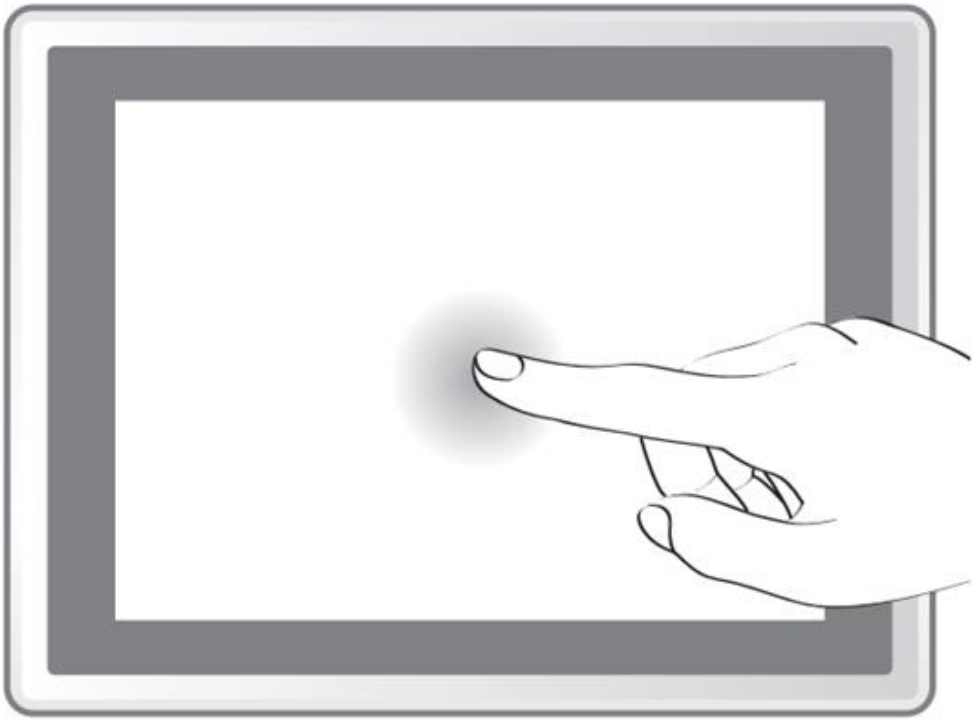
15” IP65 Stainless ATEX Display

Class I Division 2



R15L600-65EX

User Manual

Document Version 1.3
Document Part No. 9152150I100A

Please read these instructions carefully before using this product, and save this manual for future use.

Contents

Preface

Copyright Notice

Trademark Acknowledgement

Disclaimer

We reserve the right to make changes, without notice, to any product, including circuits and/or software described or contained in this manual in order to improve design and/or performance. We assume no responsibility or liability for the use of the described product(s) conveys no license or title under any patent, copyright, or masks work rights to these products, and make no representations or warranties that these products are free from patent, copyright, or mask work right infringement, unless otherwise specified. Applications that are described in this manual are for illustration purposes only. We make no representation or guarantee that such application will be suitable for the specified use without further testing or modification.

Warranty

Our warranty guarantees that each of its products will be free from material and workmanship defects for a period of one year from the invoice date. If the customer discovers a defect, we will, at his/her option, repair or replace the defective product at no charge to the customer, provide it is returned during the warranty period of one year, with transportation charges prepaid. The returned product must be properly packaged in its original packaging to obtain warranty service. If the serial number and the product shipping data differ by over 30 days, the in-warranty service will be made according to the shipping date. In the serial numbers the third and fourth two digits give the year of manufacture, and the fifth digit means the month (e. g., with A for October, B for November and C for December).

For example, the serial number 1W14Axxxxxxxx means October of year 2014.

Customer Service

We provide a service guide for any problem by the following steps: First, visit the website of our distributor to find the update information about the product. Second, contact with your distributor, sales representative, or our customer service center for technical support if you need additional assistance.

You may need the following information ready before you call:

- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

In addition, free technical support is available from our engineers every business day. We are always ready to give advice on application requirements or specific information on the installation and operation of any of our products.

Advisory Conventions

Four types of advisories are used throughout the user manual to provide helpful information or to alert you to the potential for hardware damage or personal injury. These are Notes, Important, Cautions, and Warnings. The following is an example of each type of advisory.

NOTE:
A note is used to emphasize helpful information

IMPORTANT:
An important note indicates information that is important for you to know.

CAUTION / ATTENTION
A Caution alert indicates potential damage to hardware and explains how to avoid the potential problem.
Une alerte d'attention indique un dommage possible à l'équipement et explique comment éviter le problème potentiel.

WARNING! / AVERTISSEMENT!
An Electrical Shock Warning indicates the potential harm from electrical hazards and how to avoid the potential problem.
Un Avertissement de Choc Électrique indique le potentiel de chocs sur des emplacements électriques et comment éviter ces problèmes.

ALTERNATING CURRENT / MISE À LE TERRE!
The Protective Conductor Terminal (Earth Ground) symbol indicates the potential risk of serious electrical shock due to improper grounding.
Le symbole de Mise à Terre indique le risqué potential de choc électrique grave à la terre incorrecte.

Safety Information

WARNING! / AVERTISSEMENT!
Always completely disconnect the power cord from your chassis whenever you work with the hardware. Do not make connections while the power is on. Sensitive electronic components can be damaged by sudden power surges. Only experienced electronics personnel should open the PC chassis.
Toujours débrancher le cordon d'alimentation du chassis lorsque vous travaillez sur celui-ci. Ne pas brancher de connections lorsque l'alimentation est présente. Des composantes électroniques sensibles peuvent être endommagées par des sauts d'alimentation. Seulement du personnel expérimenté devrait ouvrir ces chassis.

CAUTION / ATTENTION
Always ground yourself to remove any static charge before touching the CPU card. Modern electronic devices are very sensitive to static electric charges. As a safety precaution, use a grounding wrist strap at all times. Place all electronic components in a static-dissipative surface or static-shielded bag when they are not in the chassis.
Toujours verifier votre mise à la terre afin d'éliminer toute charge statique avant de toucher la carte CPU. Les équipements électroniques modernes sont très sensibles aux décharges d'électricité statique. Toujours utiliser un bracelet de mise à la terre comme précaution. Placer toutes les composantes électroniques sur une surface conçue pour dissiper les charge, ou dans un sac anti-statique lorsqu'elles ne sont pas dans le chassis.

Safety Precautions

For your safety carefully read all the safety instructions before using the device. All cautions and warnings on the equipment should be noted. Keep this user manual for future reference.

CAUTION / ATTENTION

Do not cover the openings!
Ne pas couvrir les ouvertures!

***Let service personnel to check the equipment in case any of the following problems appear:**

- 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 manual.
- The equipment has been dropped and damaged.
- The equipment has obvious signs of breakage.

- Do not leave this equipment in an uncontrolled environment where the storage temperature is below -20°C (-4°F) or above 60°C (140°F). It may damage the equipment.

CAUTION / ATTENTION

Use the recommended mounting apparatus to avoid risk of injury.
Utiliser l'appareil de fixation recommandé pour éliminer le risque de blessure.

WARNING! / AVERTISSEMENT!

Only use the connection cords that come with the product. When in doubt, please contact the manufacturer.
Utiliser seulement les cordons d'alimentation fournis avec le produit. Si vous doutez de leur provenance, contactez le manufacturier.

WARNING! / AVERTISSEMENT!

Always ground yourself against electrostatic damage to the device.
Toujours vérifier votre mise à la terre afin que l'équipement ne se décharge pas sur vous.

Special Conditions of Use

- Subject device has been evaluated to the enclosure requirements for Ingress Protection IP65 in accordance with EN 60079-15. All external connections must be Ex certified with minimum IP65 degree of protection. Suitability of wiring must be determined in end-use applications. Box cover does not have an IP rating.
- The equipment shall only be used in an area of not more than pollution degree 2, as defined in EN 60664-1.
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.

General Guideline

It is recommended to reboot the device when some functions are defect or inactive. If it still can't solve the problems, please contact your dealer or agent.

Important Information

Federal Communications Commission Radio Frequency Interface Statement

This device complies with part 15 FCC rules.
Operation is subject to the following two conditions:

- This device may not cause harmful interference.
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class "B" 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 him own expense.

EC Declaration of Conformity

This equipment is in conformity with the requirement of the following EU legislations and harmonized standards. Product also complies with the Council directions.

