cincoze

CV-200/M1101 Series

User Manual

Slim Bezel Industrial Monitor

10.1” – 21.5" TFT Full HD Slim Bezel Touch Module with Projected Capacitive Touch & AG Coating, 1x DisplayPort, 1x HDMI, 1x VGA

Version: V1.00

Contents

Preface

Revision

Revision	Description	Date
1.00	First Released	2026/01/15

Copyright Notice

Acknowledgement

Disclaimer

This manual is intended to be used as a practical and informative guide only and is subject to change without notice. It does not represent a commitment on the part of Cincoze. This product might include unintentional technical or typographical errors. Changes are periodically made to the information herein to correct such errors, and these changes are incorporated into new editions of the publication.

Declaration of Conformity

FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CE

The product(s) described in this manual complies with all application European Union (CE) directives if it has a CE marking. For computer systems to remain CE compliant, only CE-compliant parts may be used. Maintaining CE compliance also requires proper cable and cabling techniques.

Product Warranty Statement

Warranty

Cincoze products are warranted by Cincoze Co., Ltd. to be free from defect in materials and workmanship for 2 years from the date of purchase by the original purchaser. During the warranty period, we shall, at our option, either repair or replace any product that proves to be defective under normal operation. Defects, malfunctions, or failures of the warranted product caused by damage resulting from natural disasters (such as by lightening, flood, earthquake, etc.), environmental and atmospheric disturbances, other external forces such as power line disturbances, plugging the board in under power, or incorrect cabling, and damage caused by misuse, abuse, and unauthorized alteration or repair, and the product in question is either software, or an expendable item (such as a fuse, battery, etc.), are not warranted.

RMA

Before sending your product in, you will need to fill in Cincoze RMA Request Form and obtain a RMA number from us. Our staff is available at any time to provide you with the most friendly and immediate service.

- **RMA Instructions**
  - Customers must fill in Cincoze Return Merchandise Authorization (RMA) Request Form and obtain an RMA number prior to returning a defective product to Cincoze for service.
  - Customers must collect all the information about the problems encountered and note anything abnormal, and describe the problems on the “Cincoze Service Form” for the RMA number application process.
  - Charges may be incurred for certain repairs. Cincoze will charge for repairs to products whose warranty period has expired. Cincoze will also charge for repairs to products if the damage resulted from acts of God, environmental or atmospheric disturbances, or other external forces through misuse, abuse, or unauthorized alteration or repair. If charges will be incurred for a repair, Cincoze lists all charges and will wait for the customer’s approval before performing the repair.
  - Customers agree to ensure the product or assume the risk of loss or damage during transit, to prepay shipping charges, and to use the original shipping container or equivalent.
  - Customers can be sent back the faulty products with or without accessories (manuals, cables, etc.) and any components from the system. If the components

were suspected as part of the problem, please note clearly which components are included. Otherwise, Cincoze is not responsible for the devices/parts.

- Repaired items will be shipped along with a "Repair Report" detailing the findings and actions taken.

Limitation of Liability

Cincoze' liability arising out of the manufacture, sale, or supplying of the product and its use, whether based on warranty, contract, negligence, product liability, or otherwise, shall not exceed the original selling price of the product. The remedies provided herein are the customer's sole and exclusive remedies. In no event shall Cincoze be liable for direct, indirect, special or consequential damages whether based on contract of any other legal theory.

Technical Support and Assistance

1. Visit the Cincoze website at www.cincoze.com where you can find the latest information about the product.
2. Contact your distributor or our technical support team, or sales representative for technical support if you need additional assistance. Please have the following information ready before you call:
   - Product 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 (AVERTIR)

This indication alerts operators to an operation that, if not strictly observed, may result in severe injury.
(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des blessures graves.)

CAUTION (ATTENTION)

This indication alerts operators to an operation that, if not strictly observed, may result in safety hazards to personnel or damage to equipment.
(Cette indication avertit les opérateurs d'une opération qui, si elle n'est pas strictement observée, peut entraîner des risques pour la sécurité du personnel ou des dommages à l'équipement.)

NOTE (NOTE)

This indication provides additional information to complete a task easily.
(Cette indication fournit des informations supplémentaires pour effectuer facilement une tâche.)

Safety Precautions

Before installing and using this device, please note the following precautions.

1. Read these safety instructions carefully.
2. Keep this User's Manual for future reference.
3. Disconnect this equipment from any AC outlet before cleaning.
4. For plug-in equipment, the power outlet socket must be located near the equipment and must be easily accessible.
5. Keep this equipment away from humidity.
6. Put this equipment on a reliable surface during installation. Dropping it or letting it fall may cause damage.
7. Make sure the voltage of the power source is correct before connecting the equipment to the power outlet.
8. Use a power cord that has been approved for use with the product and matches the voltage and current marked on the product's electrical range label. The voltage and current rating of the cord must be greater than the voltage and current rating marked on the product.
9. Position the power cord so that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage from transient overvoltage.
12. Never pour any liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
    If one of the following situations arises, get the equipment checked by 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 you cannot get it to work according to the user's manual.
    - The equipment has been dropped and damaged.
    - The equipment has obvious signs of breakage.
14. CAUTION: Risk of Explosion if Battery is replaced by an Incorrect Type. Dispose of Used Batteries According to the Instructions.
    ATTENTION: Risque d'explosion si la batterie est remplacée par un type incorrect. Mettre au rebus les batteries usagées selon les instructions.
15. Equipment intended only for use in a RESTRICTED ACCESS AREA.
16. Ensure to connect the power cord of the power adapter to a socket-outlet with an earth connection.
17. Dispose of used batteries promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

Package Contents

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

Item	Description	Q'ty
1	CV-221C/M1101 Touch Monitor	1
2	USB Cable	1
3	VGA Cable	1
4	Power Terminal Block Connector	1
5	Screw Pack	1
6	Panel Mounting Kit	14

Note: Notify your sales representative if any of the above items are missing or damaged.

Ordering Information

Model No.	Product Description
CV-221C-R10/M1101-R10	21.5" TFT Full HD 16:9 Slim Bezel Touch Monitor with Projected Capacitive Touch & AG Coating, 1x DisplayPort, 1x HDMI, 1x VGA

Chapter 1
Product Introductions

1.1 Overview

The CV-200 / M1101 series is a modular industrial touch monitor designed for demanding on-site applications and HMI solutions. Supporting Full HD resolution in sizes from 10” to 21.5” for clear visuals and flexible deployment. Powered by Cincoze’s CDS technology, it enables easy maintenance and future upgrades, with HDMI, DisplayPort, and VGA inputs, multi-language OSD, and versatile panel, VESA, or rack-mount options for seamless integration across industrial application.

