

PoE Touch Monitor

10.1~15.6”



Model No. W10L100-PCH1-PoE
W10L100-PCH2-PoE
R10L100-PCT2-PoE
R12L100-PCM2-PoE
R15L600-PTC3-PoE
W15L100-PTA3-POE

User Manual

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Preface

Copyright Notice

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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 1W16Axxxxxxx means October of year 2016.

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
- 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 '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 choc sur des emplacements électriques et comment éviter ces problèmes.



Alternating Current / Mise à la 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 risque potentiel 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 châssis lorsque vous travaillez sur celui-ci. Ne pas brancher de connexions lorsque l'alimentation est présente. Des composants électroniques sensibles peuvent être endommagés par des sauts d'alimentation. Seulement du personnel expérimenté devrait ouvrir ces châssis.



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 vérifier 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. Keep this user manual for future reference.

- Always disconnect this equipment from any AC outlet before cleaning. Do not use liquid or spray detergents for cleaning. Use a damp cloth.
- For pluggable equipment, the power outlet must be installed near the equipment and must be easily accessible.
- Keep this equipment away from humidity.
- Put this equipment on a reliable surface during installation. Dropping it or letting it fall could cause damage.
- The openings on the enclosure are for air convection and to protect the equipment from overheating.
- Before connecting the equipment to the power outlet make sure the voltage of the power source is correct.
- Position the power cord so that people cannot step on it. Do not place anything over the power cord.
- If the equipment is not used for a long time, disconnect it from the power source to avoid damage by transient over-voltage.
- Never pour any liquid into an opening. This could cause fire or electrical shock.
- Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
- All cautions and warnings on the equipment should be noted.

Caution/ Attention

Always ground yourself to remove any static charge before touching the board. 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.

About This User Manual

This User Manual provides information about using the Winmate® PoE Touch Monitor. The documentation set provides information for specific user needs, and includes:

- **PoE Touch Monitor User Manual** – contains detailed description on how to use the display, its components and features.

Models

Size	Model Name
10.1"	W10L100-PCH1-PoE
10.1"	W10L100-PCH2-PoE
10.4"	R10L100-PCT2-PoE
12.1"	R12L100-PCM2-PoE
15"	R15L100-PTC3-POE
15.6"	W15L100-PTA3-POE



Note:

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

Document Revision History

Version	Date	Note
1.0	17-Oct-2018	New document release
1.1	24-Dec-2018	Add 15.6"W15L100-PTA3-POE.
1.2	3-Apr-2019	Revise accessories.
1.3	29-Jul-2020	Revise panel specifications of the R15L100-PTC3-POE

Chapter 1: Introduction

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

1.1 About PoE Touch Monitor

Congratulations on purchasing Winmate® PoE Touch Monitor. A new generation of P-Cap monitors with PoE (Power over Ethernet) function where electric power is transferred to the device through a single network cable, allowing for ease of installation without needing to re-wire electrical power.

1.2 Product Features

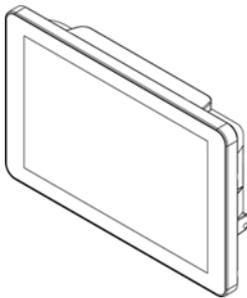
Winate® PoE Touch Monitor features:

- 10.1/ 10.4/ 12.1/ 15/ 15.6" LCD
- Projected capacitive multi-touch (P-Cap)
- Front IP65 water and dust proof
- VGA input and variety of optional connectors
- USB port for touch
- Stylish and elegant design
- Supports PoE

1.3 Package Overview

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

Your package may include items listed below based on your order:



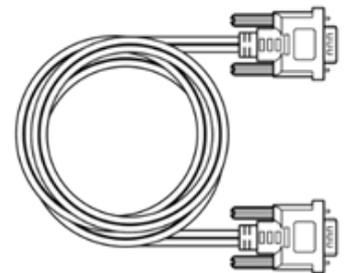
- **Touch Monitor**

Varies by product



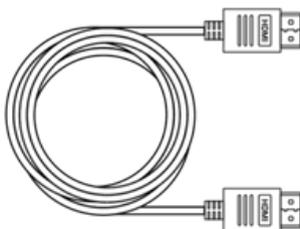
- **User Manual (Hardcopy)**

Part No. 915211101036



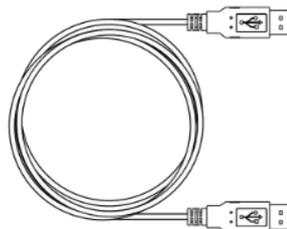
- **VGA Cable, 1.8m**

Part No. 9441151150Q7



- **HDMI Cable, 2m**

Part No. 94E0190190P3



- **USB Cable for Touch, 1.8m**

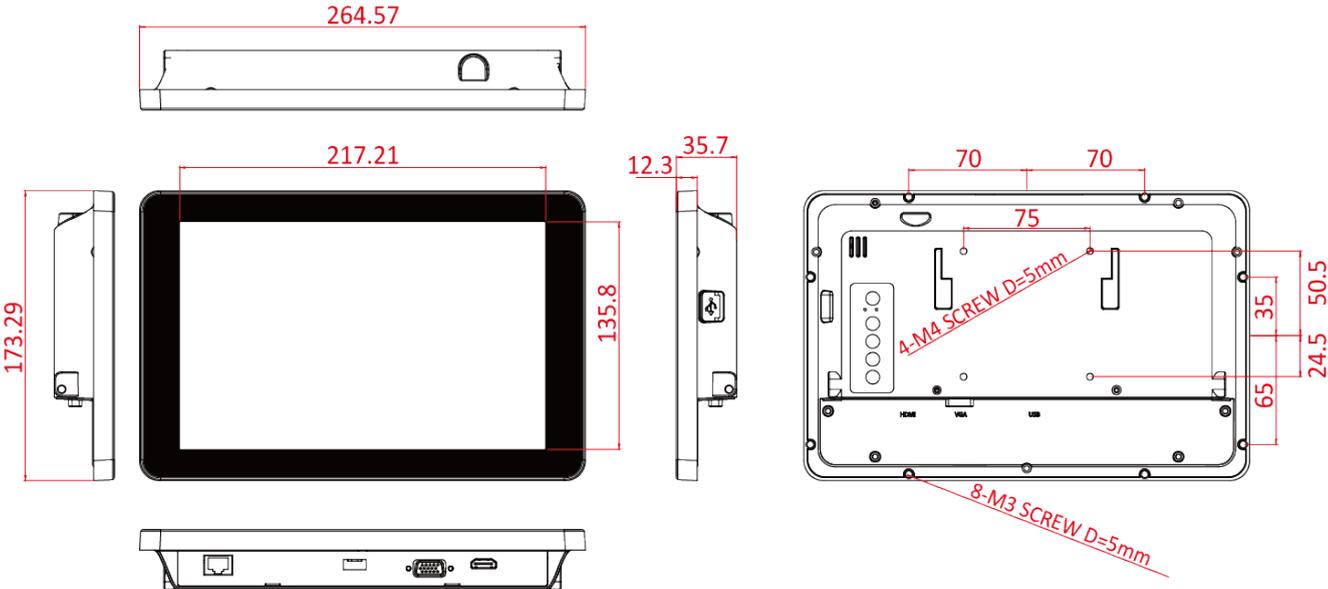
Part No. 948018102100

1.4 Product Overview

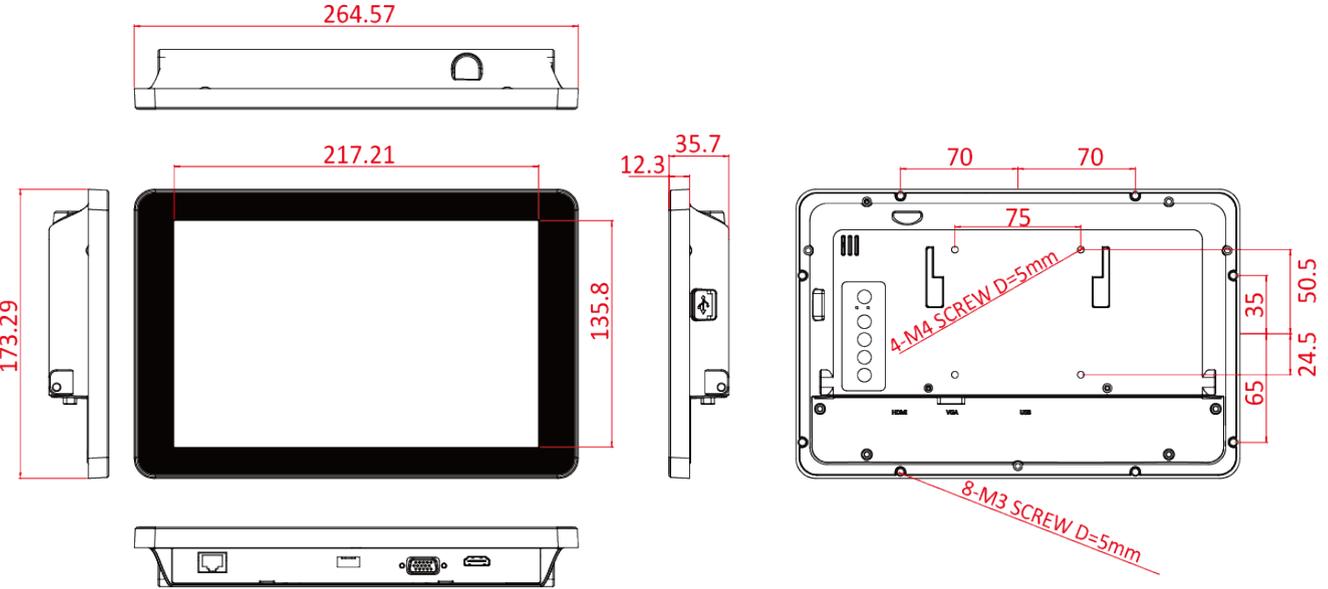
This section describes physical appearance of the PoE Touch Monitor.

All dimensions shown in mm.