Certifications and Standards

Agency Standard for Marking	Description
II 3 G Ex ic nA IIC Gc	Certification with ATEX Directive 94/9/EC; Independent 3rd party assessment (Notified Body: DEMKO) DEMKO 14 ATEX 1319472U EN 60079-0: 2012 / EditionEN 60079-11: 2012 / Edition EN 60079-15: 2010 Edition
EX nA IIC T4 Gc	Independent 3rd party assessment IECEx UL 17.0030X IEC 60079-0:2011, 6th Edition IEC 60079-15:2010, 4th Edition
N. A. Safety for Information Technology Equipment	Certification by Underwriter's Laboratories to UL60950-1, 2nd Edition standard and equivalent CSA C22.2 No 60950-1-07, 2nd Edition Standard

Agency Standard for Marking	Description
I.T.E. FOR USE IN HAZ.LOC. E361897 **N. A. Safety for Hazardous Locations Class I, Div. 2, Groups A, B, C, D, T4**	Certification by Underwriter's Laboratories to ANSI/ISA-12.12.01 -2012 standard and equivalent CAN/CSA C22.2 No 213-M1987 Standard
CE	Self-Declaration in accordance with European LVD Directive 2006/95/EC; Independent 3rd party assessment (Accredited by IEC 17025)
CE	Self-Declaration in accordance with EMC Directive 2004/108/EC; Independent 3rd party assessment (Accredited by IEC 17025)

About This User Manual

This User Manual provides information about using the Winmate® 15-inch IP65 Stainless ATEX Display, which includes a detailed description of how to use the display, its components, and features.

NOTE:
Some pictures in this guide are samples and can differ from the actual product.

Chapter 1: Introduction

This chapter gives you product overview, describes features and hardware specification. You will find all accessories that come with the device in the packing list. Mechanical dimensions and drawings included in this chapter.

1.1 Overview

15-inch Stainless ATEX Display has a footprint of 15.6 x 12.2 inches and is less than two inches thick. The sturdy stainless-steel housing has anti-corrosion protection and carries an IP65/NEMA4 sealing rating, meaning that it's completely protected against dust, and also protected against low pressure water jets from all directions. The very wide -4 to 122 °F operating temperature range means the panel can be deployed almost anywhere.

This device is suitable for deployment in certain hazardous locations where flammable substance may be present. Specifically, the device is certified for use in Class 1, Division 2, Groups A through D (i.e., Acetylene, Hydrogen, Ethylene, and Propane) classified areas and surface temperatures not exceeding 275 °F (135 °C) in the US market, and ATEX Gas Zone 2 Classified areas in European and other markets.

1.2 Product Features

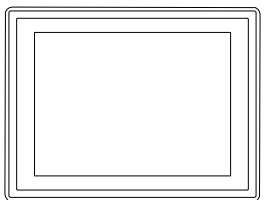
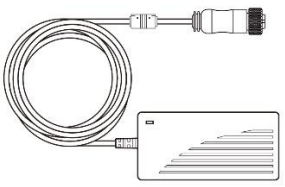
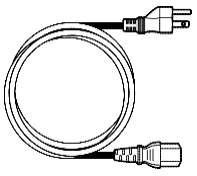
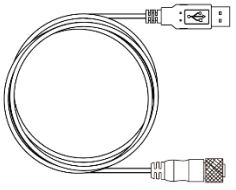
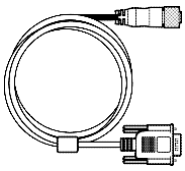
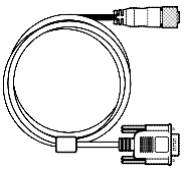
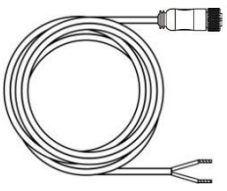
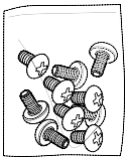
15-inch Stainless Flat Touch Screen Series Display offers the following features:

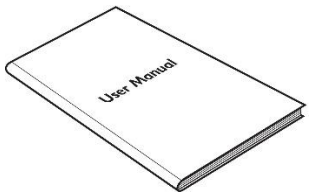
- ATEX Zone 2 certified for hazardous area applications and suitable for use in Class I, Division 2
- Wide power input 9-36V DC with isolation protection
- Special IP65 M12 type connectors with cover plate
- NEMA 4 (IP65) dust proof and water protection
- Resistive touch screen (Explosion-proof, bonding with Panel)

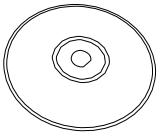
1.3 Packing List

Carefully remove the box and unpack your device. Please check if all the items listed below are inside your package. If any of these items are missing or damaged contact us immediately.

Standard factory shipment list:

			
Display	**AC to DC adapter**	**Power Cord**	**USB Cable (for touch)**
			
RS232 remote control cable	**VGA Cable**	**Power cable (open wire)**	**VESA Mounting Screws**

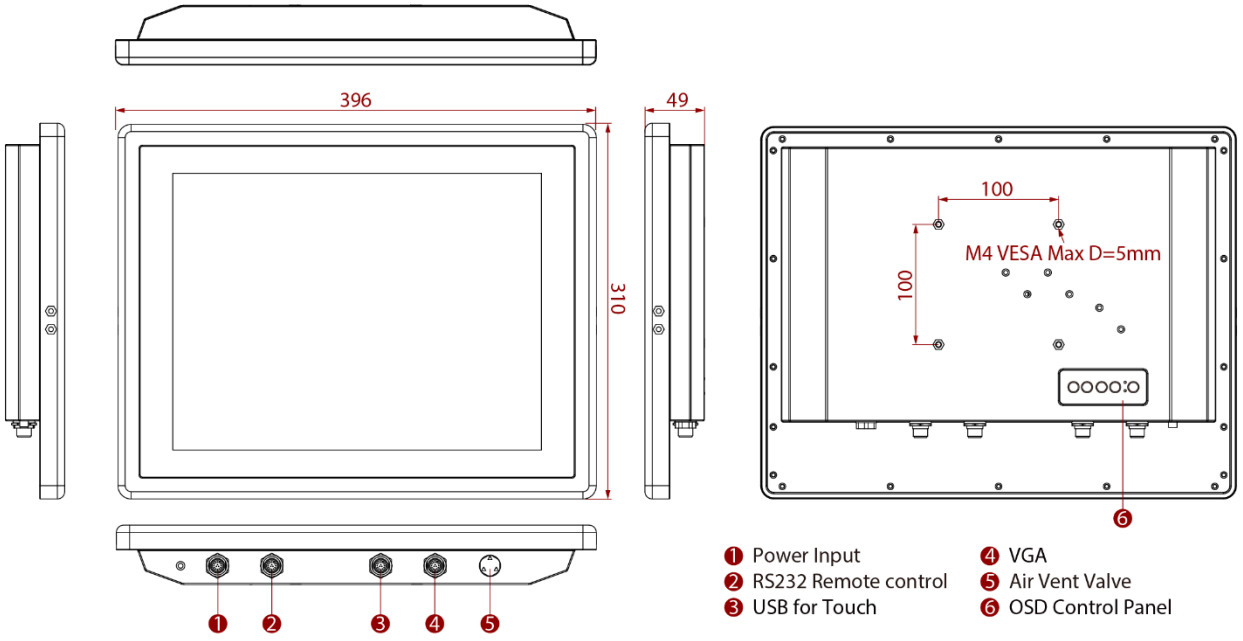




User's Manual	Touch Driver CD

1.4 Mechanical Dimensions

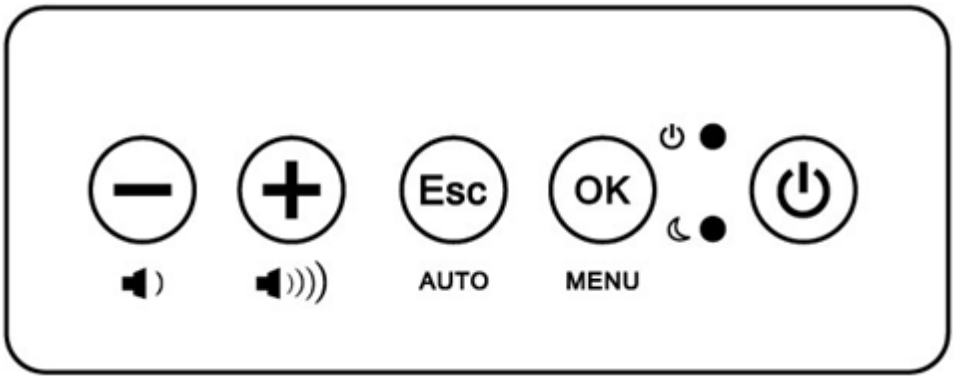
Unit: mm



1. Power Input
2. RS232 Remote control
3. USB for Touch
4. VGA
5. Air Vent Valve
6. OSD Control Panel

1.5 Physical Buttons and LED Indicators

Physical buttons and LED indicators located on the rear side of the Display.



Physical Buttons

Icon	Button	Description
	Down/ Volume Down	Press to decrease the volume or volume down when without OSD menu.
	Up/ Volume Up	Press to increase the value or volume up when without OSD menu.
Esc AUTO	Esc/ AUTO	Press to exit the menu or auto adjustment when without OSD menu.
OK MENU	OK/ MENU	Press to confirm the action or to call main OSD menu.
	Power On/ Off	Press to power on or power off the device.

