06012	Adapter Output 12V 5A 60W / Input 100-240V
3-WIFI0801S10	WIFI 6E Module KIT, Intel, 2T2R & BT 5.3
1-TCOM00041	COM cable (CT-240125-01/CHEN PERNG)
3-AI101040S10	AIO-W210 Panel Mount Bracket Kit
3-AI156040S10	AIO-W215 Panel Mount Bracket Kit
3-AI215040S10	AIO-W221 Panel Mount Bracket Kit
1-TPWR00118	3P Terminal Block(Female) To DC Plug
1-TLAN00028	LAN Male to Female CABLE /CAT6 A LAN Cable_8P/8C_80mm

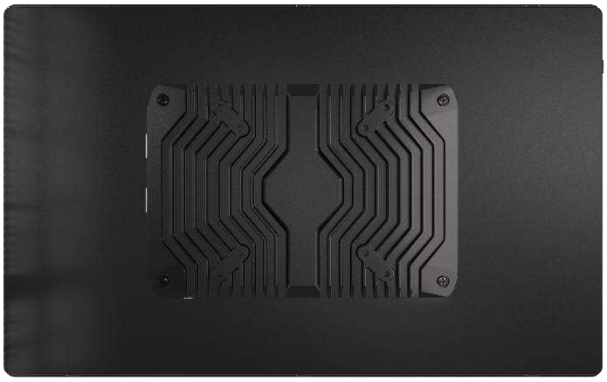
Available Models

Model No.	Description
AIO-W210-3L-N97	10.1" Full WXGA Capacitive All IN One Touchscreen Computer with Intel® Alder lake N97 Processor, 3x 2.5 GbE LAN
AIO-W210-3L-X7835RE	10.1" Full WXGA Capacitive All IN One Touchscreen Computer with Intel® x7835RE Processor, 3x 2.5 GbE LAN
AIO-W215-3L-N97	15.6" Full HD Capacitive All IN One Touchscreen Computer with Intel® Alder lake N97 Processor, 3x 2.5 GbE LAN
AIO-W215-3L-X7835RE	15.6" Full HD Capacitive All IN One Touchscreen Computer with Intel® x7835RE Processor, 3x 2.5 GbE LAN
AIO-W221-3L-N97	21.5" Full HD Capacitive All IN One Touchscreen Computer with Intel® Alder lake N97 Processor, 3x 2.5 GbE LAN
AIO-W221-3L-X7835RE	21.5" Full HD Capacitive All IN One Touchscreen Computer with Intel® x7835RE Processor, 3x 2.5 GbE LAN

Chapter 1

Product Introductions

1.1 Overview



Key Features

- 10.1“ / 15.6“ / 21.5" All IN One Touch Panel PC
- World Class Certifications for Safety and Reliability: CE/FCC Class A/CB/UL/UKCA/IC
- Front IP65 Rating for protection against water and dust
- Scratch Resistant 7H Glass Hardness
- Versatile Display Outputs; HDMI and DP
- MTBF 30,000 Hours and 50,000 Hours

1.2 Hardware Specification

Display	AIO-W210-ASL-3L	AIO-W215-ASL-3L	AIO-W221-ASL-3L
LCD Size	10.1" (16:10)	15.6" (16:9)	21.5" (16:9)
Max. Resolution	1280 x 800	1920 x 1080 (FHD)	1920 x 1080 (FHD)
Brightness (cd/m2)	400	400	500
Contrast Ratio	800:1	800:1	1,000:1
LCD Color	16.7M	16.7M	16.7M
Pixel Pitch (mm)	0.169(H) x 0.1695 (V)	0.17925 (H) x 0.17925 (V)	0.248 (H) x 0.248 (V)
Viewing Angle (H-V)	89/89/89/89 (Typ.) (CR>=10)	85 /85 /85 /85 (Typ.) (CR>=10)	89/89/89/89 (Typ.) (CR>=10)
Backlight MTBF	30,000 Hours	30,000 Hours	50,000 Hours

System	
Processor	• 12th Gen Intel® Alder Lake-N Processor N97, 6M Cache, up to 3.60 GHz, 4 core 12W • Intel® Atom® x7835RE Processor 6M Cache, up to 3.60 GHz, 8 core 12W
System Chipset	SoC integrated
LAN Chipset	GbE1: Intel i226V 2.5GbE LAN PXE Support GbE2: Intel i226V 2.5GbE LAN PXE Support GbE3: Intel i226V 2.5GbE LAN PXE Support
Audio Codec	Realtek ALC897 High Definition Audio CODEC
System Memory	1x 262-Pin DDR5 4800MHz SO-DIMM. Max. up to 16GB (Non-ECC)
BIOS	AMI uEFI 256MB SPI flash
Watchdog	Software Programmable Supports 1~255 sec. System Reset
TPM	TPM2.0

Touch	
Touch Type	Projected Capacitive Touch
Surface Hardness	7H / IK07

Storage	
M.2 B Key	128G M.2 B Key SATA SSD (Default)
SATA	1x SATA 3.0 6Gb/s port Support AHCI (Option)

Expansion	
M.2	1x M.2 E Key Support WiFi 6E/Bluetooth (Option) 1x M.2 B Key Support 4G/5G (Option)

I/O	
DisplayPort	1x DP 1.4a up to 4096x2304 @60Hz
HDMI	1x HDMI™ 1.4b up to 3840x2160 @30Hz
COM	2x RS-232/422/485
USB	2x USB 3.2 Gen 2 (10 Gbps)
LAN	3x 2.5GbE LAN
SIM	1x Dual Nano SIM
Others	Support up to 6x Antenna (optional)

Operating System	
Windows	Windows 10 / Windows 11
Linux	Linux Ubuntu 22.04

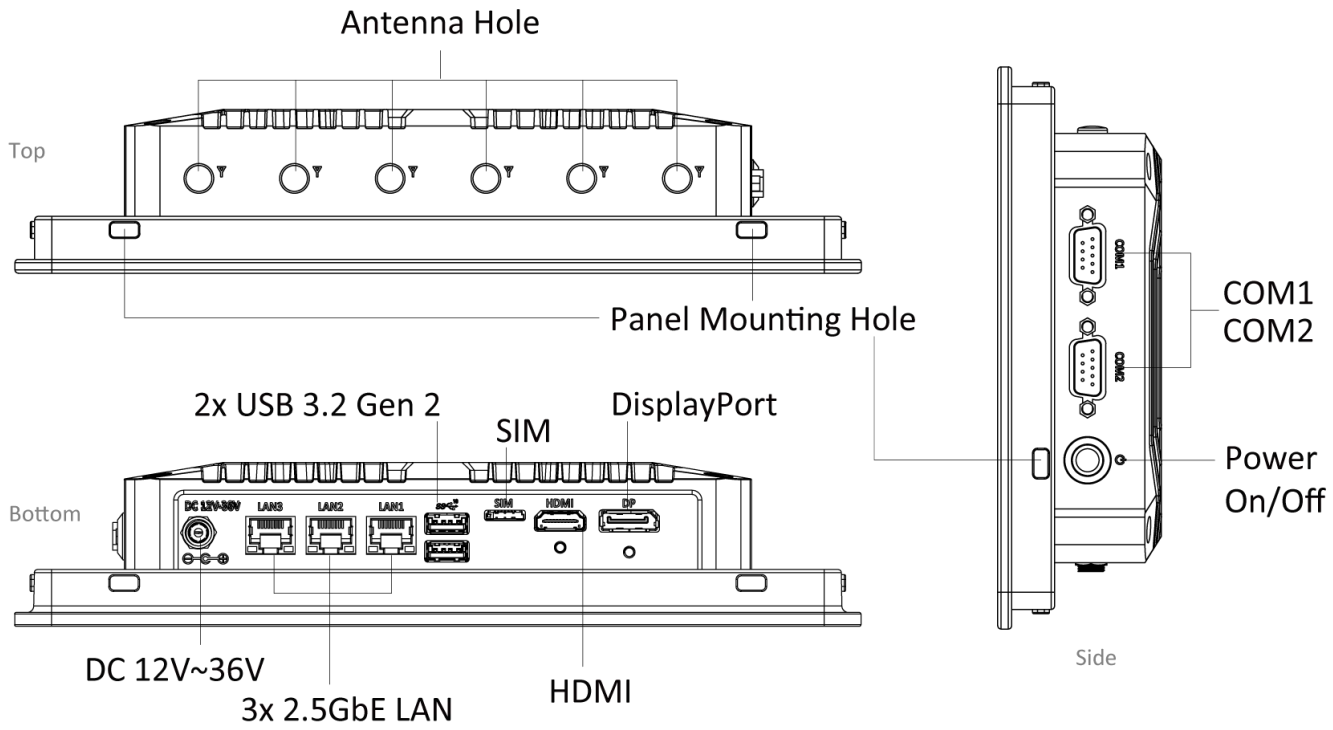
Power	
Power Adapter	60W (12V 5A, Default)
Power Supply Voltage	DC 12~36V
Power Connector	DC Jack 5.5mm/2.5mm