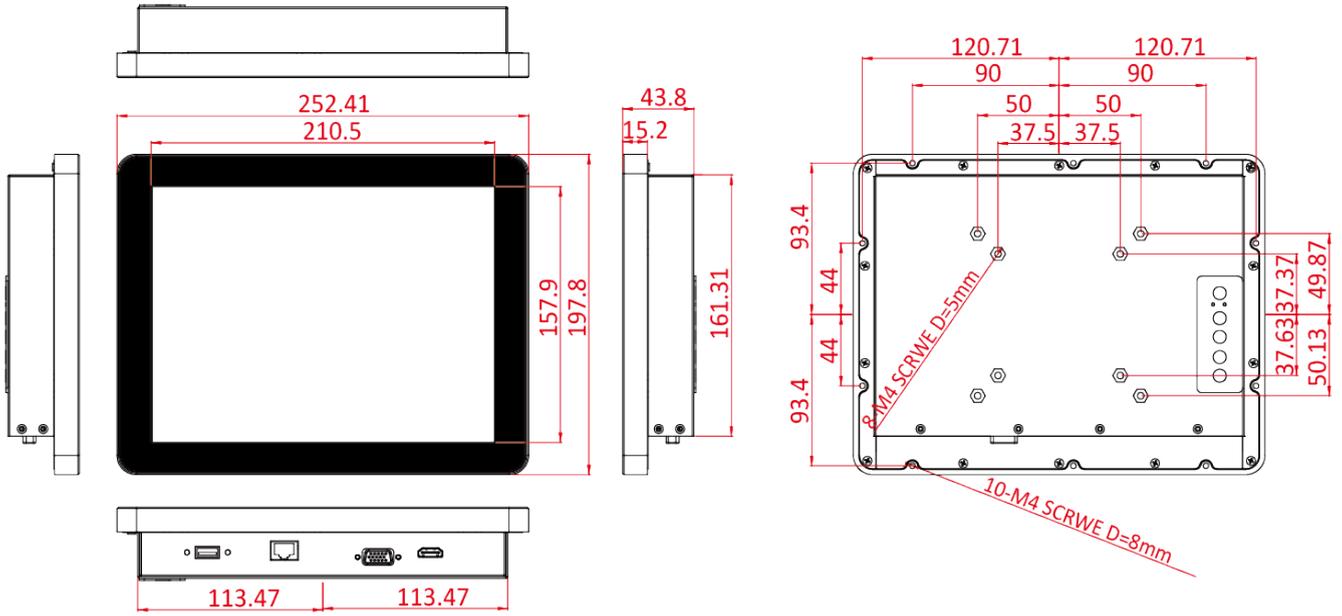
10.1", W10L100-PCH1-PoE



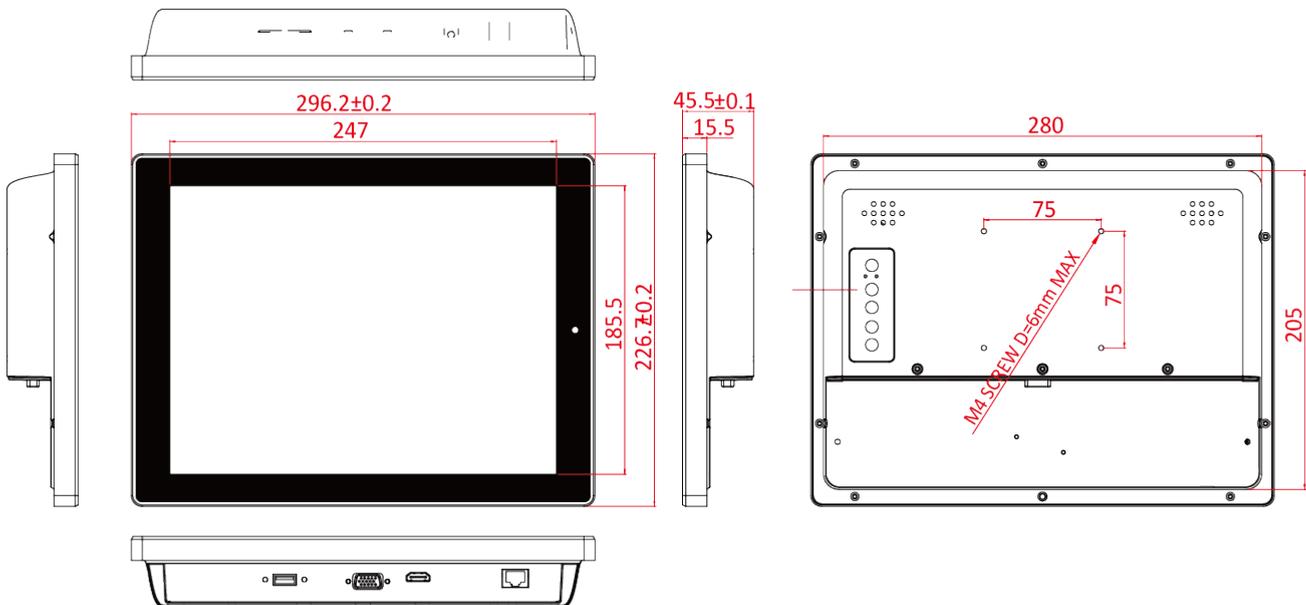
10.1", W10L100-PCH2-PoE



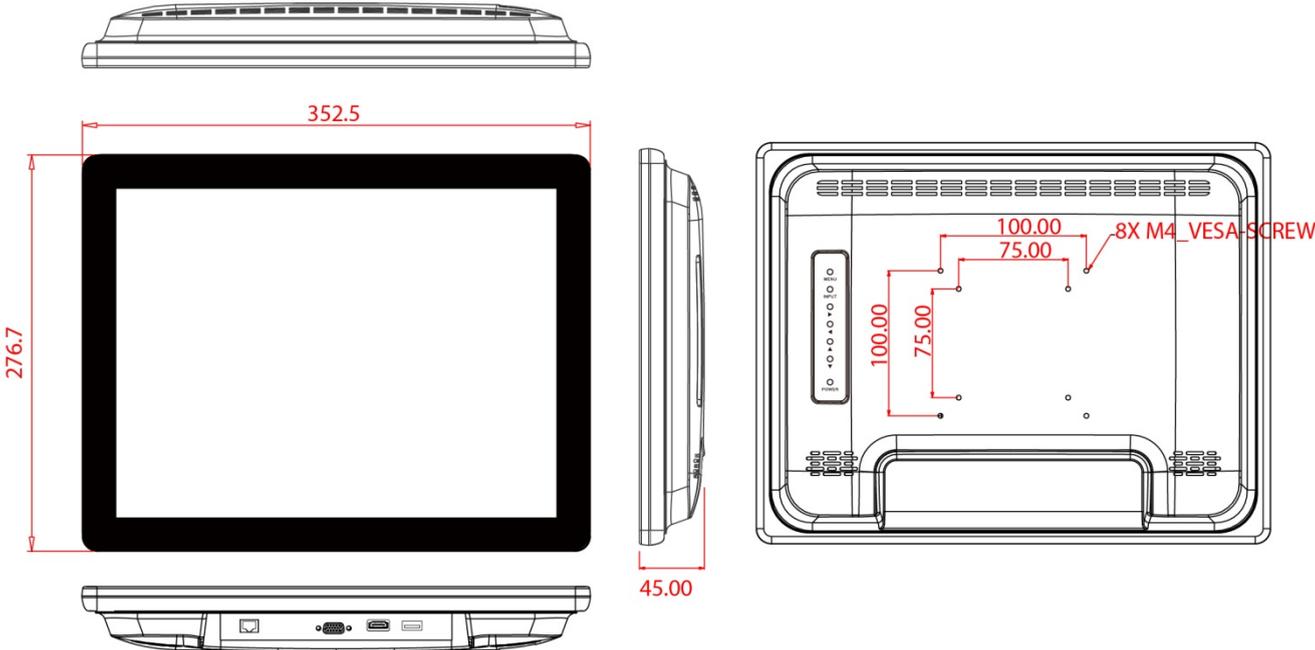
10.4", R10L100-PCT2-PoE



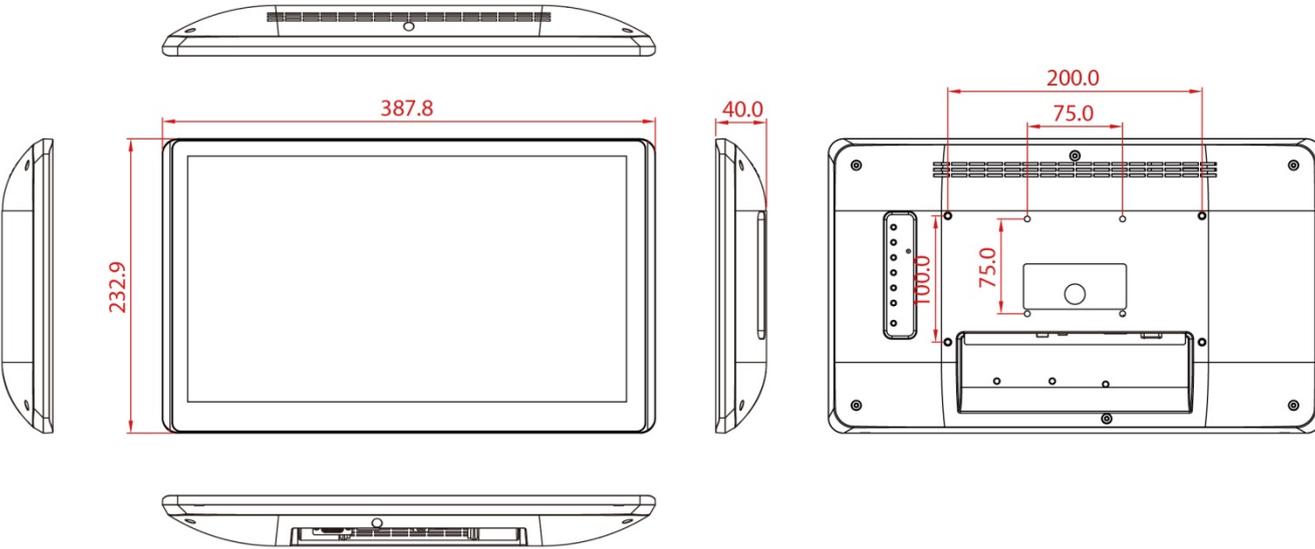
12.1", R12L100-PCM2-PoE



15", R15L100-PTC3-POE

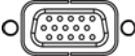


15.6", W15L100-PTA3-POE



1.5 External Connectors

Terminal interfaces are located on the bottom side of the display.