LED Indicators

LED Type	Status	Description
	Power Indicator	Light up in “Green” when the monitor turn on
	Stand by Indicator	Lights up in “Orange” when the device cannot detect ant input source

1.6 Hazardous Locations

This equipment (R15L600-65EX) is primarily intended for use in Class I, Division 2 Groups A, B, C, and D; or non-hazardous locations only. It is suitable for use in oil, gas, and petrochemical manufacturing plants and locations where ignitable gases or vapor may be presented. This device is typically used for automation or control purposes.

WARNING! / AVERTISSEMENT!

1. Provision shall be made to provide transient protection device to be set at a level not exceeding 140% of the rated voltage at the power supply terminals of the apparatus.
   Une provision devra être faite pour fournir un appareil de protection des survoltages, a un niveau n'excédant pas 140% du voltage spécifié, au connecteur d'alimentation de l'appareil.

2. Explosion Hazard – Do not connect or disconnect the equipment unless power has been switched off or the area is known to be non-hazardous.
   Risque d'explosion – Ne pas brancher ou débrancher l'équipement a moins que l'alimentation ait été coupée ou que la zone ne soit pas explosive.

3. Explosion Hazard – Substitution of components may impair suitability for Class I, Division 2.
   Risque d'explosion – Si vous substituez des composantes vous pourriez affecter la certification Classe 1, Division 2.

4. The equipment should be adequately protected from direct light when installed indoor or outdoor.
   L'équipement doit être protégé adéquatement de la lumière directe lorsqu'il est installé à l'intérieur ou l'extérieur.

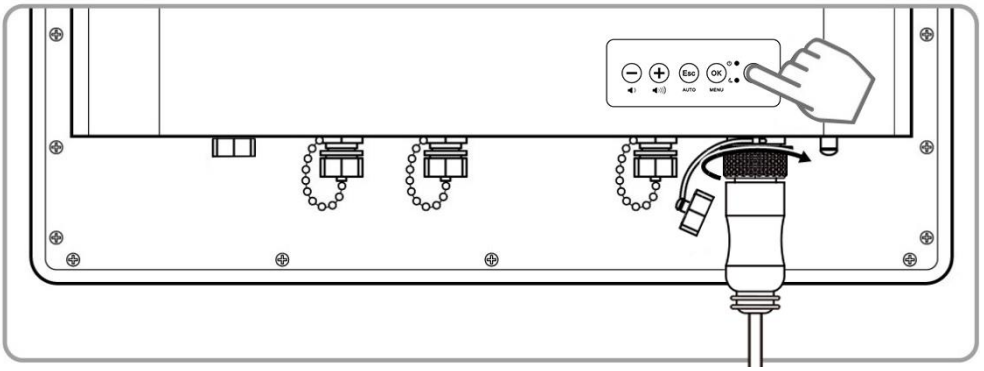
Chapter 2: Getting Started

This chapter provides information on how to connect the device to the source of power, connector pinouts, OSD menu navigation, and the guideline to turn on/off the Display.

2.1 Turning On and Off Your Device

IMPORTANT:
Power button is located under the enclosure on the rear side of the Display. In order to access it, you need to open the enclosure.

1. Remove the protective cap out of the DC IN Jack.
2. Plug the AC adapter to the DC-in jack of your device. Make sure the cable fits to the connector, then tighten the O-ring (by turning it clockwise) to secure the connection.



3. Connect the AC adapter to the power cord.
4. Plug the power cord to an electrical outlet.
5. Press the **Power** button to turn on and off the device.

2.2 OSD Menu Navigation

	BRICONTRAST	BRIGHTNESS CONTRAST	XII	GAMMA	GAMMA0 GAMMA1 GAMMA2
	POSITION	Only support VGA mode		CHANNEL	ANALOG
	IMAGE	Only support VGA mode		RECALL	YES NO
	COLOR	USER 9300K 6500K ADC RIGHTNESS	EXIT	OSD EXIT	YES NO
OP	OPTION	VOLUME ADJUST SPEAK ON/OFF			

BRICONTRAST

OSD icon	Sub menu	Settings	Note
BRICONTRAST	**BRIGHTNESS**	**slider bar**	Default 50
	Use to adjust the screen's brightness. Range 0 to 100		
	CONTRAST	**slider bar**	Default 50
	Use to adjust the screen's contrast. Range 0 to 100		

POSITION (VGA mode only)

OSD icon	Sub menu	Settings	Note
POSITION	**H POSITION**	**slider bar**	
	Use to adjust the image to the left or right on the screen		
	V POSITION	**slider bar**	
	Use to adjust the image up or down on the screen		

IMAGE (VGA mode only)

OSD icon	Sub menu	Settings	Note
IMAGE	**AUTO**	**Select and execute**	
	Use to choose the best settings for the current input signal		
	CLOCK	**slider bar**	Default 50
	Use to adjust the value of horizontal image. Range 0 to 100		
	PAHSE	**slider bar**	Default 50
	Use to adjust the phase control (Phase adjustment may be required to optimize the display quality)		
	WHITE BALANCE	**Select and execute**	
	Use to set RGB signal voltage level		

COLOR

OSD icon	Sub menu	Settings	Note
 COLOR	**USER**	**R.G.B slider bar**	
	Choose RED/GREEN/BLUE to set value of color temperature brightness to suit you own preference		
	9300K	**Select and execute**	
	Use to set value of monitor for the CIE coordinate 9300 color temperature		
	6500K	**Select and execute**	
	Use to set value of monitor for the CIE coordinate 6500 color temperature		
	ADC RIGHTNESS	**slider bar**	Default 50
	Set value of monitor for ADC Brightness. Range 0 to 100		

GAMMA

OSD icon	Sub menu	Settings	Note
XII GAMMA	**GAMMA 0**	**Select and execute**	Default GAMMA0
	Choose the parameter of GAMMA 0 as default setting.		
	GAMMA 1	**Select and execute**	
	Choose the parameter of GAMMA 1 as default setting.		
	GAMMA 2	**Select and execute**	
	Choose the parameter of GAMMA 2 as default setting.		

OPTION

OSD icon	Sub menu	Settings	Note
OP OPTION	**Volume**	**slider bar**	Default ON
	Use to set value of Volume		
	Speaker	**ON/OFF**	Default OFF
	Use to set value of Volume Speaker		

CHANNEL

OSD icon	Sub menu	Settings	Note
 CHANNEL	**ANALOG**	**Select and execute**	
	Switch the setting of signal input to Analog mode		

RECALL

OSD icon	Sub menu	Settings	Note
 RECALL	**YES**	**Select and execute**	
	Recall the factory default setting		
	NO	**Select and execute**	
	Return to main menu		

EXIT

OSD icon	Sub menu	Settings	Note
 EXIT	**YES**	**Select and execute**	
	Exit the OSD menu		
	NO	**Select and execute**	
	Return to main menu		

2.3 Connectors

2.3.1 Wiring Requirements

The following common safety precautions should be observed before installing any electronic device:

- Strive to use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must cross make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to interface. The rule of thumb is that wiring that shares similar electrical characteristics may be bundled together.
- Do not bundle input wiring with output wiring. Keep them separate.
- When necessary, it is strongly advised that you label wiring to all devices in the system.