Environment	
Operating Temp	-10°C to 50°C
Storage Temp	-20°C to 60°C
Relative Humidity	10% to 80% (non-condensing)
Certification	CE, FCC Class A, CB, UL Listed, UKCA, IC
Vibration	IEC60068-2-64:2008 With SSD: 3 Grms (5 - 500 Hz, 0.5 hr/axis) Designed to comply with MIL-STD-810G Method 514.7 Procedure I
Shock	IEC60068-2-27:2008 With SSD: 20G half-sin 11ms Designed to comply with MIL-STD-810G Method 516.7 Procedure I

Physical	
Dimension	• AIO-W210-ASL-3L : 256 (W) x 170 (H) x 50 (D) mm • AIO-W215 –ASL-3L: 400 (W) x 249 (H) x 50 (D) mm • AIO-W221-ASL-3L : 538 (W) x 329 (H) x 62 (D) mm
Weight	• AIO-W210-ASL-3L：1.4 Kg • AIO-W215-ASL-3L：2.3 Kg • AIO-W221-ASL-3L：5.2 Kg
Mounting	Panel Mounting Holes M3

1.3 System I/O

1.3.1 AIO-W210-ASL-3L



Power On/Off
Press to power-on or power-off the system

USB 3.2 Gen 2 port
Used to connect USB 3.2 device

DC IN
Used to plug a DC power input with terminal Block

COM port
COM1 ~ COM2 support RS232/422/485 serial device

SIM
Used to insert Dual Nano SIM card

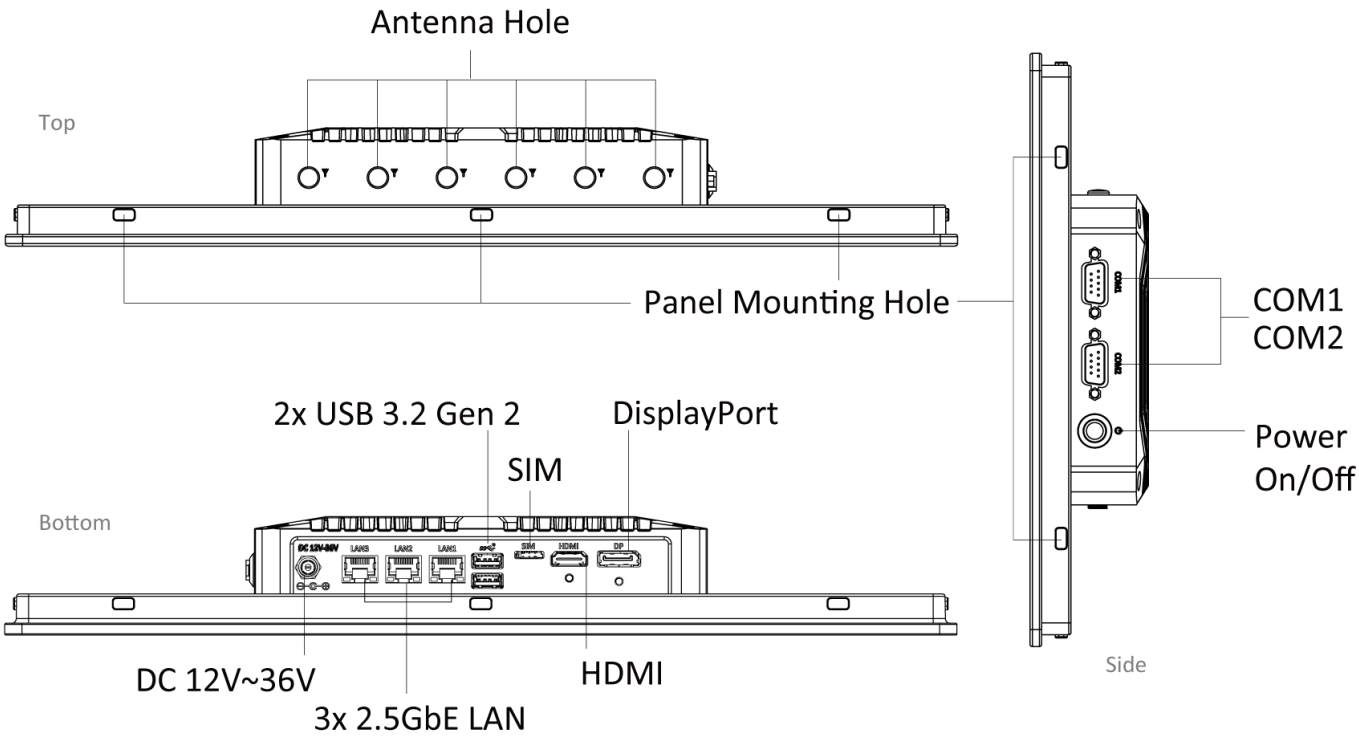
LAN port
Used to connect the system to a local area network