Key Features

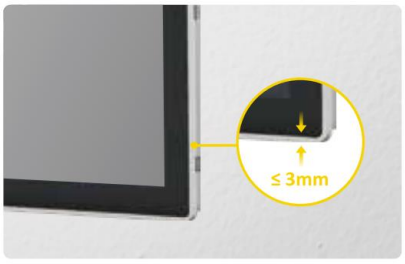
- 21.5“ Full HD LCD (1920 x 1080) with 16:9 Aspect Ratio
- Projected Capacitive Touch with Anti-Glare Coating.
- Wide Viewing Angle of 178°/178°
- Various Video Input Interfaces: 1x VGA, 1x HDMI, 1x DisplayPort Input
- Support USB & RS-232 Interfaces for Touch Function
- OSD Control keys for Brightness Adjustment
- Convertible Display System (CDS) Supported
- Front Panel IP66 Compliant
- Support Panel / VESA / Rack Mount

Certifications

IP66

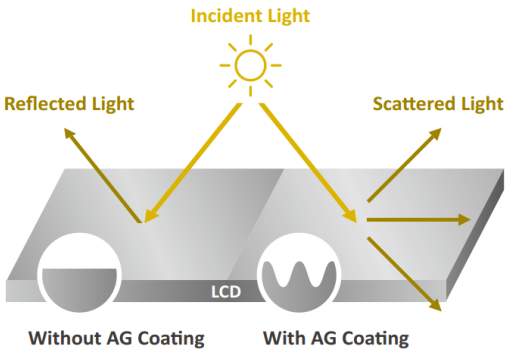
Ultra-Slim Bezel

With an ultra-slim bezel of ≤ 3 mm (varies by display size), the CV-200 minimizes physical constraints for compact installations. It’s ideal for space-limited enclosures and applications requiring efficient integration with a streamlined appearance.



Reliable Touch Performance

All models support P-Cap touch, anti-glare (AG) coating, and wet tracking technology, ensuring stable operation and clear visibility even in humid environments or under bright indoor lighting.



IP66

EMI

EN 61000-6-4

50,000-hr Backlight

Built to Last

Front-panel IP66 protection, compliance with industrial environment EMC standards (EN 61000-6-4), and a long-lasting backlight rated for up to 50,000 hours ensure reliable, long-term performance.

Multiple Display Inputs

The CV-200/M1101 series has three different display inputs, including HDMI and DisplayPort digital inputs and VGA analog input.

CDS Patented Technology

The patented CDS technology makes field side maintenance and future upgrades simpler and more cost-effective because a single part of the system can be replaced instead of replacing the whole thing.

1.2 Specifications

1.2.1 CV-221C/M1101

Model Name	CV-221C
Display	
LCD Size	• 21.5” (16:9)
Max. Resolution	• 1920 x 1080
Brightness (cd/m2)	• 300
Contrast Ratio	• 5000:1
LCD Color	• 16.7M
Pixel Pitch (mm)	• 0.24825 (H) x 0.24825 (V)
Viewing Angle (H-V)	• 178 / 178
Backlight LED Life Time	• 50,000 hrs (LED Backlight)
Touch Screen	
Touch Type	• Projected Capacitive Touch
Anti-Glare	✓
Wet Touch Tracking	✓
Physical	
Dimension (W x D x H)	• 522.4 x 318.3 x 63.4 mm
Weight Information	• 5.28 kg
Mechanical Construction	• Die-Cast Flat Surface
Power	
Power Consumption	• 24.8W (Max.)
Environment	
Front Panel Protection	• IP 66 Compliant
Operating Temperature	• 0°C - 60°C (32°F to 140°F) - with Industrial Grade peripherals; Ambient with air flow
Storage Temperature	• -20°C - 60°C (-4°F to 140°F)
Relative Humidity	• 90% RH @ 40°C (non-condensing)
EMC	• CE, UKCA, FCC, ICES-003 Class A
EMI	• CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN 50121-3-2 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A
EMS	• EN/IEC 61000-4-2 ESD: Contact: 6 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 20 V/m • EN/IEC 61000-4-4 EFT: AC Power: 2 kV; DC Power: 1 kV; Signal: 2 kV

	• EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 10V (**Compliant with the standard when utilizing shielded cable.) • EN/IEC 61000-4-8 PFMF: 50/60 Hz, 30A/m • EN/IEC 61000-4-11 (50/60 Hz): Voltage dips duration up to 25/30 cycles; interruptions up to 250/300 cycles
Industrial Environment	• EMC: - EN/BS/IEC 61000-6-4: 2019 Class A - EN/BS/IEC 61000-6-2: 2019
Railway	• EMC: EN 50155: 2021 Clause 4.4.6, 13.4.9 (w/ M1101 only) - EN 50121-1: 2017 - EN 50121-3-2: 2016 + A1: 2019

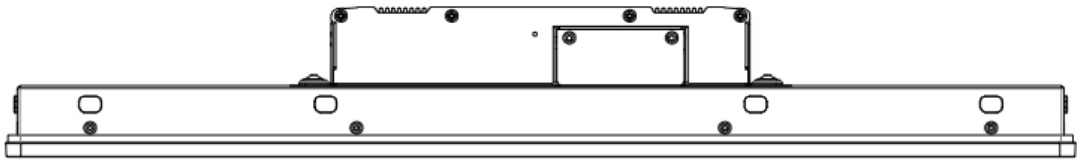
Model Name	**M1101**
Graphics	
HDMI-in	• 1x HDMI Connector (1920 x 1080 @60Hz)
DP-in	• 1x DisplayPort Connector (1920 x 1080 @60Hz)
VGA-in	• 1x VGA Connector (1920 x 1080 @60Hz)
Audio	
Audio input	• 1x Audio Line in, Phone Jack 3.5mm
I/O	
COM	• 1x RS-232, DB9
USB	• 1x 480Mbps USB 2.0, Type A
Other Function	
OSD Button	• Menu, Auto, LCD On/Off, Brightness Up, Brightness Down
Internal Speaker	• AMP 2W + 2W
Status LED Indicator	• Power LED, Standby LED
Power	
Power Input	• 9 - 48VDC, 3-pin Terminal Block
Physical	
Dimension (W x D x H)	• 204.5 x 149 x 38.5 mm
Weight Information	• 1.2 kg
Mechanical Construction	• Extruded Aluminum with Heavy Duty Metal
Mounting	• VESA / CDS Mounting
Physical Design	• Fanless Design • Jumper-less Design
Reliability & Protection	
Reverse Power Input	• Yes