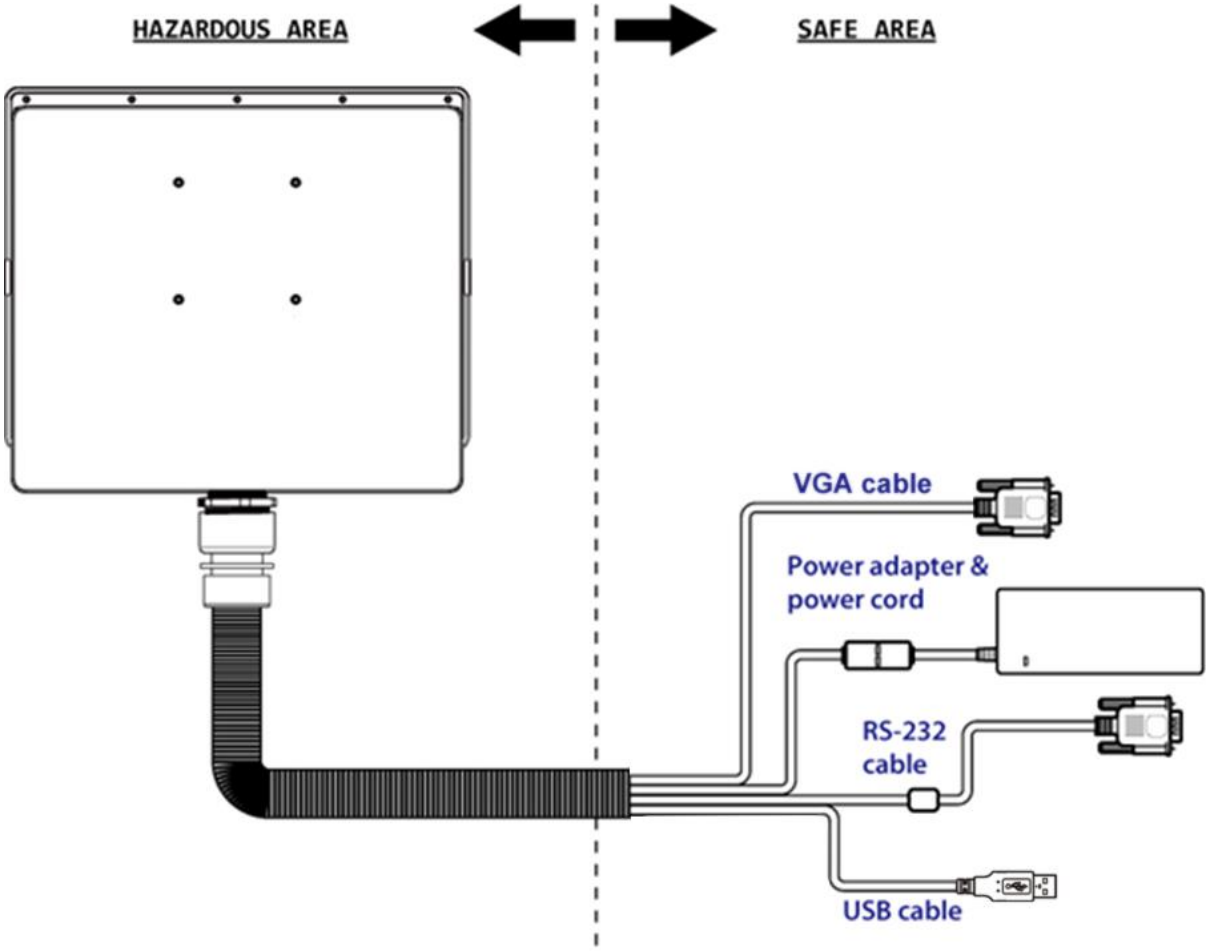
CAUTION/ATTENTION

- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the maximum possible current for each wire gauge, especially for the power cords. Observe all electrical codes dictating the maximum current allowable for each wire gauge.
- If the current goes above the maximum ratings (80 W), the wiring could overheat, causing serious damage to your equipment.
- Be careful when handling the unit. When the unit is plugged in, the internal components generate a lot of heat which may lead the outer casing too hot to touch.

2.3.2 ATEX Zone 2 Workstation

The connector cables are located under the enclosure (optional accessory). You need to connect wires first (refer to Chapter 1.4 to find the connector placement), install the pipe, insert the wires into the pipe opening, and then secure the cover box to the Display.

Hazardous and safe areas

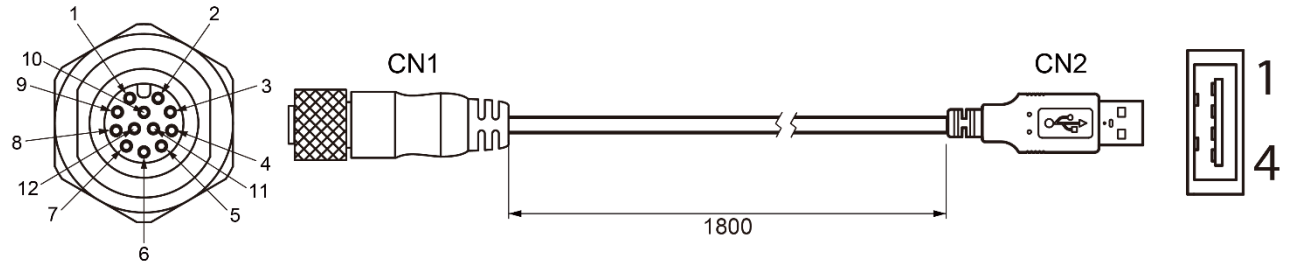


2.3.3 Connector Pinouts

This Display is equipped with four connectors which are IP65 level and fool-proofing design. Use only the cables that are included in the package. The pin assignments of the cables are as follows:

IMPORTANT:
Minimum input cables size is 18AWG,
Minimum temperature rating of the cables is 105°C.

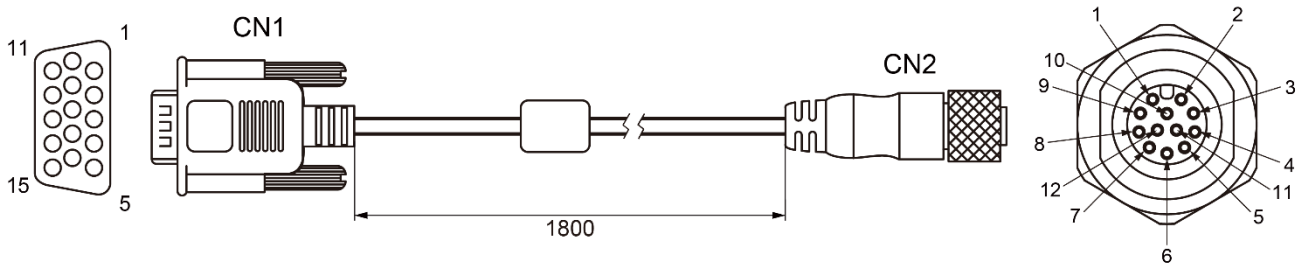
2.3.3.1 USB Cable (For Touch)



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-2	VCC	Red	⟷	CN2-1	VCC	Red
CN1-3	D-	White	⟷	CN2-2	D-	White
CN1-4	D+	Green	⟷	CN2-3	D+	Green
CN1-5	GND	Black	⟷	CN2-4	GND	Black
CN1-9	GND	Black	⟷	CN2 Shell		Black

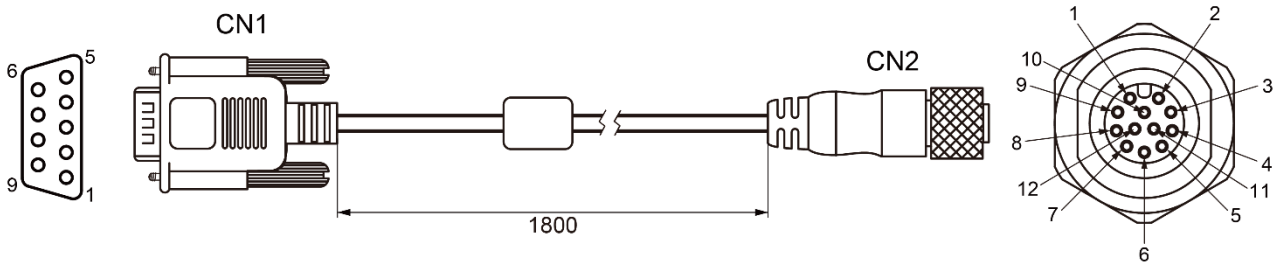
twisted pairs

2.3.3.2 VGA Cable



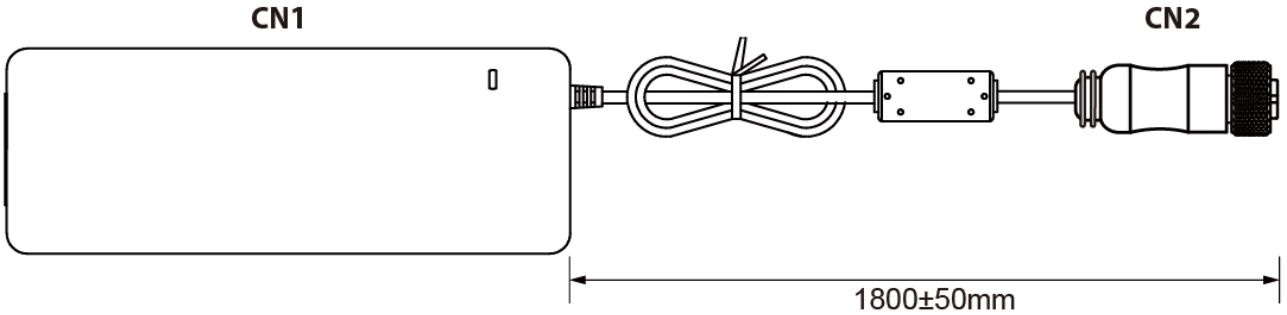
Pin No.	Symbols	Color		Pin No.	Symbols	Color	
CN1-1	R	Red	⟷	CN2-1	R	Red	coaxial
CN1-6	R-GND	Black	⟷	CN2-2	R-GND	Black	
CN1-2	G	Green	⟷	CN2-3	G	Green	coaxial
CN1-7	G-GND	Black	⟷	CN2-4	G-GND	Black	
CN1-3	B	Blue	⟷	CN2-5	B	Blue	coaxial
CN1-8	B-GND	Black	⟷	CN2-6	B-GND	Black	
CN1-12	SDA	Yellow	⟷	CN2-7	SDA	Yellow	
CN1-13	HS	Orange	⟷	CN2-8	HS	Orange	
CN1-14	VS	White	⟷	CN2-9	VS	White	
CN1-15	SCL	Brown	⟷	CN2-10	SCL	Brown	