DisplayPort
Used to connect a DisplayPort monitor

HDMI
Used to connect a HDMI monitor

Antenna hole
Used to connect an antenna for optional WiFi module

1.3.2 AIO-W215-ASL-3L



Power On/Off
Press to power-on or power-off the system

USB 3.2 Gen 2 port
Used to connect USB 3.2 device

DC IN
Used to plug a DC power input with terminal Block

COM port
COM1 ~ COM2 support RS232/422/485 serial device

SIM
Used to insert Dual Nano SIM card

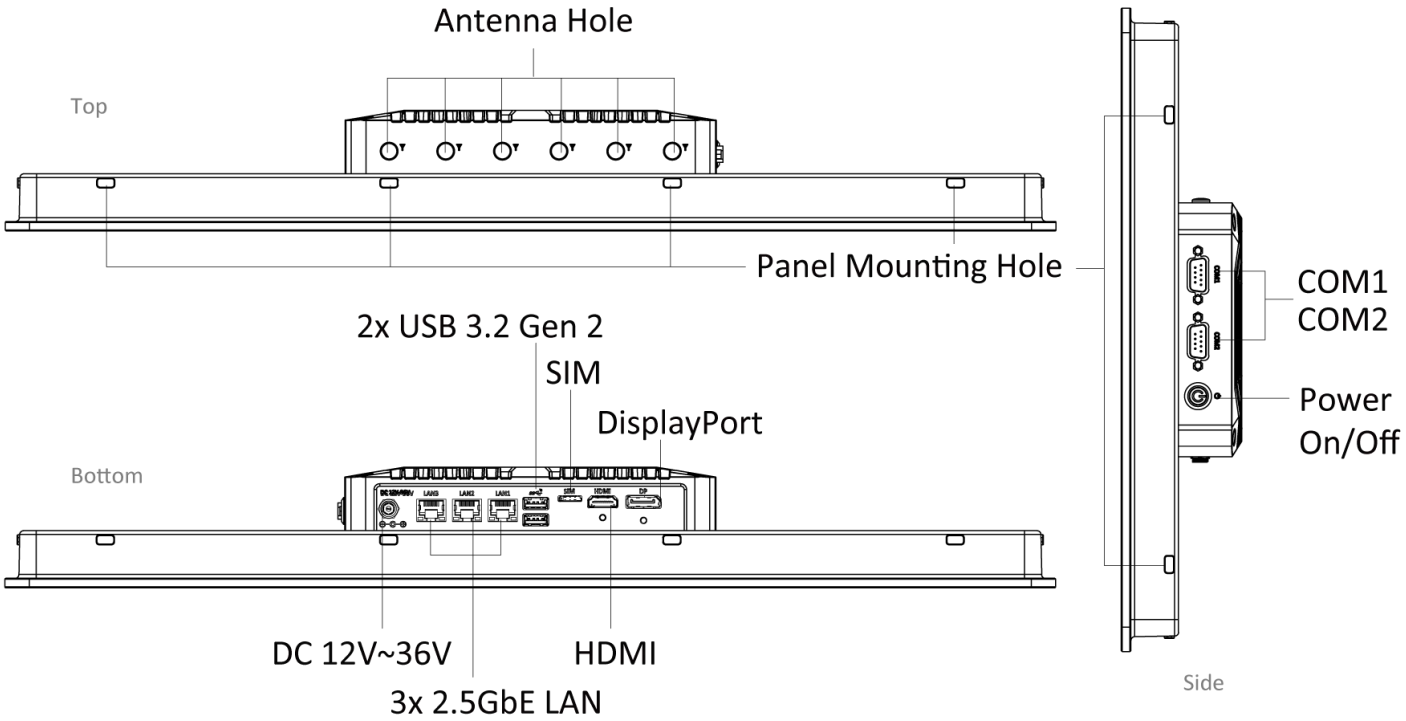
LAN port
Used to connect the system to a local area network