Protection	
Over Voltage Protection	• Protection Range: 51-58V • Protection Type: shut down operating voltage, re-power on at the present level to recover
Over Current Protection	• 15A
MTBF	• 1,217,359 hrs - Database: Telcordia SR-332 Issue 3, Method 1, Case 3
Environment	
Operating Temperature	• -20°C to 70°C *Ambient with air flow *According to IEC60068-2-1, IEC60068-2-2, IEC60068-2-14
Storage Temperature	• -20°C to 75°C
Relative Humidity	• 95%RH @ 70°C (non-Condensing)
Shock	• Operating, 15 Grms (according to IEC60068-2-27)
Vibration	• Operating, 1.5 Grms, 5-500 Hz, 3 Axes (according to IEC60068-2-64) • Operating, 1 Grms, 10-500 Hz, 3 Axes (according to IEC60068-2-6)
EMC	• CE, UKCA, FCC, ICES-003 Class A • EN61000-6-4, EN61000-6-2 (24VDC Input Only)
EMI	• CISPR 32 Conducted & Radiated: Class A • EN/BS EN 55032 Conducted & Radiated: Class A • EN/BS EN IEC 61000-3-2 Harmonic current emissions: Class A • EN/BS EN61000-3-3 Voltage fluctuations & flicker • FCC 47 CFR Part 15B, ICES-003 Conducted & Radiated: Class A
EMS	• EN/IEC 61000-4-2 ESD: Contact: 4 kV; Air: 8 kV • EN/IEC 61000-4-3 RS: 80 MHz to 1000 MHz: 10 V/m • EN/IEC 61000-4-4 EFT: AC Power: 2 kV; DC Power: 1 kV; Signal: 1 kV • EN/IEC 61000-4-5 Surges: AC Power: 2 kV; Signal: 1 kV • EN/IEC 61000-4-6 CS: 10V • EN/IEC 61000-4-8 PFMF: 50 Hz, 30A/m • EN/IEC 61000-4-11 Voltage Dips & Voltage Interruptions: 1 cycles at 60 Hz
Safety	• UL, cUL, CB, IEC, EN 62368-1

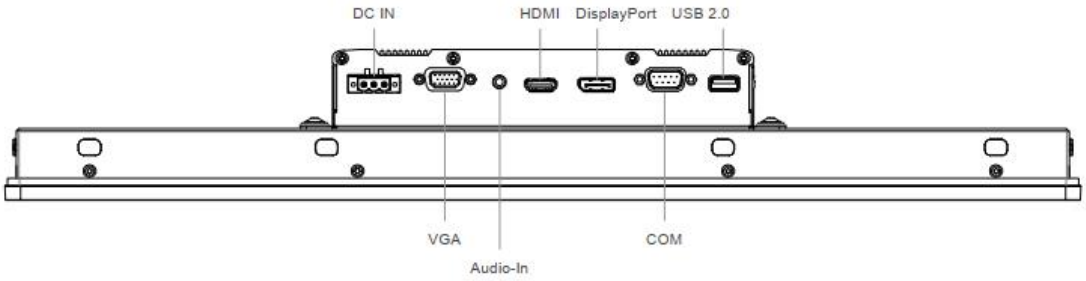
** Product Specifications and features are for reference only and are subject to change without prior notice. For more information, please refer to the latest product datasheet from Cincoze's website.*