2.3.3.3 RS-232 Cable (For Remote Control)



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	DCD-CON2	Green	⟷	CN2-1	DCD-CON2	Green
CN1-6	DSR-CON2	Brown	⟷	CN2-2	DSR-CON2	Brown
CN1-2	RXD-CON2	Red	⟷	CN2-3	RXD-CON2	Red
CN1-7	RTS-CON2	Orange	⟷	CN2-4	RTS-CON2	Orange
CN1-3	TXD-CON2	Blue	⟷	CN2-5	TXD-CON2	Blue
CN1-8	CTS-CON2	White	⟷	CN2-6	CTS-CON2	White
CN1-4	DTR-CON2	Purple	⟷	CN2-7	DTR-CON2	Purple
CN1-9	RI-CON2	Yellow	⟷	CN2-8	RI-CON2	Yellow
CN1-5	GND-CON2	Black	⟷	CN2-9	GND-CON2	Black

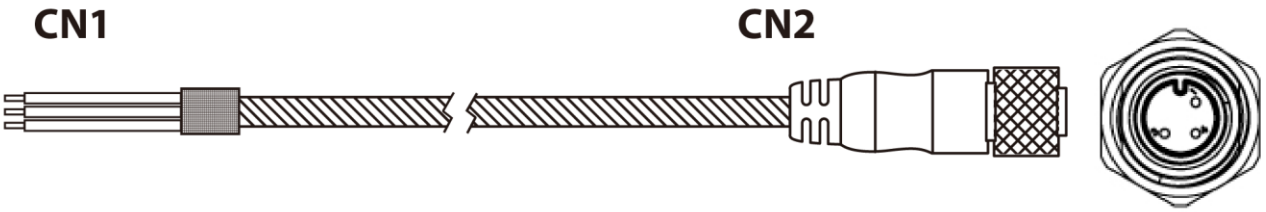
2.3.3.4 Power Adapter



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	V+	NO ASSIGN	⟷	CN2-1	V+	Flow Adapter
CN1-2	GND	NO ASSIGN	⟷	CN2-2	GND	Flow Adapter
			⟷	CN2-3	V–	Flow Adapter

NOTE:
The adapter is certified by UL, CUL TUV/GS CE, FCC, BSMI, EK, DOIR+C-TICK, CCC, PSE.

2.3.3.5 DC Power Cable (Open Wire)



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VCC+	White	⟷	CN2-1	VCC+	White
CN1-2	GND	Green	⟷	CN2-2	GND	Green
CN1-3	VCC-	Black	⟷	CN2-3	VCC-	Black

WARNING! / AVERTISSEMENT!

Ensure that the external power source is OFF before connecting or disconnecting the DC IN jack.

Assurez-vous que la source d'alimentation externe est coupée avant de brancher et de débrancher la prise DC IN.

Chapter 3: Installation

This chapter provides mounting guide for all available mounting options and hardware installation instructions. Pay attention to cautions and warning to avoid any damages.

3.1 Cable Mounting Considerations

For a nice look and safe installation, make sure cables are neatly hidden behind the Display. Refer to Chapter 2.3 for the cable installation instruction.

CAUTION / ATTENTION

Follow mounting instructions and use recommended mounting hardware to avoid the risk of injury.
Suivez les instructions de montage et d'utilisation recommandé le matériel de montage pour éviter le risque de blessure.

CAUTION / ATTENTION

Observe all local installation requirements for connection cable type and protection level.
Suivre tous les règlements locaux d'installations, de câblage et niveaux de protection.

CAUTION / ATTENTION

Turn off the device and disconnect other peripherals before installation.
Éteindre l'appareil et débrancher tous les périphériques avant l'installation.

ALTERNATING CURRENT / MISE À LE TERRE!

To prevent electrical shock, the Safety Ground location on the rear must be bonded to the local earth ground through a minimum 12 AWG wire as short as possible
Pour éviter les chocs électriques, l'emplacement de la prise terre à l'arrière doit être lié à terre locale, à travers un 12 AWG minimum et aussi court que possible.

3.2 Safety Precautions

Observe the following common safety precautions before installing the equipment:

- Use separate, non-intersecting paths to route power and networking wires. If power wiring and device wiring paths must be crossed make sure the wires are perpendicular at the intersection point.
- Keep the wires separated according to the interface. Wires that share similar electrical characteristics must be bundled together.
- Do not bundle input wiring with output wiring. Keep them separate.
- When necessary, it is strongly advised that you label wiring to all devices in the system.

3.3 Mounting Guide (Back Cover is an Optional Accessory)

The device comes with different mounting options suitable for most of the industrial and commercial applications. The main mounting approach is chassis – very user-friendly in terms of installation. Refer to sub-sections below for more details.

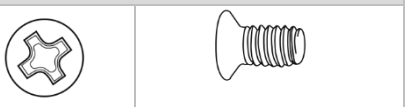
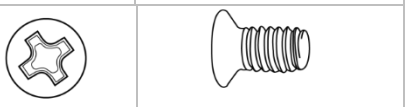
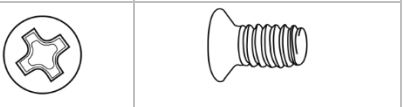
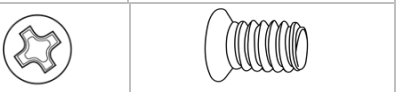
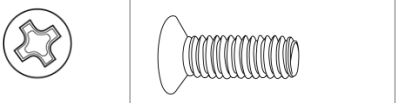
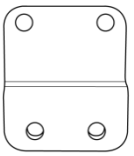
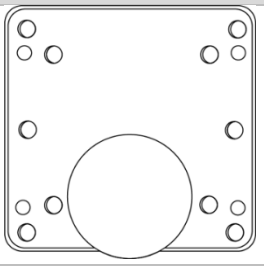
IMPORTANT:

Perform mounting after you establish all the necessary connections. Refer to Chapter 2.3 for wiring requirements and instructions.
The power button is located under the enclosure. Make sure the device is turned ON before it is mounted.

3.3.1 VESA Mount

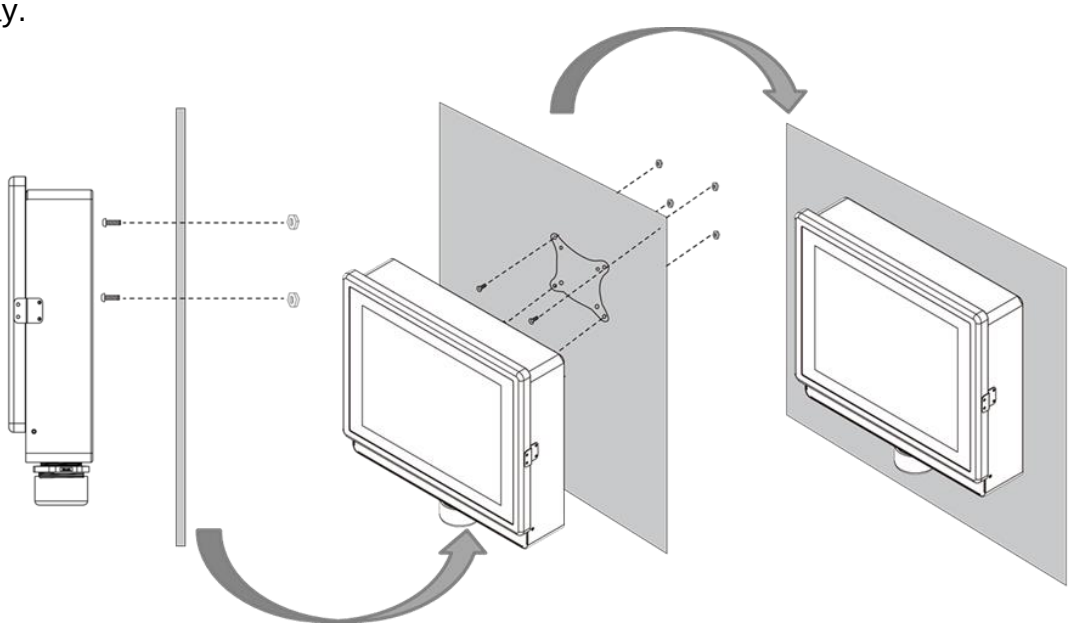
3.3.1.1 Wall Mount

Standalone Stainless Display comes with VESA Mount solution. Follow the instruction below to complete mounting.