DisplayPort
Used to connect a DisplayPort monitor

HDMI
Used to connect a HDMI monitor

Antenna hole
Used to connect an antenna for optional WiFi module

1.3.3 AIO-W221-ASL-3L



Power On/Off
Press to power-on or power-off the system

USB 3.2 Gen 2 port
Used to connect USB 3.2 device

DC IN
Used to plug a DC power input with terminal Block

COM port
COM1 ~ COM2 support RS232/422/485 serial device

SIM
Used to insert Dual Nano SIM card

LAN port
Used to connect the system to a local area network

DisplayPort
Used to connect a DisplayPort monitor

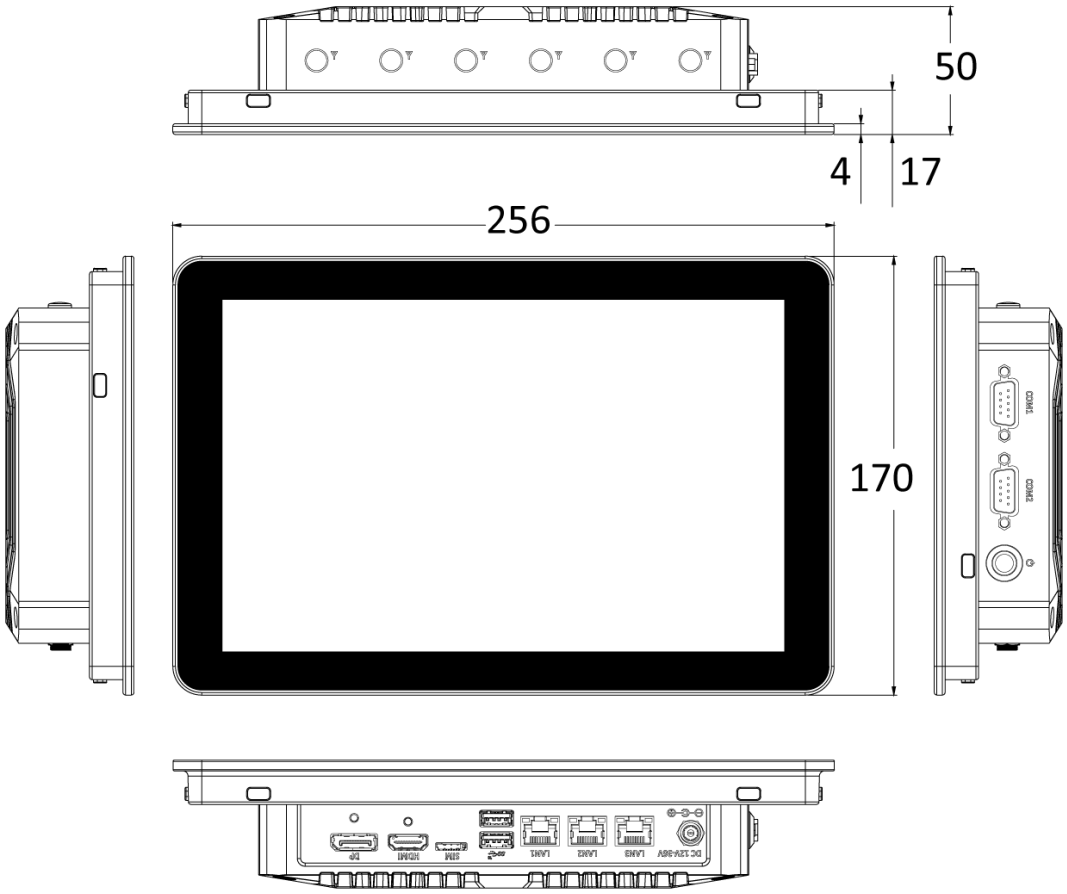
HDMI
Used to connect a HDMI monitor

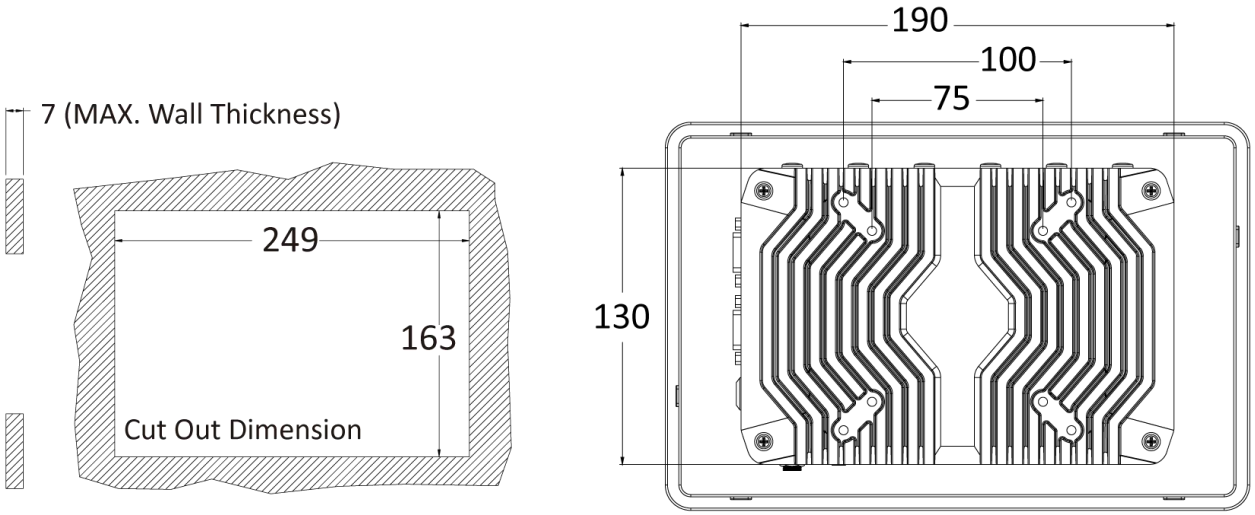
Antenna hole
Used to connect an antenna for optional WiFi module