1.3 External Layout

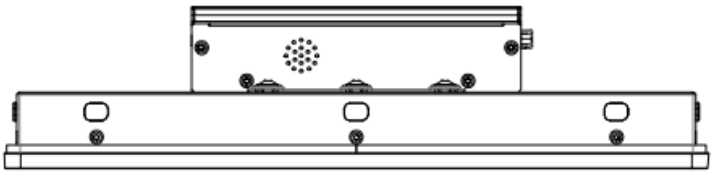
Front I/O



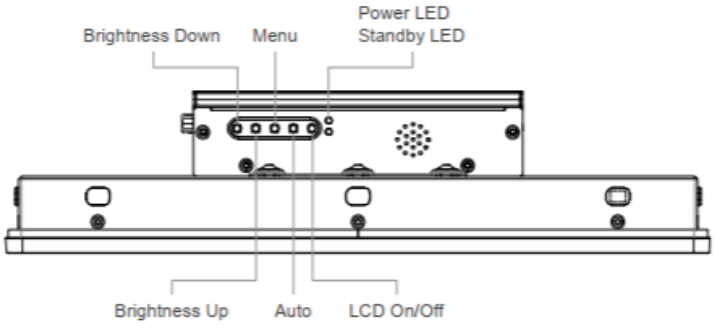
Rear I/O



Left I/O



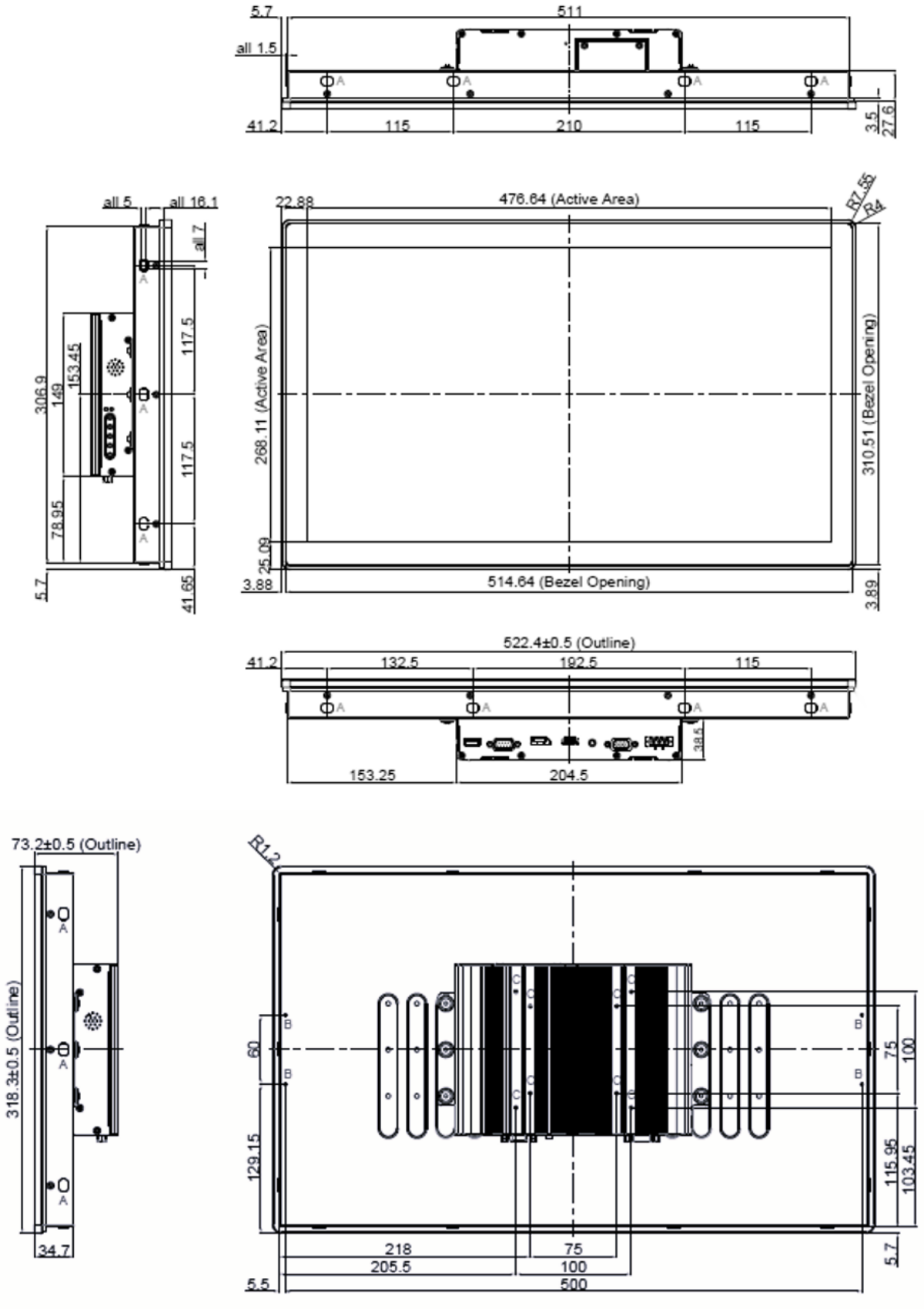
Right I/O

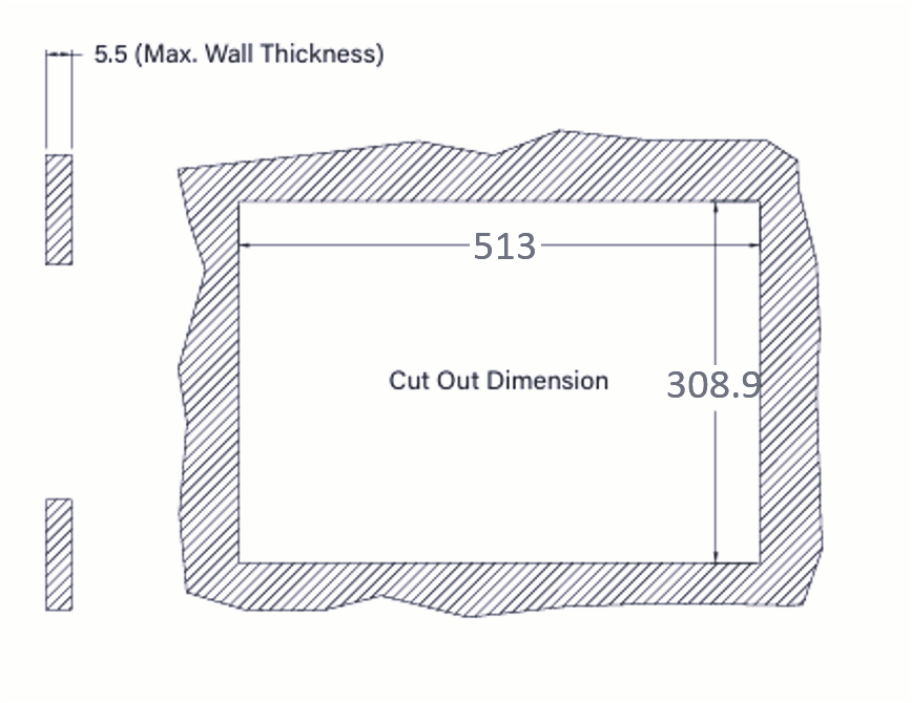


1.4 Dimensions

CV-221C/M1101

mm

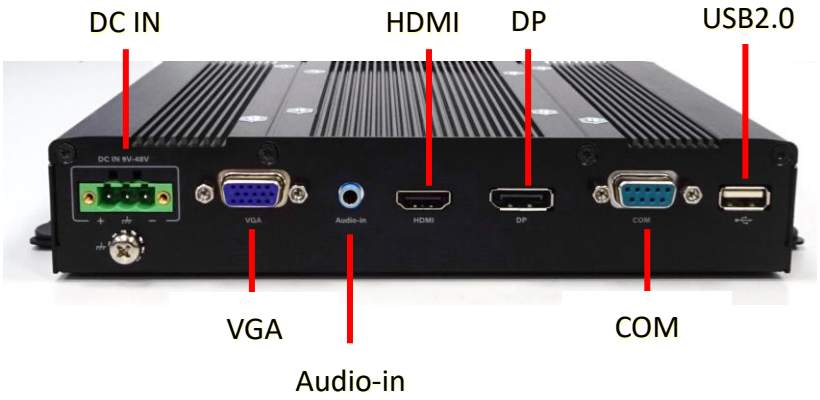



5.5 (Max. Wall Thickness)
513
Cut Out Dimension
308.9

Chapter 2 Introduction to Switches and Connectors on Monitor Module

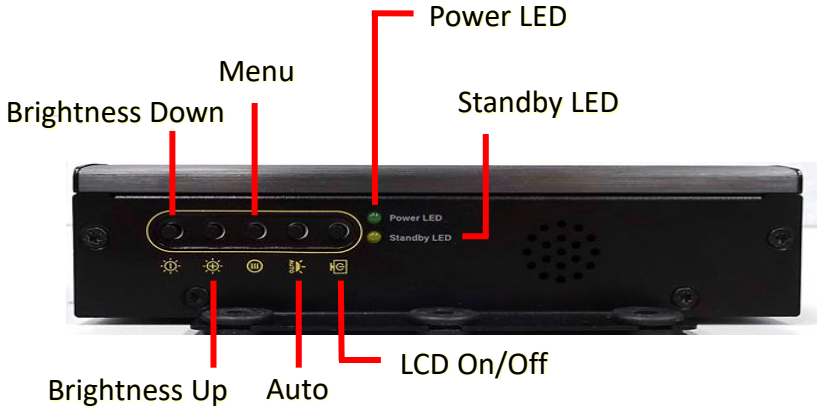
2.1 Switches and Connectors Location

2.1.1 Rear Panel



Switches & Connector	Definition
DC IN	DC +9V-48V Power Connector
VGA	A standard 15-pin female VGA connector used to connect the monitor to the system graphics interface.
Audio-in	Used to connect an audio cable.
HDMI	An HDMI connector used to connect the monitor to the system graphics interface.
DP	A DP connector used to connect the monitor to the system graphics interface.
COM	This is a COM Port for Touch Panel Connector (Resistive Touch Only), a standard RS-232 DB-9 female touch panel connector used to connect the monitor to the system interface.
USB2.0	This is a USB Port for Touch Panel Connector, a standard USB touch panel connector used to connect the monitor to the system interface.

2.1.2 Right Panel



Switches & Connector	Definition
Brightness Down	OSD (On Screen Display) Function: Used to turn down the brightness on the screen display, or to decrease the value of selected item.
Brightness Up	OSD (On Screen Display) Function: Used to turn up the brightness on the screen display, or to increase the value of selected item.
Menu	OSD (On Screen Display) Function: Press this button to turn on/off the OSD main menu. Press this button to activate selected items.
Auto	OSD (On Screen Display) Function: Press to auto adjust the optimal frequency of horizontal and vertical.
LCD On/Off	OSD (On Screen Display) Function: Press to turn-on or turn-off the display.
Power LED	Indicates the power status of the monitor.
Standby LED	Indicates the power status of the monitor.