Tools needed:				
	Size	**Where used**	**Quantity**	**Appearance**
Screw				
	M3x 6	Secure the metal plate to the bottom side	2	
		Secure the box cover on the top side	3	
		Secure the box cover on the bottom side	4	
	M4 x 6	Secure the metal plate on the box cover to the Panel CP (left and right sides)	8	
	M5 x 10	Secure VESA Plate to the enclosure of the Display	4	
Metal Nut				
	D=5 mm	Secure VESA Plate to the enclosure of the Display	4	
Metal Plate				
	34.8 x 30.8 x 6.7	Secure the enclosure (box) to the Pan el PC	2	
VESA Plate				
	100 x 100	Mount Display to the fixture	1	

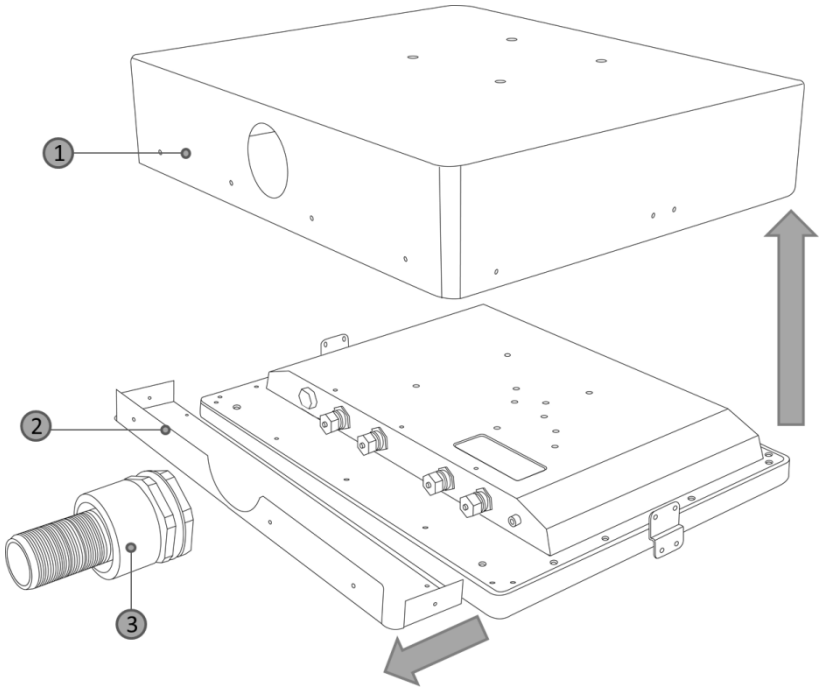
Mounting Steps:

Step 1 First, you need to open the enclosure (box cover) to install VESA Plate to the enclosure of the Display.



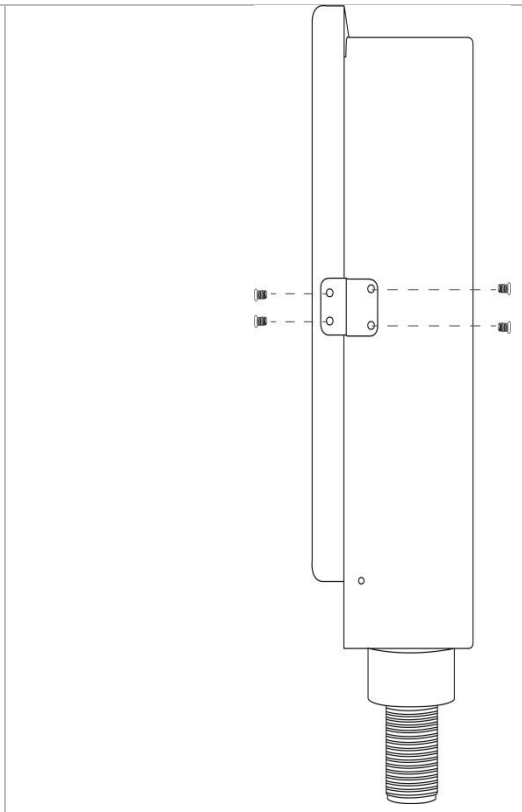
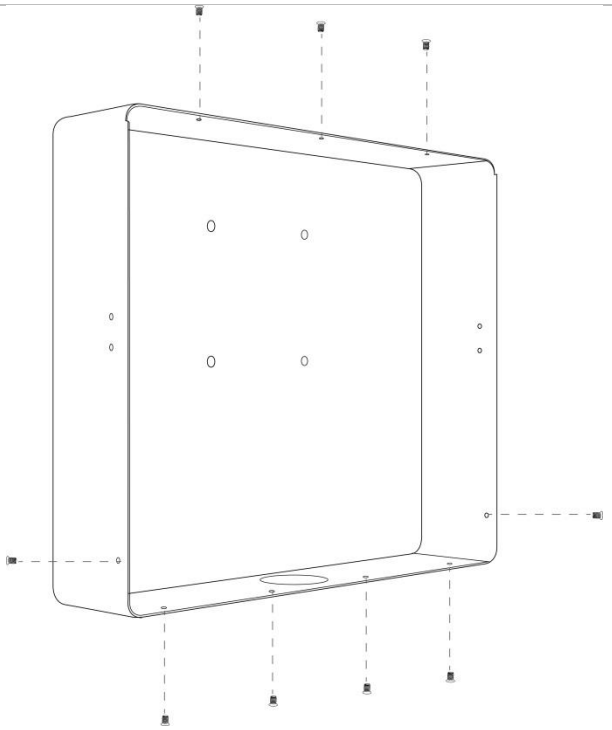
**with customer's bracket*

Exploded drawing:



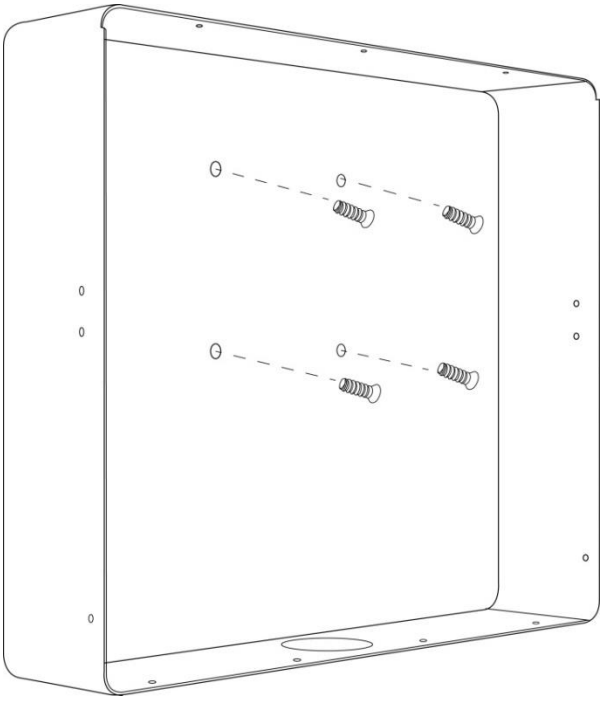
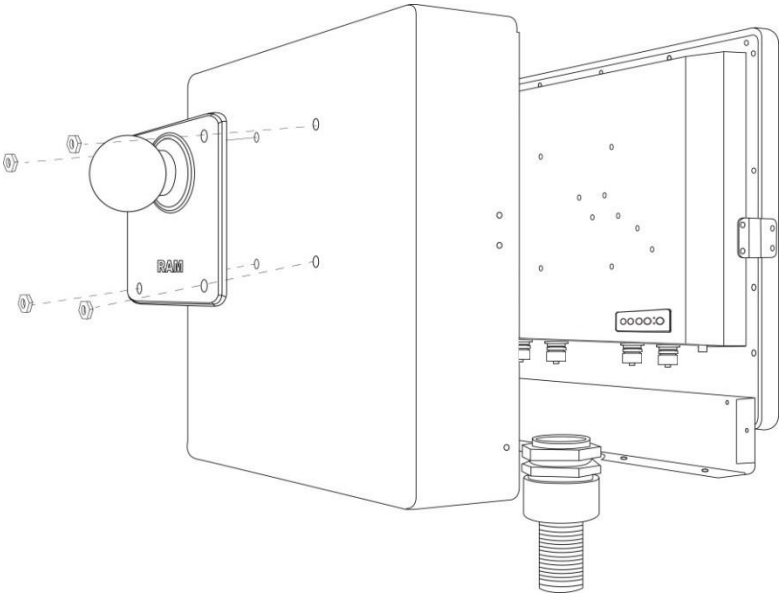
Item No.	Description
1	Top cover lid of the enclosure
2	Bottom cover plate of the enclosure
3	The conduit

To open the enclosure, follow the steps below:

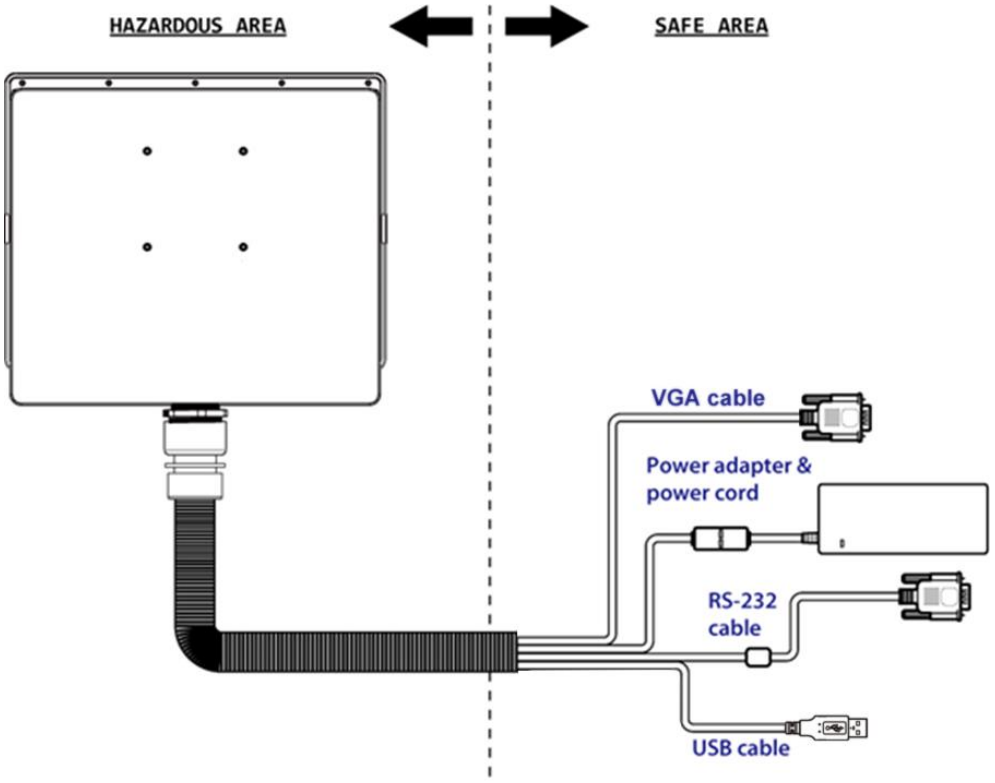
Description	Picture
1. Turn the Display face down.	
2. Loosen screws (M4 x 6) on two metal plates that secure enclosure to the Display from each side.	
3. Loosen the screws (M3 x 6) that secure box cover on both top (three screws) and bottom (four screws) sides, and loosen the screws (one on each side) that secure box cover on the left and right sides.	
Remove the box top cover	

Step 2 After you opened the box cover, install VESA plate to the enclosure.

To install VESA Plate, follow the steps below:

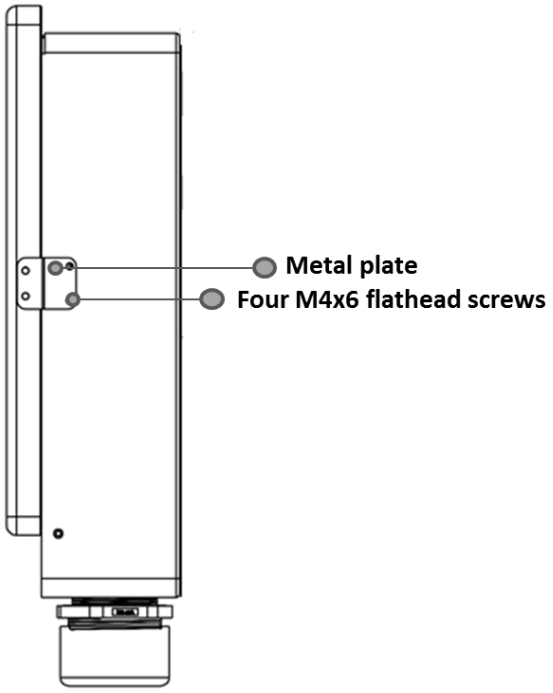
Description	Picture
1. Fasten four Philips M5x10 flathead screws from the inside of the box top cover.	
2. Secure the VESA plate from the outside with four metal nuts.	

Step 3 Align all the wires and insert into the pipe opening (refer to Chapter 2.3 for pipe installation instructions).



Step 4 Secure the cover box on both top (three screws) and bottom (four screws) sides with M3 x 6 Philips flathead screws, and fasten the screws (M3 x 6) that secure box cover on the left and right sides;

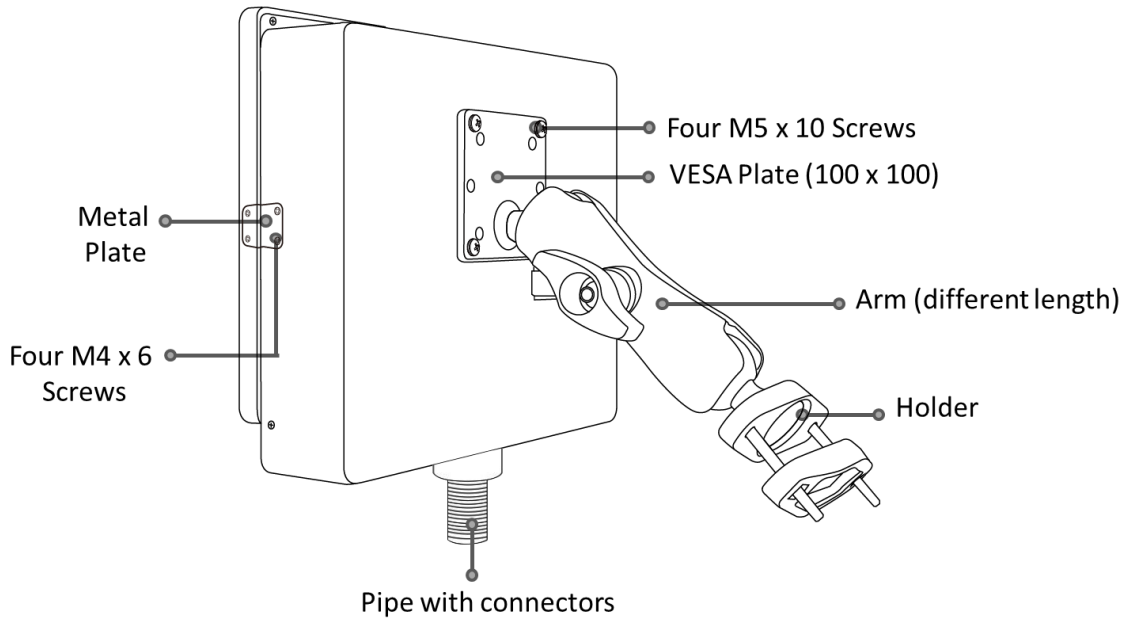
Step 5 Fasten four Phillips M4x6 flathead screws on metal plates on both sides to secure Display to the enclosure.



Step 6 Carefully mount the device to the fixture (for ex. wall).
Step 7 When the installation is complete; plug the power cord into a grounded AC outlet. Turn on the power.

3.3.1.2 Swing Arm

The device can be installed on a swing arm. You can purchase swing arm from RAM Mount.



NOTE:
You need to secure VESA Plate to the Display enclosure with four M5x10 screws from outside and fasten metal nuts from inside.

3.3.2 Panel Mount

Panel mount is a mounting solution suitable for mounting into an opening in a cabinet or enclosure. The unit is mounted from the front side and secured from the rear side. All user controls are located on the rear side making the panel mount suitable for applications that require no external or exposed interfaces on the front.

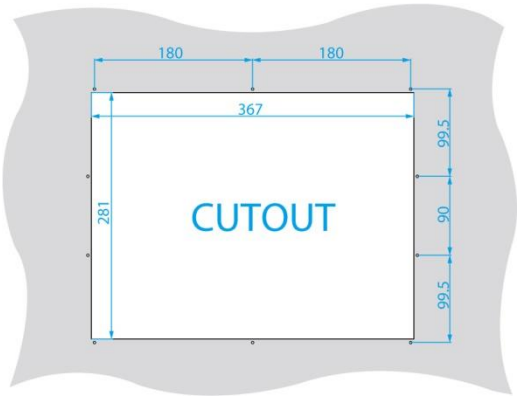
Tools required:

- 15 x M3 truss head screws, length 15 mm or 8 mm.
- Waterproof rubber.
- Screwdriver (not supplied by Winmate).

NOTE:
Choose screw length based on the thickness of your fixture.