1.4 Mechanical Dimensions

1.4.1 AIO-W210-ASL-3L

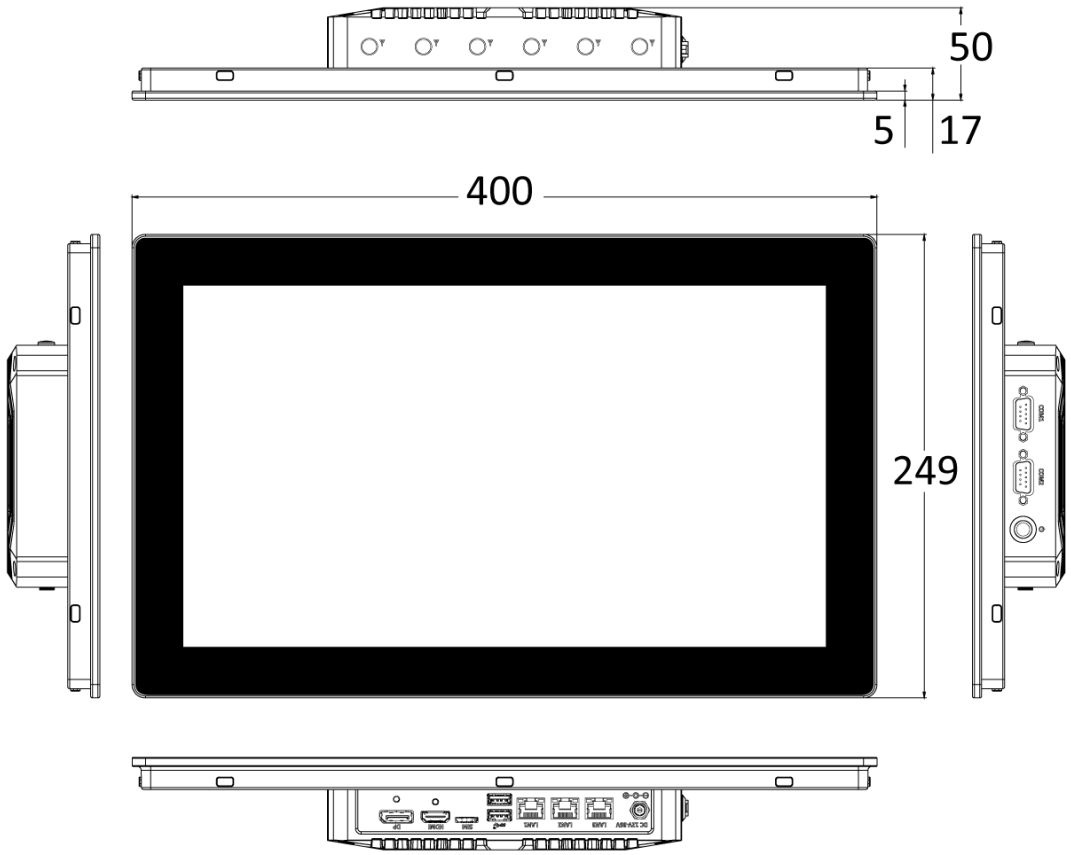
Unit: mm

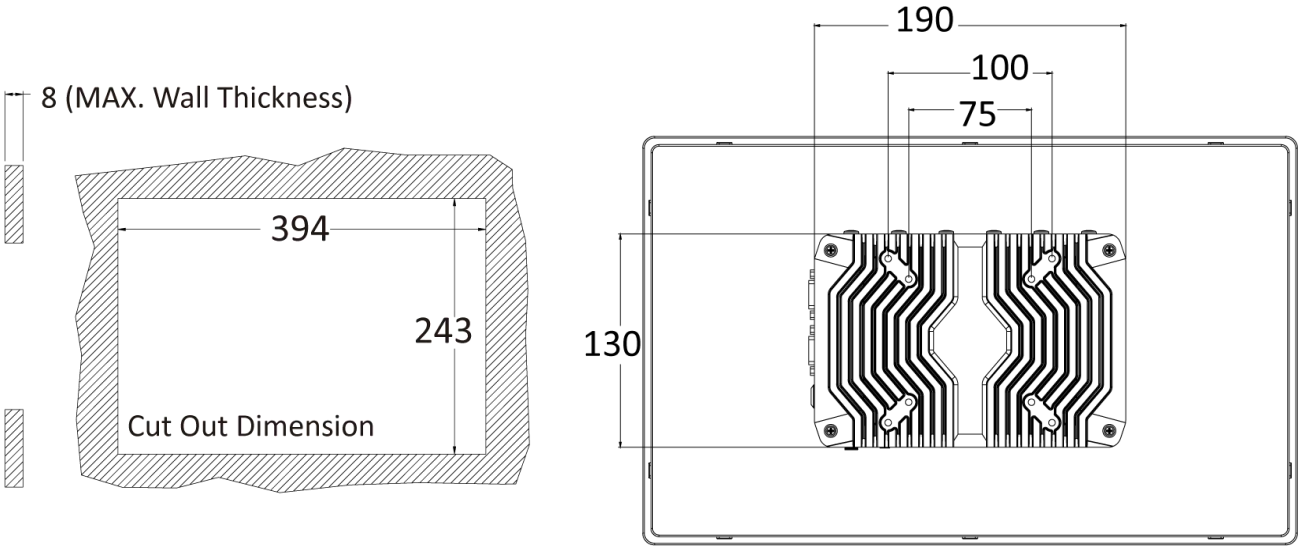




1.4.2 AIO-W215-ASL-3L

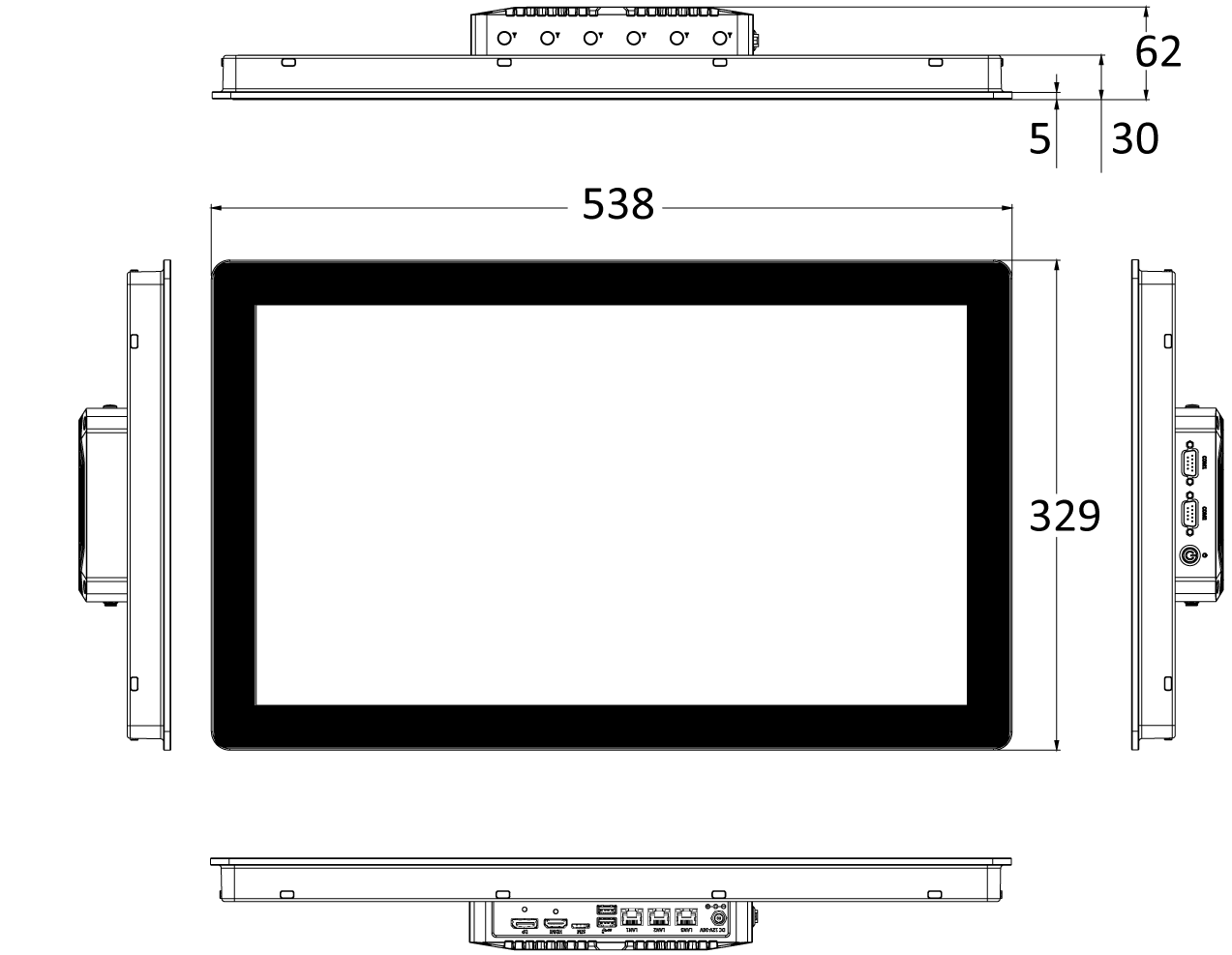
Unit: mm

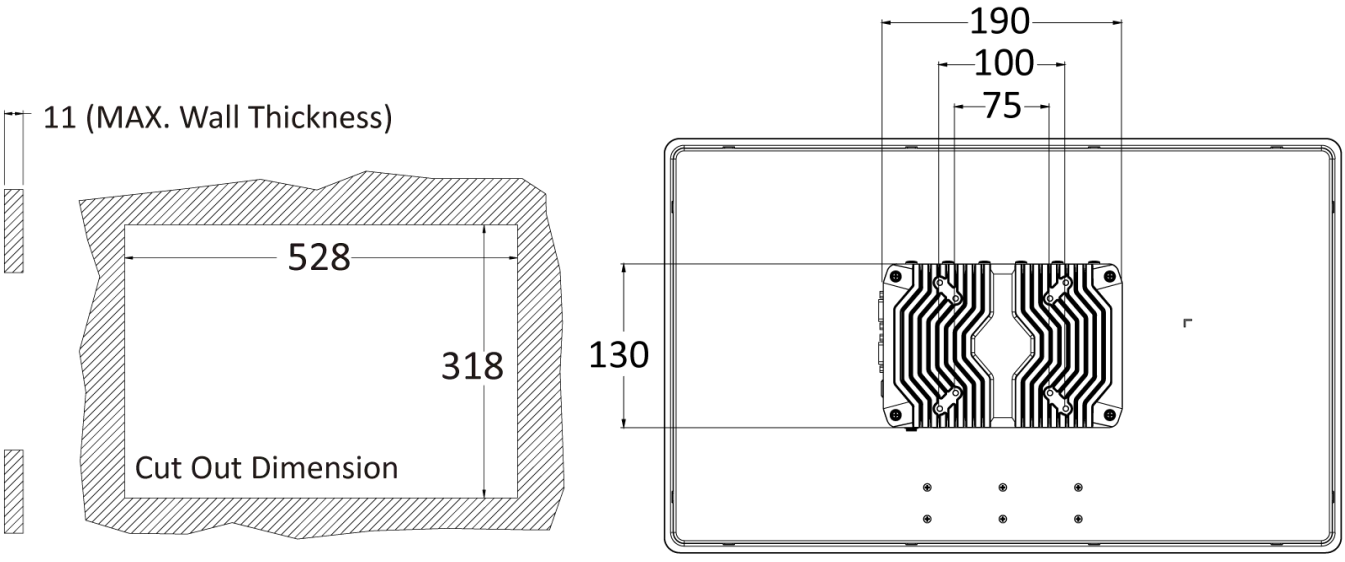




1.4.3 AIO-W221-ASL-3L

Unit: mm

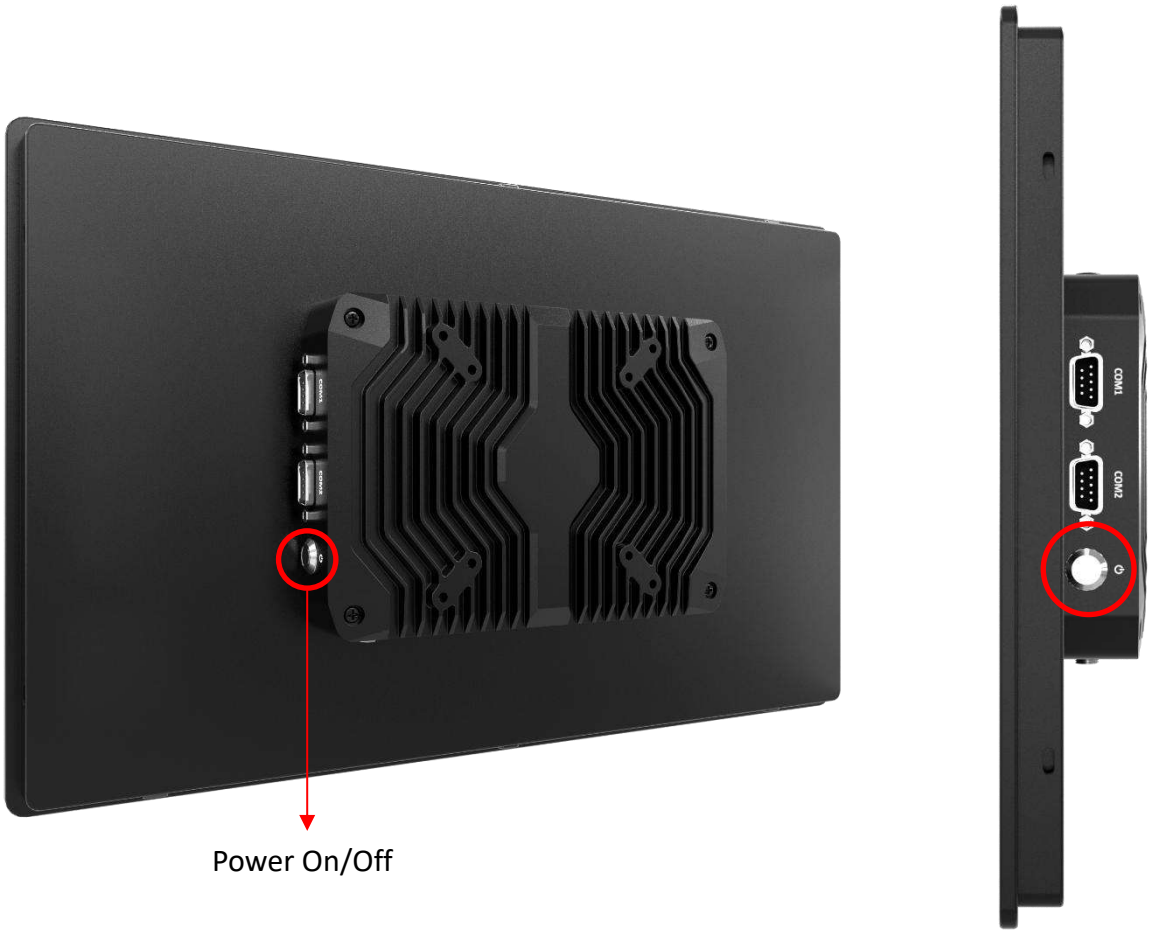




Chapter 2

Panel Controls

2.1 Users Controls



Power Button
System power on or off.

Chapter 3

System Setup