2.2 OSD Function Description

OSD Menu	Description
	• Backlight • Brightness • Contrast • Sharpness • Exit
	• Auto Adjust • H Position (Horizontal) • V Position (Vertical) • Clock • Phase • White Balance • Exit
	• Temperature • Color Effect • Hue • Saturation • Exit
	• Auto Select • A0: VGA • D0: DP • D1: HDMI
	• Volume • Mute • Audio Source • Exit
	• Reset • Menu Time • OSD H Position • OSD V Position • Language • Transparency • Rotate • Exit

	Base on LCD type information
	Exit the main menu

** If using HDMI or DisplayPort connection, all options within the "Display" menu are unavailable.*

Chapter 3
System Setup

3.1 Installing Display Module

WARNING (AVERTIR)

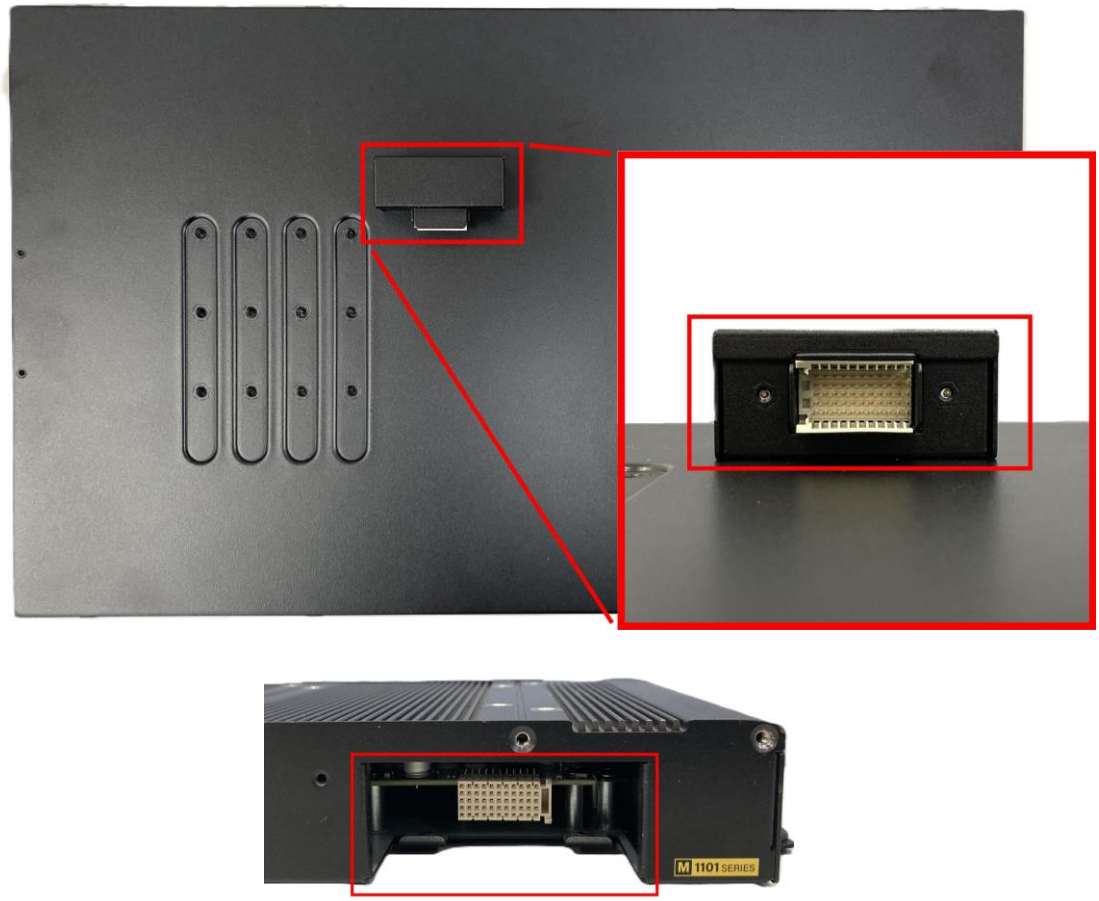
In order to prevent electric shock or system damage, must turn off power and disconnect the unit from power source before removing the chassis cover.
(Afin d'éviter tout risque d'électrocution ou d'endommagement du système, vous devez couper l'alimentation et débrancher l'appareil de la source d'alimentation avant de retirer le couvercle du châssis.)

This manual uses the M1101 Convertible Monitor Module and CV-221C Display Module for demonstration purposes.

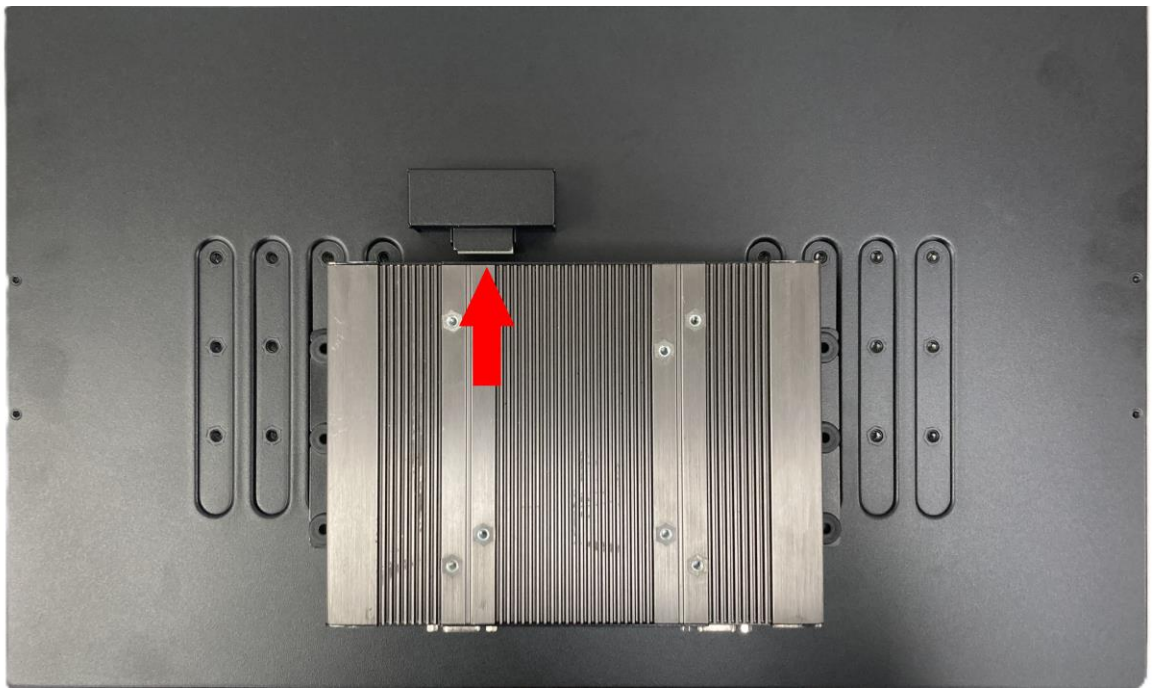
Step 1. Locate the module connector slot and loosen the 1 screw.

Step 2. Turn over the module and loosen 2 screws at the back of the connector cover.