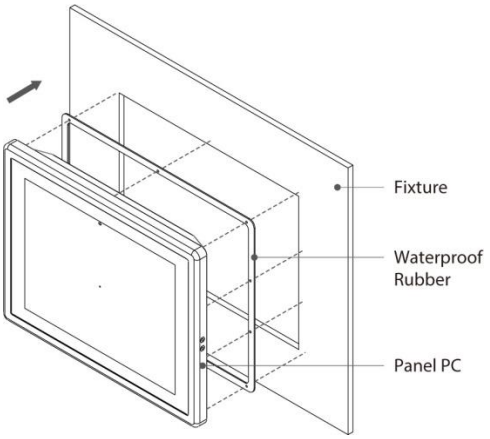
Installation instruction:

1. Make a cutout on the fixture (e.g., wall) according to the cutout dimension of the Display.

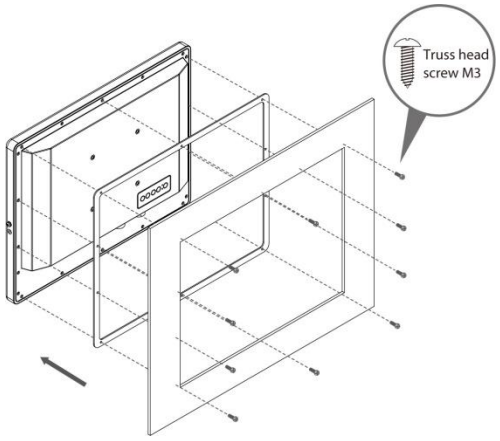


2. Place the Display and a waterproof rubber on the fixture from the front side. The sides of the bezel should be visible from outside.

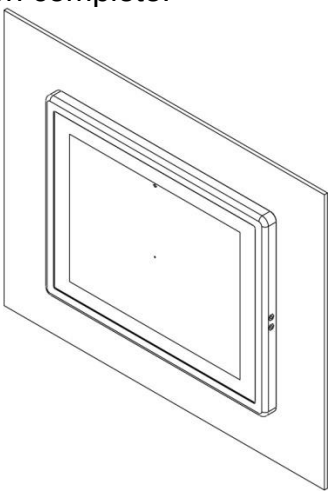
Note: *Perform installation from the rear side of the fixture.*



3. Fasten M3 truss head screws to fix the unit to the fixture from the rear side.



4. Installation complete.



Chapter 4: Maintenance

This chapter provides information on regular cleaning and maintenance procedures. Follow all the recommendations included in this chapter in order to ensure long product lifecycle.

4.1 Cleaning the Display Screen

- Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles. Do not use acetone, ethyl alcohol, toluene, ethyl acid or methyl chloride to clear the panel. It may permanently damage the display screen.
- You can apply a small amount of non-ammonia; non-alcohol based glass cleaner onto a clean, soft, lint-free cloth and wipe the screen.
- Never spray or pour any liquid directly on the screen or case.
- **Do Not** use water or oil directly on the display screen. If droplets are allowed to drop on the screen, permanent staining or discoloration may occur.

4.2 Cleaning the Casing

Use the following procedure to clean the equipment.

CAUTION / ATTENTION
Always turn off the device and disconnect other peripherals before cleaning and maintenance procedures.
Toujours éteindre l'appareil et débrancher tous les périphériques avant que les procédures de nettoyage et d'entretien.

Before Cleaning:

- Make sure the device is turned off.
- Disconnect the power cable from any AC outlet.

When Cleaning:

- Wipe dust off the outside casing with a cloth slightly moistened with water or mild ammonia-based cleaning solution. Do not use this cloth on a display screen!
- Do not use an abrasive cleaner or high-pressure washer on the screen.
- Do not rub the unit with a dry cloth. This action can result in a static charge being built up and cause a spark. Always use damp cloth while cleaning the unit.

WARNING! / AVERTISSEMENT!
POTENTIAL ELECTROSTATIC CHARGE HAZARD – SEE INSTRUCTIONS
POTENTIEL ÉLECTROSTATIQUE CHARGE DANGER - VOIR INSTRUCTIONS

Appendix

Appendix A: Product Specifications

Model Name	R15L600-65EX
Item	**Specifications**
Display:	
Panel Size	15-inch
Resolution	1024 x 768
Brightness	550 nits 1000 nits (Optional)
Contrast Ratio	2000:1 (typ.)
View Angles	88,88,88,88
Touch	Resistive touch screen bonding with panel (explosion-proof)
Display Color	16.2M Colors
Active Area	304.1 x 228.1 mm
Input/ Output Ports	
COM	1 x M12 type connector for Touch 1 x M12 type connector for RS232 remote control (Optional)
USB	1 x M12 type connector for Touchscreen
Video	1 x M12 type connector for VGA input
Power	1 x 9~36 V DC, M12 Type connector
Control and Indicator	
Button	1 x Power 1 x Adjust up 1 x Adjust down 1 x ESC (Auto) 1 x OK (Menu)
Indicator	1 x LED Indicator for power 1 x LED Indicator for standby mode
Environment Consideration:	
Operating Temperature	-20 to 50°C
Storage Temperature	-20 to 50°C
Operating Humidity	10 to 95% (non-condensing)
IP rating	IP65
Vibration	MIL-STD-810G Method 514.6
Shock	MIL-STD-810G Method 516.6
Drop	MIL-STD-810G Method 516.6
Standards and Certifications:	
Safety	UL60950-1, CSA C22.2 No. 60950-1-07, EN 62368-1, IEC60950-1, CE, FCC
Hazardous Locations	ATEX Zone 2 EX II 3 G Ex ic nA IIC Gc, UL Class I, Div.2, Groups ABCD T4 ANSI/ISA12.12.01 CAN/CSA C22.2 No. 213M1987

Accessories:	
	100~240V AC to DC Power Adapter with M12 Connector Power Cord M12 Type Power Cable M12 Type RS232 Male Cable for remote control M12 Type USB Male Cable for Touch M12 Type VGA Cable Touch Driver CD VESA screws M12 Type RS232 Male Cable for touch screen control (Optional)

NOTE

1. Accessories and Integrated Options may vary depending on your configuration.
2. The product shown in this user manual is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.

Appendix B: Remote Control Set Command

NO.	Function	Length	Command	index	Value	Checksum(*1)
1	Power	0x05	0x40	0x00	0= ON/OFF	0xBB= ON/OFF
2	Auto	0x05	0x40	0x01	0=Auto	0xBA=Auto
3	Recall	0x05	0x40	0x02	0=Recall	0xB9=Recall
4	White Balance	0x05	0x40	0x03	0=White Balance	0xB8=White Balance
5	Main Input Source	0x05	0x40	0x04	0=VGA	0xB7=VGA
6	Brightness	0x05	0x40	0x10	0x00~0x64	0xAB=00 ~ 0x47=100
7	Contrast	0x05	0x40	0x11	0x00~0x64	0xAA=00 ~ 0x46=100
8	ADC Brightness	0x05	0x40	0x14	0x00~0x64	0xA7=00 ~ 0x43=100
9	Gamma	0x05	0x40	0x31	0=Gamma 0 1=Gamma 1 2=Gamma 2	0x8A=Gamma 0 0x89=Gamma 1 0x88=Gamma 2
10	Color Temp	0x05	0x40	0x32	0=user 1=9300K 2=6500K	0x89=User 0x88=9300K 0x87=6500K
11	Color-R	0x05	0x40	0x33	0x00-0x64	0x88=00 ~ 0x24=100
12	Color-G	0x05	0x40	0x34	0x00-0x64	0x87=00 ~ 0x23=100
13	Color-B	0x05	0x40	0x35	0x00-0x64	0x86=00 ~ 0x22=100

Appendix C: Remote Control Get Command

Command (Tx)					Acknowledgement (Rx)			
Function	Length	Command	index	Checksum (*1)	Length	index	Value	Checksum (*1)
Power	0x04	0x30	0x00	0xCC	0x04	0x00	0=ON 1=OFF	0xFC=ON 0xFB=OFF
Main Input Source	0x04	0x30	0x04	0xC8	0x04	0x04	0=VGA	0xF8=VGA
Brightness	0x04	0x30	0x10	0xBC	0x04	0x10	0x00-0x64	0xEC=0 ~ 0x88=100
Contrast	0x04	0x30	0x11	0xBB	0x04	0x11	0x00-0x64	0xEB=0 ~ 0x87=100
ADC Brightness	0x04	0x30	0x14	0xB8	0x04	0x14	0x00~0x64	0xE8=0 ~ 0x84=100
Gamma	0x04	0x30	0x31	0x9B	0x04	0x31	0=Gamma 0 1=Gamma 1 2=Gamma 2	0xCB=Gamma 0 0xCA=Gamma 1 0xC9=Gamma 2
Color Temp	0x04	0x30	0x32	0x9A	0x04	0x32	0= user 1=9300K 2=6500K	0xCA=user 0xC9=9300k 0xC8=6500k
Color-R	0x04	0x30	0x33	0x99	0x04	0x33	0x00-0x64	0xC9=0 ~ 0x65=100
Color-G	0x04	0x30	0x34	0x98	0x04	0x34	0x00-0x64	0xC8=0 ~ 0x64=100
Color-B	0x04	0x30	0x35	0x97	0x04	0x35	0x00-0x64	0xC7=0 ~ 0x63=100

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