Set torque force to 3.5 kgf-cm to execute all the screwing and unscrewing.

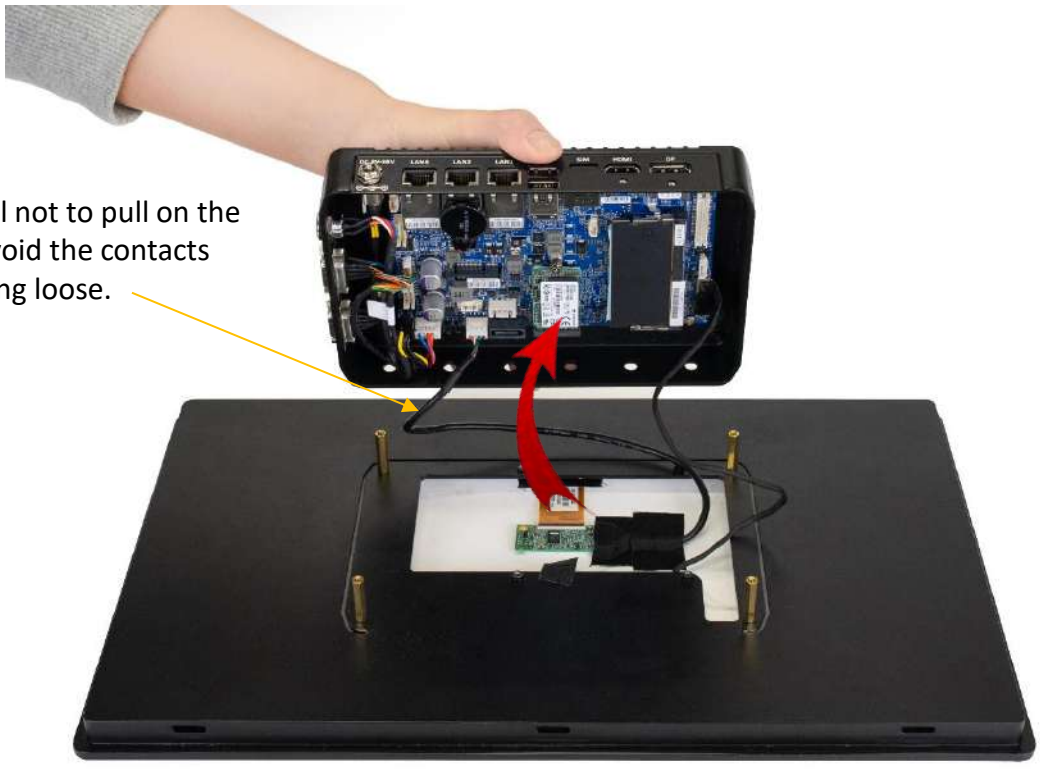
3.1 Replacement of Internal Modules

WARNING

In order to prevent electric shock or system damage, before removing the chassis cover, must turn off power and disconnect the unit from power source.

1. Use a screwdriver to remove the four screws securing the back cover.

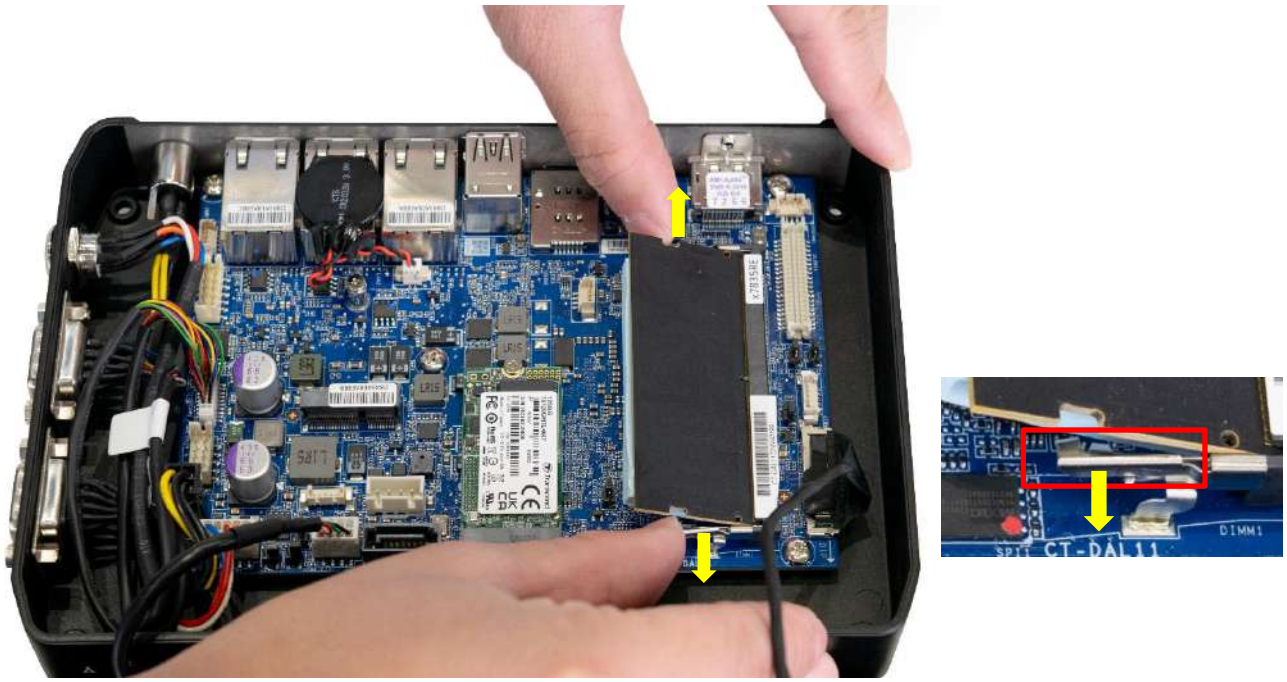
2. After removing the screws, detach the main unit from the screen.