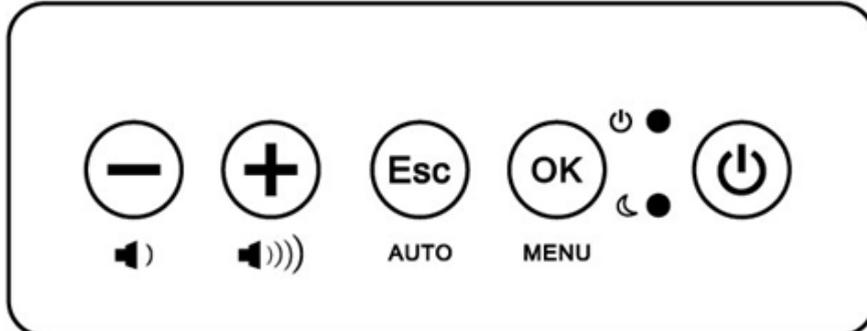
Item	Description
	PoE – Connects a monitor to PoE for power transmission in network equipment, via network UTP cable, together with data. PoE follows standard IEEE 802.3at (25 Watt).
	USB for Touch- For touch interface. <i>Example: Touch interface to PoE monitor.</i>
	VGA (RGB) –Transmits video from a PC to a monitor. <i>Example: An external HMI device to PoE monitor.</i>
	HMDI –. Transmits uncompressed video data and compressed or uncompressed digital audio data from a display. <i>Example: An external HMI device to PoE monitor</i>

1.6 Physical Buttons and LED Indicators

Physical buttons and LED indicators (OSD Control Panel) located on the rear side of the Display.

Type A (For 10.1", 10.4", 12.1", 15")

OSD Panel



Physical Buttons



DOWN-Press to lower down the volume.



UP- Press to increase the volume.



ESC/ AUTO- Press to exit the menu.



OK/ MENU- Press to confirm the action or to call main OSD menu.



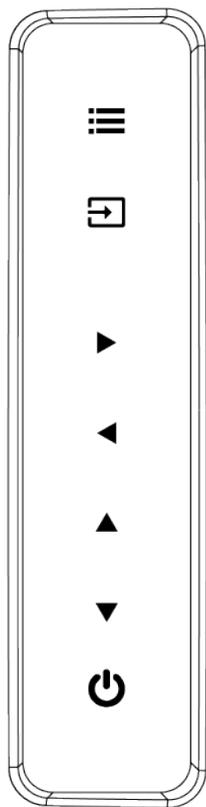
Power On/ Off - Press to power on or power off the device.

LED Indicators

- 
Power Indicator - Lights up "Green" when the monitor turns on.

- 
Stand by Indicator - Lights up "Orange" when the device cannot detect any input source.

Type B (For 15.6" only)



- 
Menu – Press to come back to the main menu/ Enter function.

- 
Input – Choose display input signal, ECS, Change source/ In main menu performs Exit function.

- 
Right – Press to move right in the navigation menu.

- 
Left – Press to move left in the navigation menu.

- 
Up – Press to move up in the navigation menu/ Hot key volume.

- 
Down – Press to move down in the navigation menu/ Hot key volume.

- 
Power – Press to power on or power off the device.

Chapter 2: Installation

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

2.1 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.
- 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, 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 leave the outer casing too hot to touch.

2.2 Mounting Guide

The display can be applied for several different installation methods, including panel mount, bracket mount, VESA mount. Refer to sub-sections below for more details.



Caution/ Attention

Follow mounting instructions and use recommended mounting hardware to avoid the risk of injury.

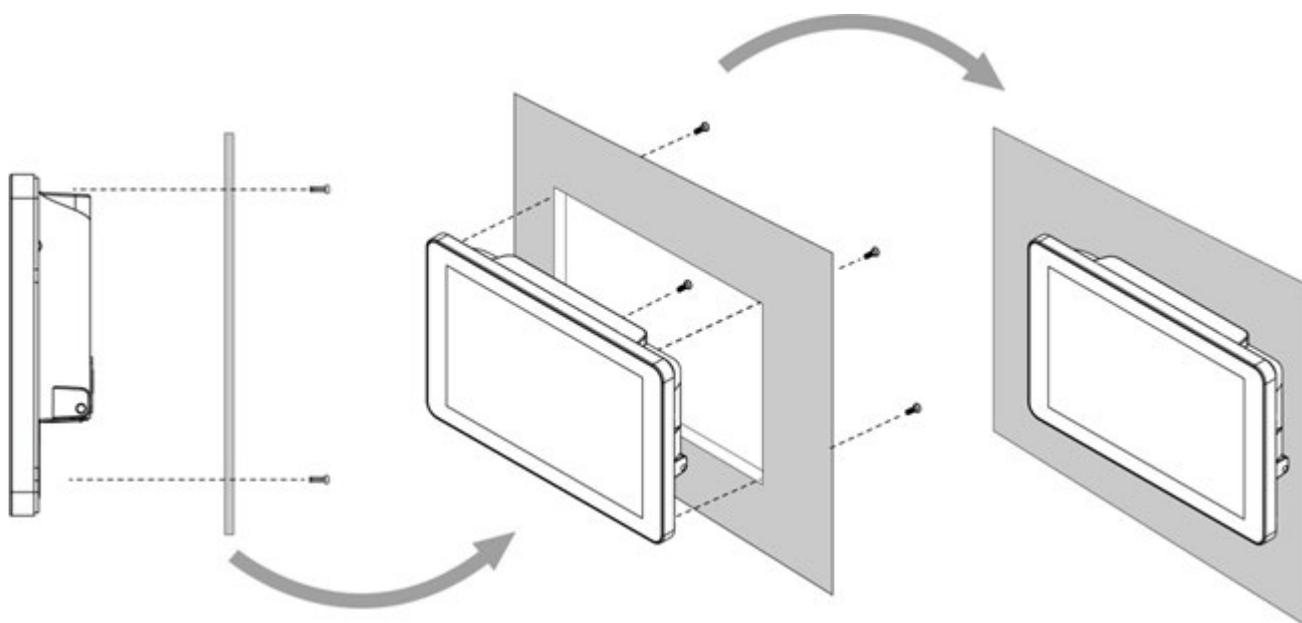
Suivez les instructions de montage et d'utilisation recommandé le matériel de montage pour éviter le risque de blessure.