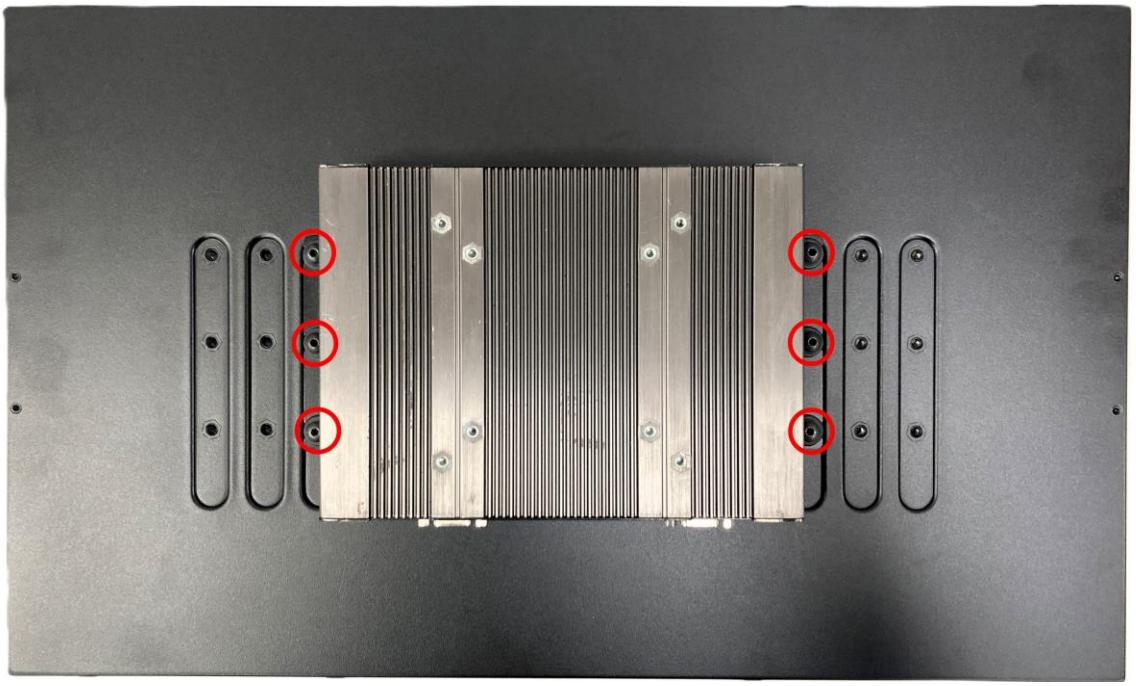
Step 3. Locate the male connector on the display module and the female connector on the monitor module.



Step 4. Align the connectors and connect the display with the monitor module.



Step 5. Secure the monitor module to the display with 6 screws as indicated below.



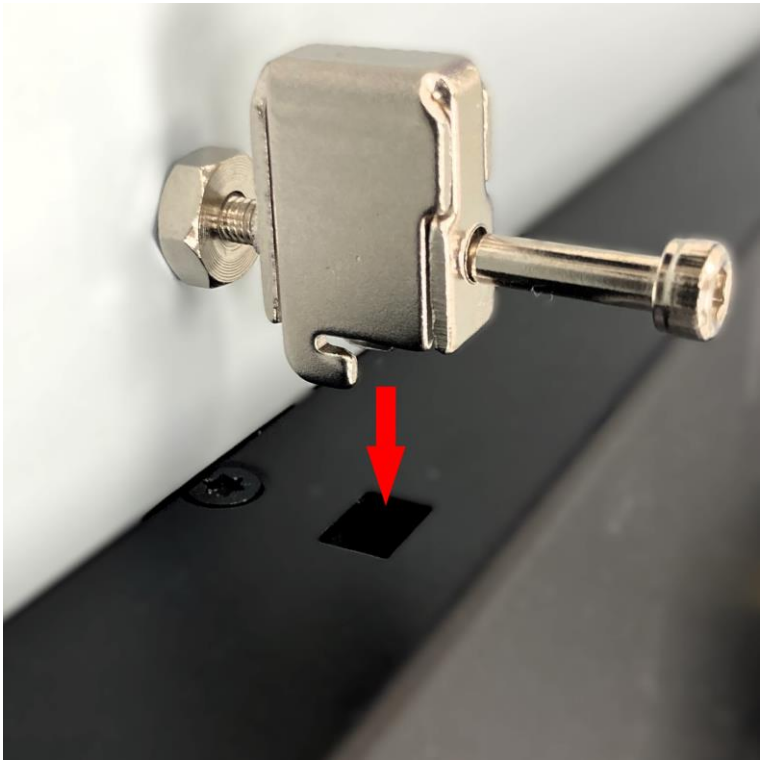
3.2 Installing Panel Mount

Step 1. Prepare the mounting kits included with the display.

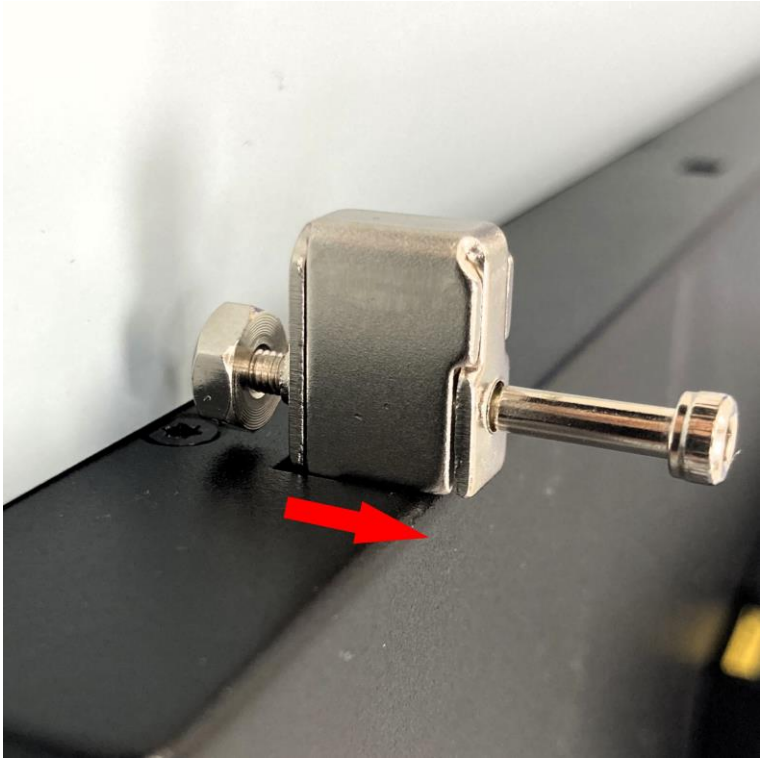
Step 2. Slot the assembled display module into the fixture.

Step 3. Remove all plastic covers.