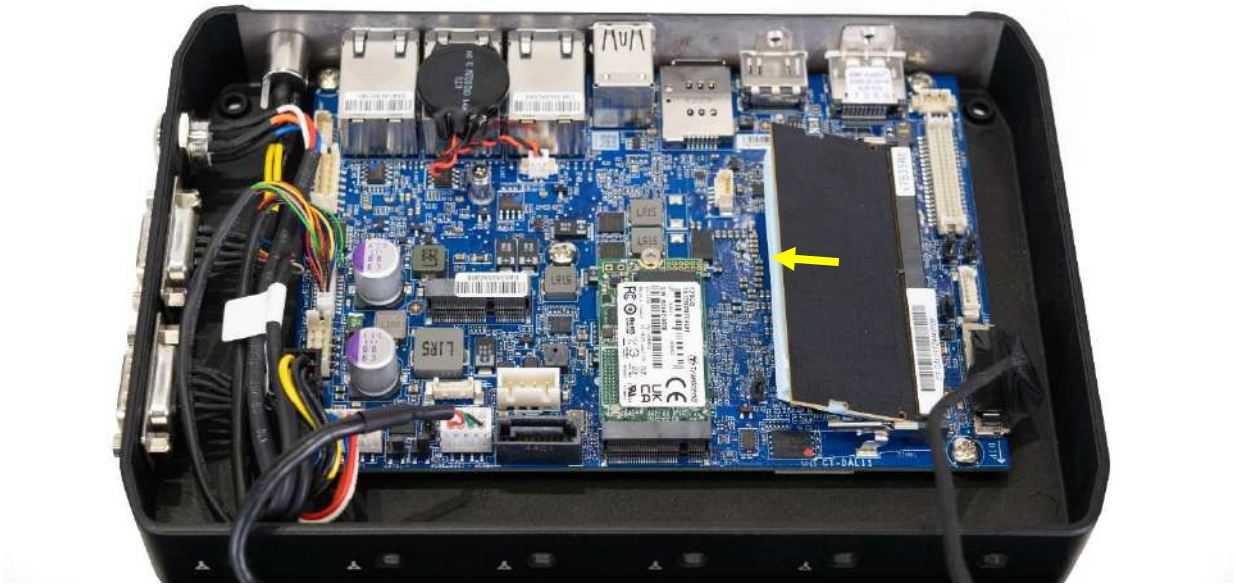
*Be careful not to pull on the cable to avoid the contacts from coming loose.

3.2 Replacement of Memory Module

1. Pull out the locking tabs on both sides of the memory slot to release the memory module, allowing it to pop out.



2. After the memory module pops up, pull it out.
   Carefully remove the thermal pad underneath the memory module.

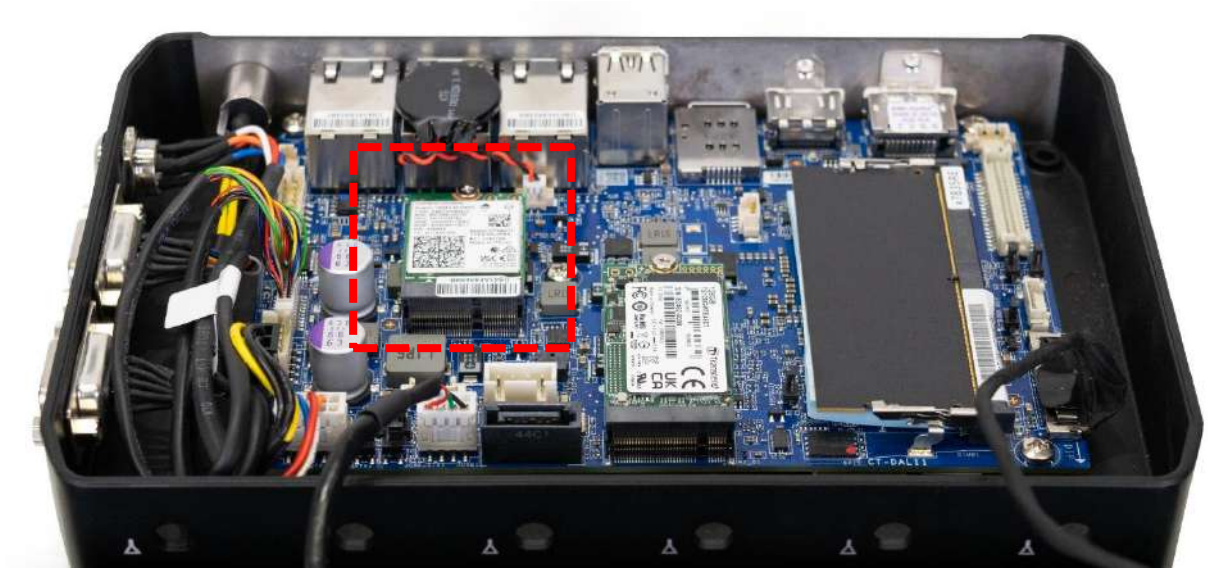


3.3 Replacement of M.2 Storage Module

1. Use a screwdriver to remove the single screw securing the M.2 card. After removing the M.2 card, carefully remove the thermal pad underneath.