2.2.1 Panel Mount

The PoE Touch Monitor supports panel mount installation. The panel mount solution is suitable for many applications where display should be embedded. With this mounting solution flat surface leave no bezel in the front.

Installation Instruction

1. Prepare a fixture for the specific dimensions of the device.
2. Cut a hole on a sub frame or panel according to the cutout dimensions.
3. Install the device properly onto the cutout area of the sub frame or panel with the sides of the front bezel.
4. Fix the device to fixture with eight Phillips screws.



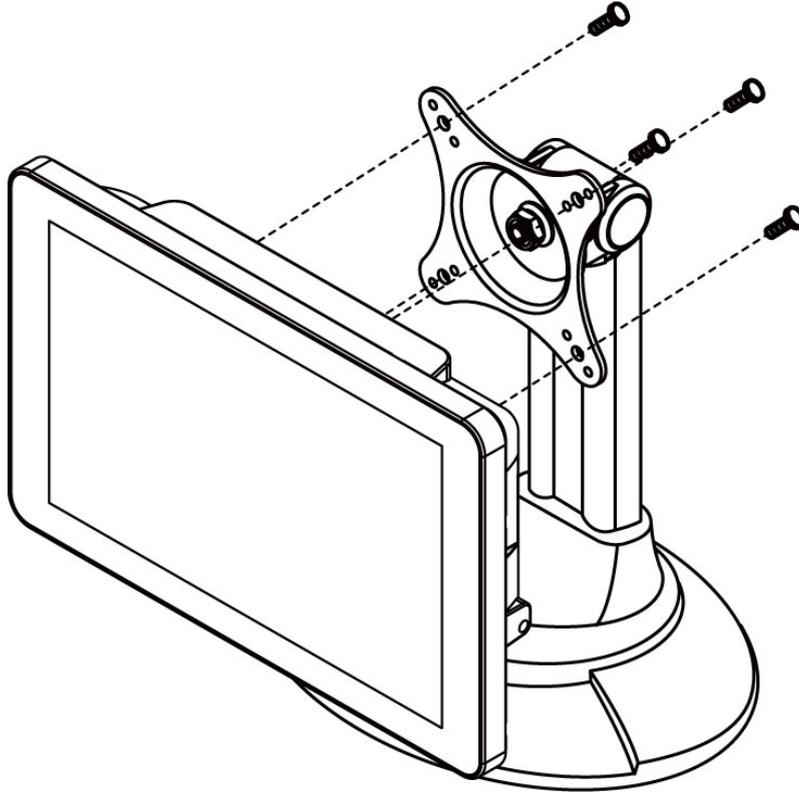
Size	Wall Cutout, mm	Screw
10.1"	250 x 158.6	M4x5
10.4"	227 x 174.5	M4x5
12.1"	282 x 206	M4x5

2.2.2 VESA Mount

This device supports VESA mount and provides various types of mounting options to fit any industrial use or vehicle.

Installation Instruction:

1. Use Philips M4x5 screws to fix the desk stand to VESA holes on the back cover of the device.
2. Follow instructions that come with VESA mount kit (Not supplied by Winmate).



**The picture is for demonstration purposes only. VESA Mount accessories are not supplied by Winmate.*

Size	VESA Plate
10.1", 10.4", 12.1"	75x75 mm
10.4", 15"	100x100 mm
15.6"	75 x 75, 100 x 200 mm

2.3 Cable Mounting Considerations

For a nice look and safe installation, make sure cables are neatly hidden behind the device.



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.