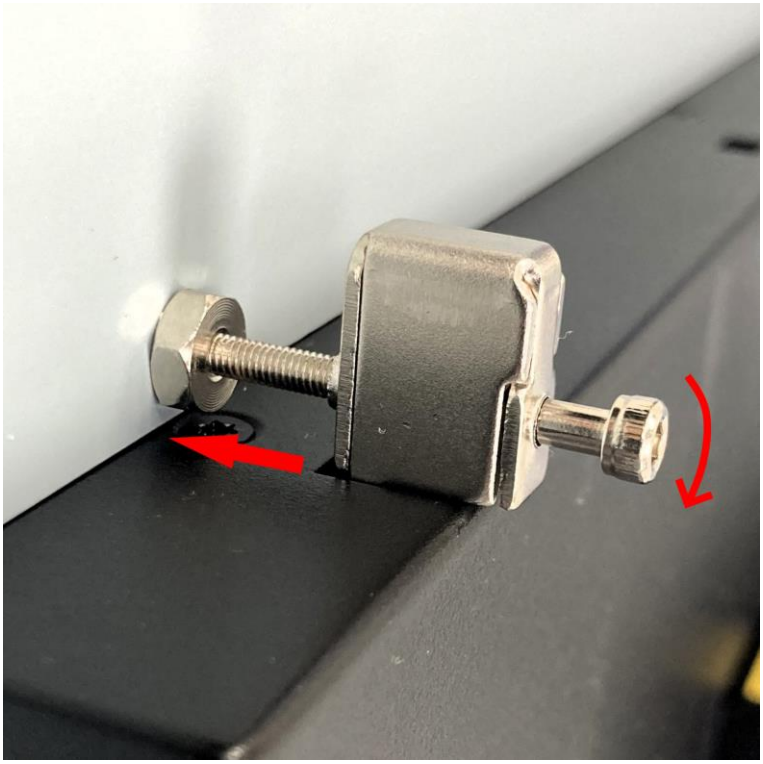
Step 4. Insert the Mounting Kit with the hook facing away from the fixture.



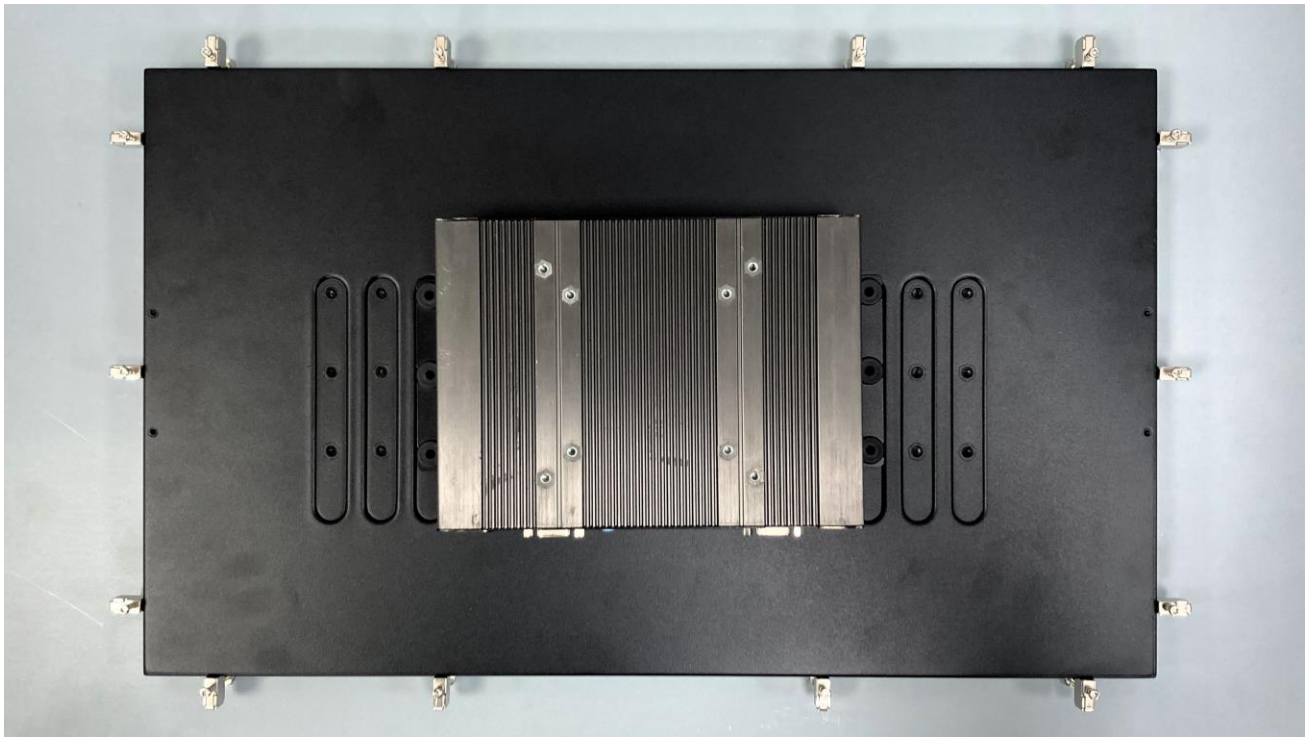
Step 5. Slide the Mounting Kit away from the fixture to lock it in place.



Step 6. Tighten the screw on the Mounting Kit until the other end sits flush against the fixture.



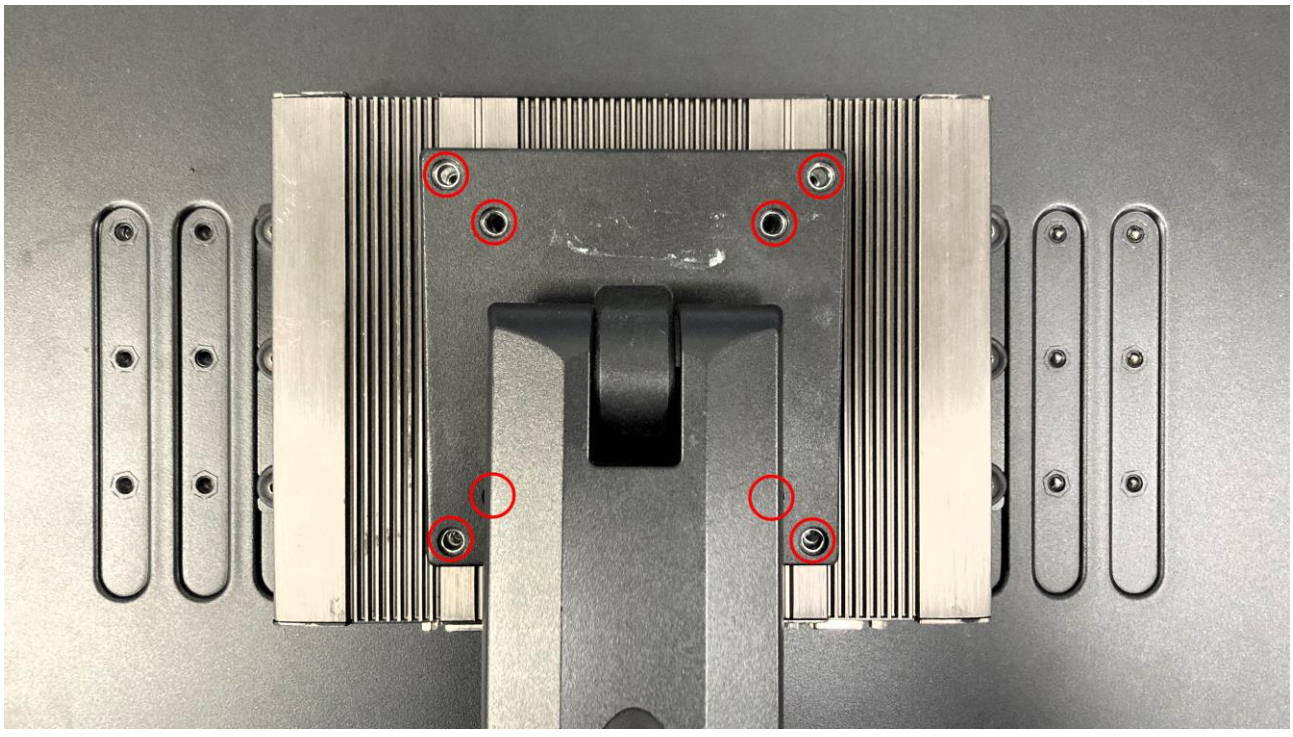
Step 7. Repeat steps 4-6 until all Mounting Kits have been installed. In this example (CV-221C), 14 Mounting Kits are required to secure the display to the fixture.