3.4 Install wireless network card and antenna

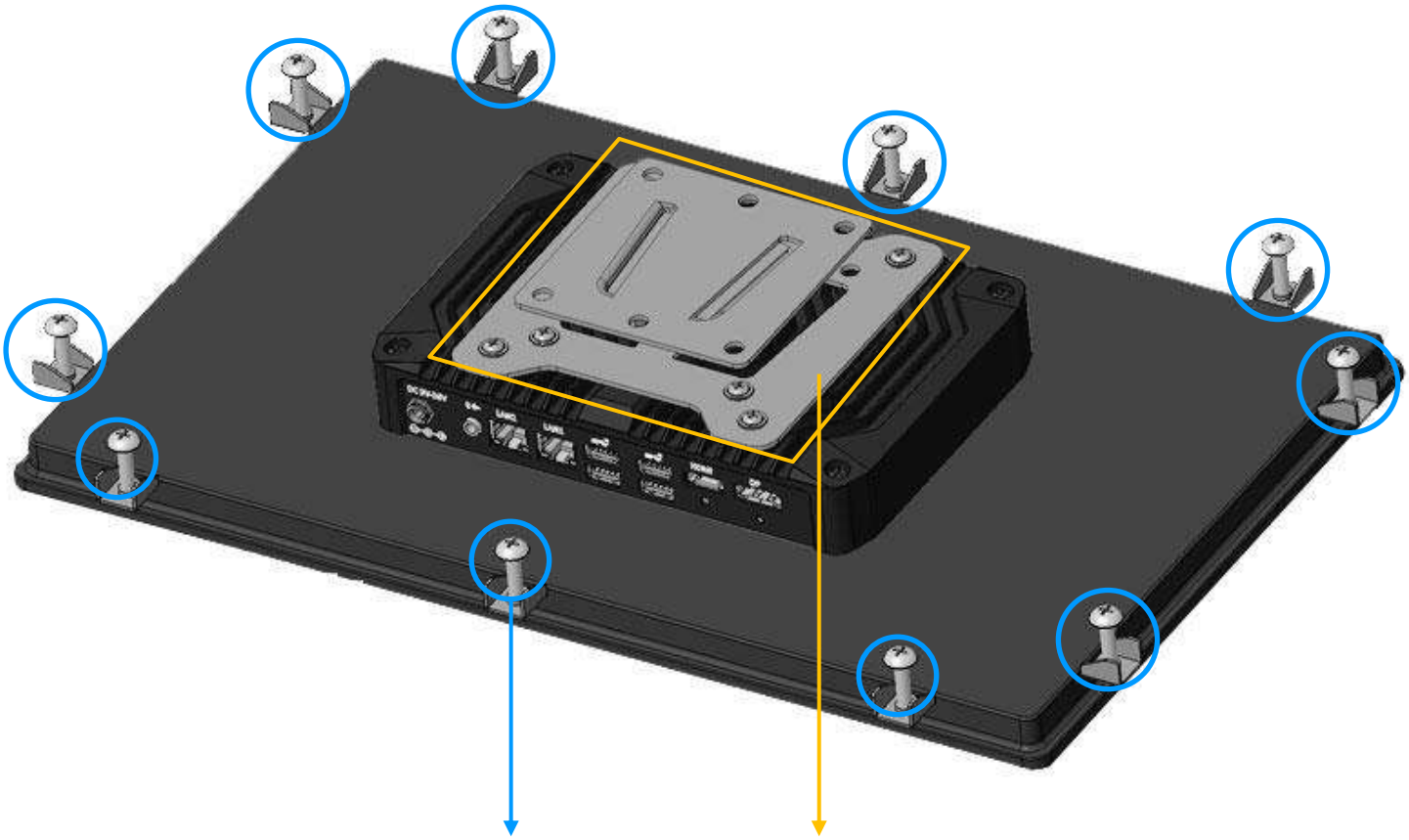
1. Install the network card in the designated red frame and secure it with screws.



2. Ensure the internal antenna is securely connected to the network card, and the antenna interface is properly installed in the designated opening on the chassis cover.

3. Connect the external antenna to the internal antenna, reattach the main unit to the screen following the original steps, and secure it with the four screws.

VESA Mount / Panel Mount:



Panel mount bracket

VESA mount bracket
(75mm x 75mm/100mm x 100mm)

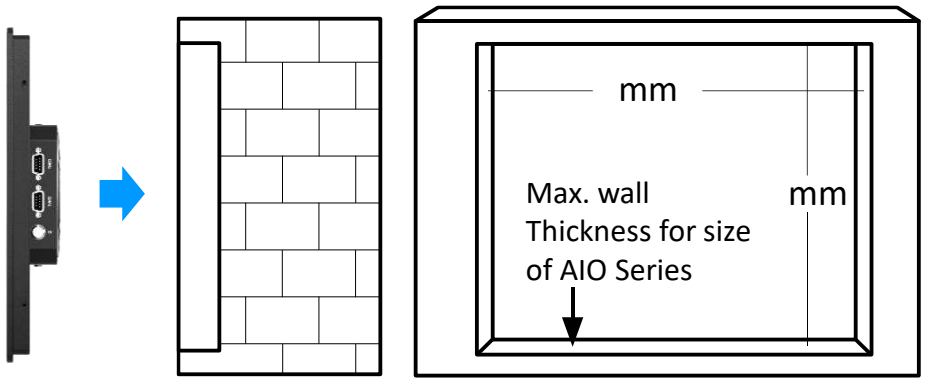
M4X6L x8 pcs

Model	Panel Mount Kit
AIO-W210-ASL-3L	6
AIO-W215-ASL-3L	10
AIO-W221-ASL-3L	12

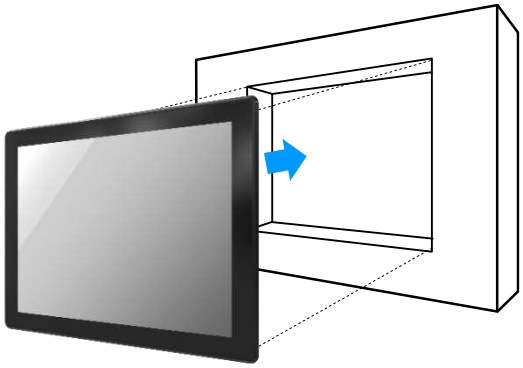
Mounting Guide

Flush Mount / Panel Mount:

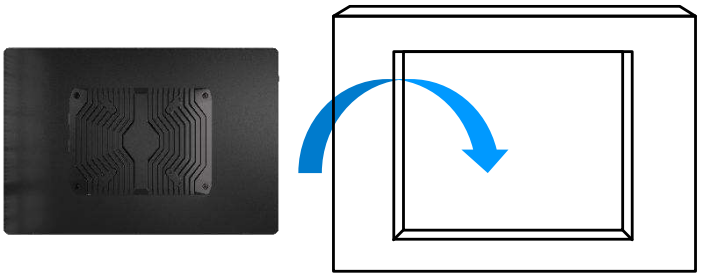
- Cut hole in the wall w/ dimensions according to the screen size you have purchased. Please refer to the next page for the list of cutout dimensions and max wall depths



- From the FRONT of the wall, place the AIO Panel PC with its rear (display screen forward) into the measured cutout hole.

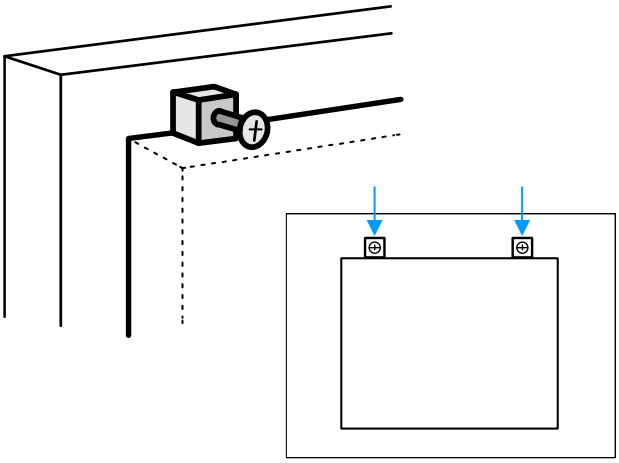


REAR



FRONT

- Install the mounting clips around the AIO and screw them in to secure against the wall. If the wall's thickness is greater than maximum wall thickness allowed, the clips will not fit. Please refer to the next page for the list of max wall depths



AIO Series

Model	Wall Cut-Out (W x H) Unit: mm	Max Wall Thickness (mm)
AIO-W210-ASL-3L	249 x 163	7
AIO-W215-ASL-3L	394 x 243	8
AIO-W221-ASL-3L	528 x 318	11

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