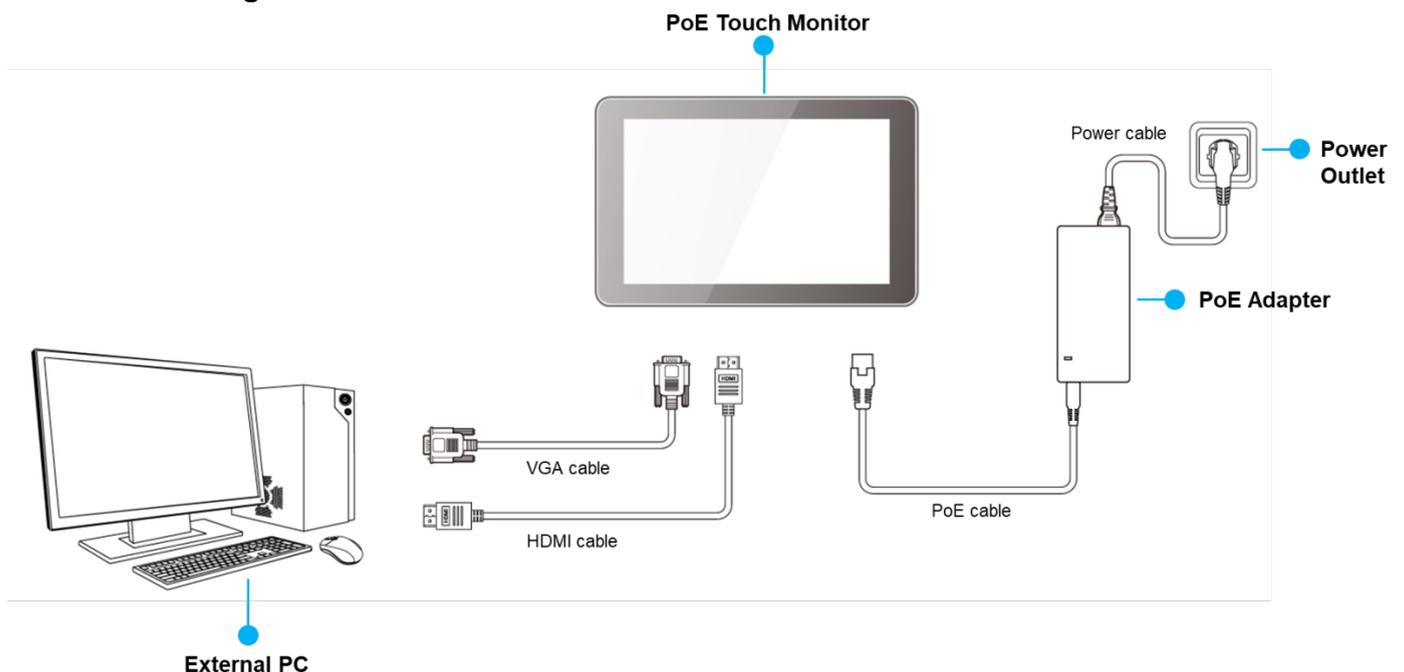
2.4 Connecting Power and Peripherals

This section provides information on how to use connectors on the PoE Touch Monitor. Be cautious while working with these modules. Please carefully read the content of this chapter in order to avoid any damages.

Installation instruction:

1. Plug the PoE adapter into the power socket.
2. Connect the external computer to the LAN port of the PoE adapter.
3. Connect the LAN port PoE Touch Monitor to the PoE port of the PoE adapter.
4. Connect PoE Touch Monitor to external PC using VGA or/and HDMI cable.

Connection Diagram



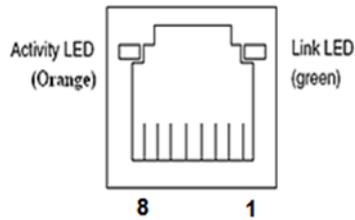
2.5 Connector Description

The panel control port is designed for monitors that work with a variety of compatible video sources. Due to the possible deviations between these signal sources, you may have to make adjustments to the monitor settings from the OSD menu when switching between these sources.

2.5.1 PoE Connector

PoE Touch Monitor has RJ45 connector that supports PoE function.

Pin assignment and signal names for PoE connector



Pin №	Signal Name	Pin №	Signal Name
1	TX1+	2	TX1-
3	TX2+	4	TX2-
5	TX3+	6	TX3-
7	TX4+	8	TX4-



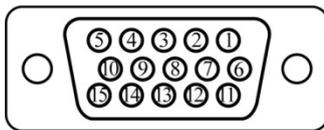
Important:

Power Device (PD): follows IEEE 802.3at (25 Watt)

2.5.2 VGA Connector

PoE Touch Monitor uses standard 15pin D-sub connector. Plug 15-pin VGA signal cable to the VGA connector in the rear of motherboard, and plug the other end to the monitor. Secure cable connectors with hexagonal copper pillars M3x4mm.

Pin assignment and signal names for VGA connector

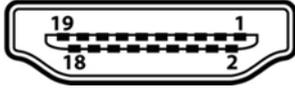


Pin №	Signal Name	Pin №	Signal Name
1	RED	2	GREEN
3	BLUE	4	NC
5	GND	6	AGND
7	AGND	8	AGND
9	VGA_5V	10	GND
11	NC	12	DDCSDA
13	H Sync	14	V Sync
15	DDCSCL		

2.5.3 HDMI Connector

Plug HDMI signal cable to the HDMI connector on the rear side of PC system, and plug the other end to the PoE Touch Monitor.

Pin assignment and signal names for HDMI connector

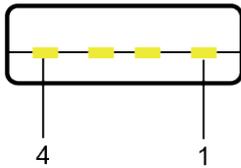


Pin No	Signal Name	Pin No	Signal Name
1	HDMI_RX2+	2	GND
3	HDMI_RX2-	4	HDMI_RX1+
5	GND	6	HDMI_RX1-
7	HDMI_RX0+	8	GND
9	HDMI_RX0-	10	HDMI_RXC+
11	GND	12	HDMI_RXC-
13	HDMI_CON_CEC	14	NC
15	HDMI_CON_SCL	16	HDMI_CON_SDA
17	GND	18	+5V_HDMI
19	HDMI_CON_HP		

2.5.4 USB for Touch Connector

To connect touch use USB Type-A connector.