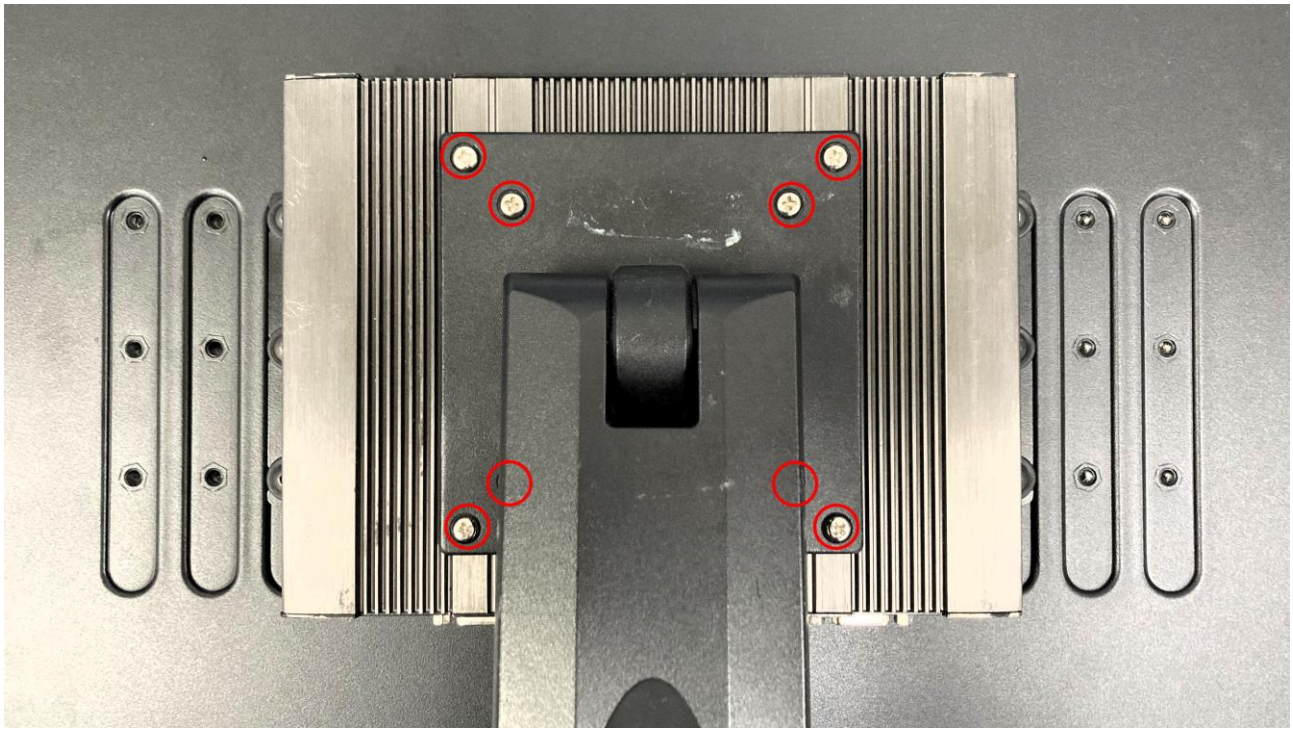
3.3 Installing VESA Mount

This section uses the M1101 convertible monitor module and CV-221C display module for demonstration purposes. The following picture indicates the VESA mounting hole pattern on the top side of M1101, which is compliant with the VESA mounting standard.

Step 1. Place the VESA stand on top of the monitor module and align the holes on the stand with the holes on the top side of M1101.



Step 2. Secure the eight screws as indicated to mount the assembly onto a VESA stand.



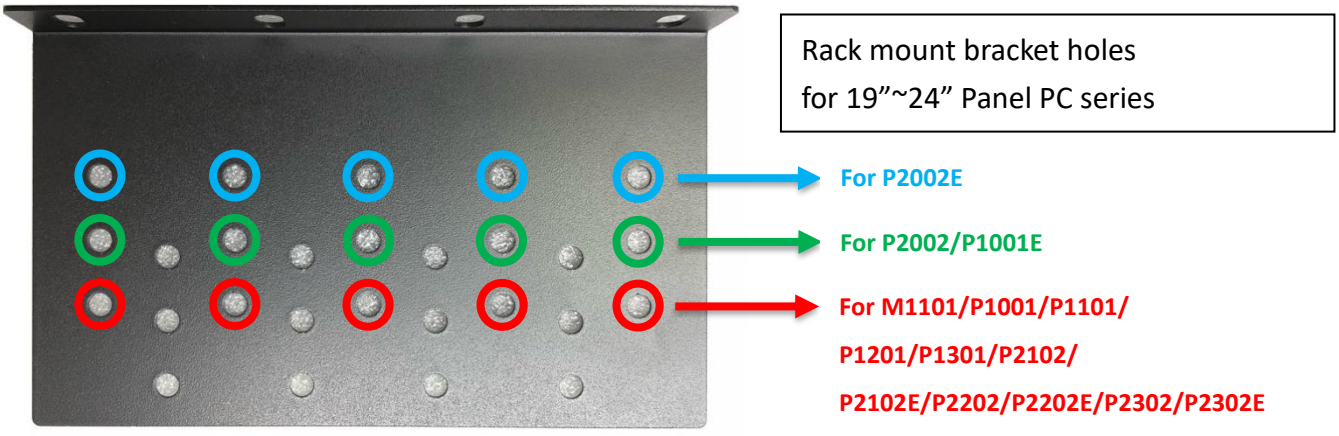
3.4 Installing Rack Mount (URM01)

The rack mount cannot be installed simultaneously with a VESA mount.

This section uses the M1101 convertible monitor module and CV-221C display module for demonstration purposes. The following picture indicates the VESA mounting hole pattern on the top side of M1101, which is compliant with the VESA mounting standard.

Step 1. Align the rack mount base with the VESA screw holes as shown below and secure it with screws.

Step 2. Assemble two rack mount brackets by securing 4 screws (M5x6) on each side.



Left

Right

Bottom

Step 3. Assemble the two rack mount brackets by securing 4 screws (M5x12), flat washers, and hex nuts on each side.