Pin assignment and signal name of USB for touch connector



Pin No.	Signal Name	Pin No.	Signal Name
1	+5V	2	Data-
3	Data+	4	GND

Chapter 3: Operating the Device

In this chapter you will find instructions on how to operate the display.

3.1 Turning on/ off the System

To turn on the system:

1. Plug the PoE adapter into the power socket.
2. Connect the external computer to the LAN port of the PoE adapter.
3. Connect the LAN port PoE Touch Monitor to the PoE port of the PoE adapter.
4. Turn on the external computer.
5. The device will boot automatically when powered on.

To turn on the system:

1. Disconnect the Display from external computer to completely turn off the device.

3.2 Troubleshooting Guide

If your monitor fails to operate correctly, check the following chart for possible solution before calling for repairs:

Condition	Check Point
The picture does not appear	<ul style="list-style-type: none"> • Check if the signal cable is firmly seated in the socket. • Check if the Power is ON at the computer • Check if the brightness control is at the appropriate position, not at the minimum.
The screen is not synchronized	<ul style="list-style-type: none"> • Check if the signal cable is firmly seated in the socket. • Check if the output level matches the input level of your computer. • Make sure the signal timings of the computer system are within the specification of the monitor.
The position of the screen is not in the center	<ul style="list-style-type: none"> • Adjust the H-position, and V-position, or Perform the Auto adjustment.
The screen is too bright (too dark)	<ul style="list-style-type: none"> • Check if the brightness or contrast control is at the appropriate position, not at the Maximum (Minimum).
The screen is shaking or waving	<ul style="list-style-type: none"> • Perform the Auto adjustment. • Moving all objects which emit a magnetic field such as motor or transformer, away from the monitor. • Check if the specific voltage is applied. • Check if the signal timing of the computer system is within the specification of monitor.

**If you are unable to correct the fault by using this chart, stop using your monitor and contact your distributor or dealer for further assistance*

3.3 On-Screen Display Menu Navigation

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	H POSITION	slider bar	Default 50. VGA Only.
	Use to adjust the image to the left or right on the screen. Range 0 to 100		
	V POSITION	slider bar	Default 50. VGA Only.
Use to adjust the image up or down on the screen. Range 0 to 100.			
 IMAGE	AUTO	Select and execute	VGA Only.
	Use to choose the best settings for the current input signal		
	CLOCK	slider bar	VGA Only.
	Use to adjust the value of horizontal image. Range 0 to 100		
	PHASE	slider bar	VGA Only.
	Use to adjust the phase control (To optimize the display quality)		
	WHITE BALANCE	Select and execute	VGA Only.
Use to set RGB signal voltage level			
 COLOR	USER	R.G.B slider bar	
	Choose RED/GREEN/BLUE to set value of color temperature brightness.		
	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 temp.		
	ADC BRIGHTNESS	slider bar	Default 50
Set value of monitor for ADC Brightness. Range 0 to 100			
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.		
Choose the brightness control mode by VR control			

OSD Icon	Sub-menu	Settings	Note
 CHANNEL	AUTO SCAN	Select and execute	Default mode.
	Auto detect the input source		
	ANALOG	Select and execute	
	Switch the setting of signal input to Analog mode		
	HDMI	Select and execute	
Switch the setting of signal input to HDMI mode			
 RECALL	YES	Select and execute	
	Recall the factory default setting		
	NO	Select and execute	
Return to main menu			
OP OPTION	Volume	slider bar	Default 10.
	Use to set value of Volume. Range 0~31.		
	Speaker	ON/OFF	Default OFF.
	Use to set value of Volume Speaker		
 EXIT	YES	Select and execute	
	Exit the OSD menu		
	NO	Select and execute	
Return to main menu			

Appendix

This chapter contains additional product information, including troubleshooting guide and frequency table



Appendix B: Frequency Table

The choice of supported modes depends on the monitor native resolution. Refer to the table below for more information about available input signals.

Signal name	Vertical Frequency (Hz)	VGA	HDMI 1.4
640 x 480	60	✓	✓
	72	✓	
	75	✓	
480P	60		✓
800 x 600	60	✓	✓
	72	✓	
	75	✓	
1024 x 768	60	✓	✓
	72	✓	
	75	✓	
720P	60		✓
1280 x 800	60	✓	✓
1920 x 1080	60	✓	✓

For more information about available input signals and OSD navigation, please refer to R6H or R2E (for 15.6" display) A/D board manual included in the package.

You can also download manuals and touch drivers from [Winmate Download Center](#).

Appendix C: Cleaning the Monitor

Before cleaning:

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

When cleaning:

- Never spray or pour any liquid directly on the screen or case.
- Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- The display area is highly prone to scratching. Do not use ketene type material (ex. Acetone), Ethyl alcohol, toluene, ethyl acid or Methyl chloride to clear the panel. It may permanently damage the panel and void the warranty.
- If it is still not clean enough, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.
- Don 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.

