7~18.5" Stand Alone Type-C Display

WINMATE

User Manual

Please read this instructions before operating the device and retain them for future reference.

Contents

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 1W16Axxxxxxxx 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.
Unealerted' attention indique un dommage possible à l'équipement et explique comment éviter le problem 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 Électriqueindique le potentiel de chocssur des emplacements électriques et comment éviterces 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 Miseà 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 moderns 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.

Caution/ Attention

Do not cover the openings!

- 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® Stand Alone Type-C Display. The documentation set provides information for specific user needs, and includes:

- **Stand Alone Type-C Display User Manual** – contains detailed description on how to use the display, its components and features.

Models

Size	Model Name
7"	W07L100-GCT1-C W07L100-GCO1HB-C
10.1"	W10L100-GCH2-C W10L100-GCH1HB-C
10.4"	R10L100-GCT2-C
12.1"	R12L100-GCM2-C
15"	R15L600-GCC3-C R15L600-PTC3-C
15.6"	W15L100-PTA3-C
18.5"	W18L100-PTA2-C

Note:

Some pictures in this guide are samples and can differ from 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 display device in the packing list. Mechanical dimensions and drawings included in this chapter.

1.1 About Stand Alone USB Type-C Display

Congratulations on purchasing Winmate® Stand Alone Type-C Display. The elegantly designed, yet rugged, industrial grade Front IP65 Type C Display series is designed for usability with brilliant true-flat screens, which offer superior readability and Projected Capacitive Multi-Touch (P-CAP) technology, available in 7", 10.1", 10.4", 12.1" and 15" options.

Front IP65 Type C Display features projected capacitive multi-touch (P-Cap) screen and waterproof front IP65 enclosure.

1.2 Product Features

Winmate® Front IP65 Type-C Display features:

- 7~18.5" LCD
- Projected capacitive multi-touch (P-Cap)
- Front IP65 rating
- USB Type-C alternate mode waterproof connector for power, video and touch input

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.
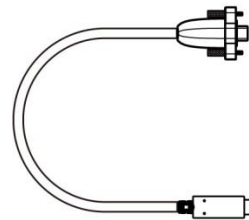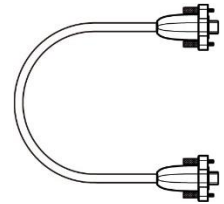
Packing List
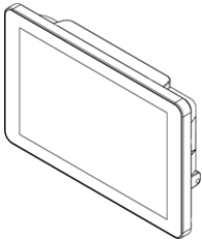
• **Display**	• **User Manual**	• **Lockable USB-C to Std. USB-C Cable (Optional)**	• **Dual-side Lockable USB Type-C Cable (Optional)**
Varies by product	Part No. 91521110102P	Part No. 9480240240K5	Part No. 9480240240K6
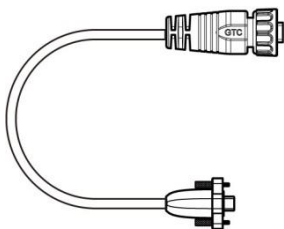
- **Waterproof USB-C to Std. USB-C Cable (Optional)**
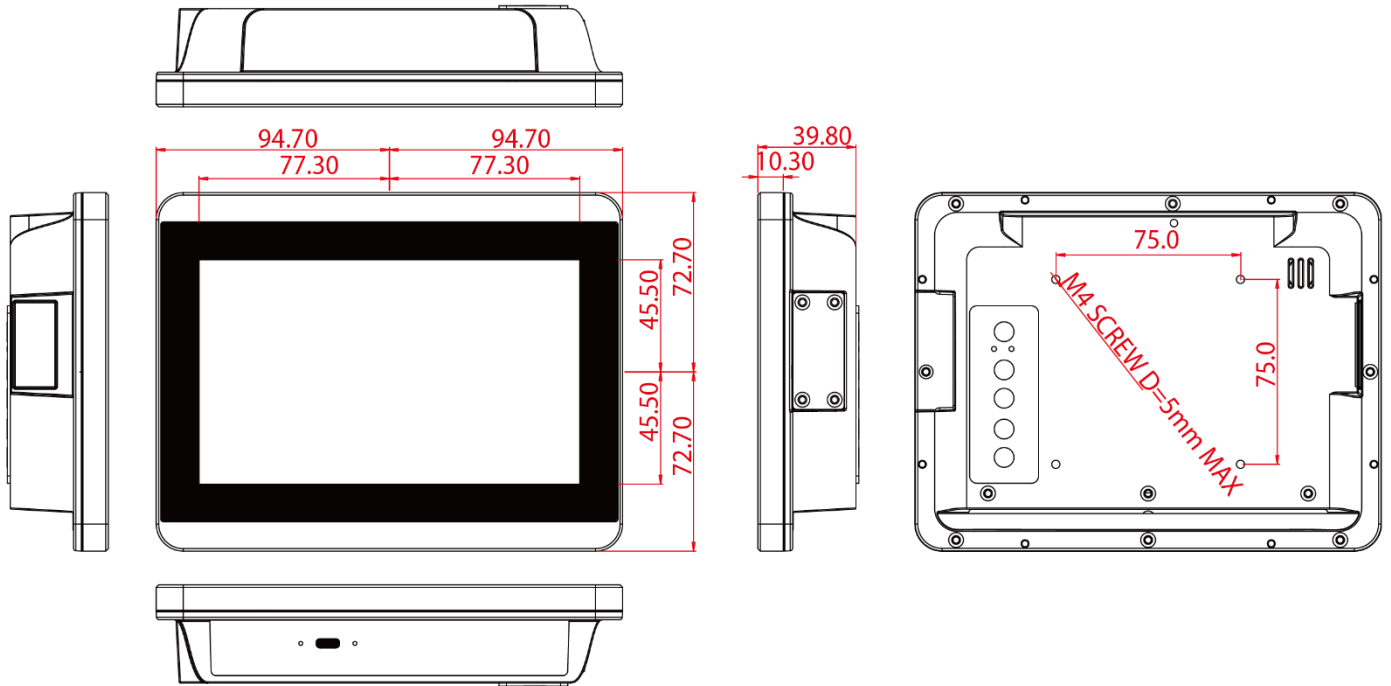Part No. 9480240240K8

1.4 Product Overview
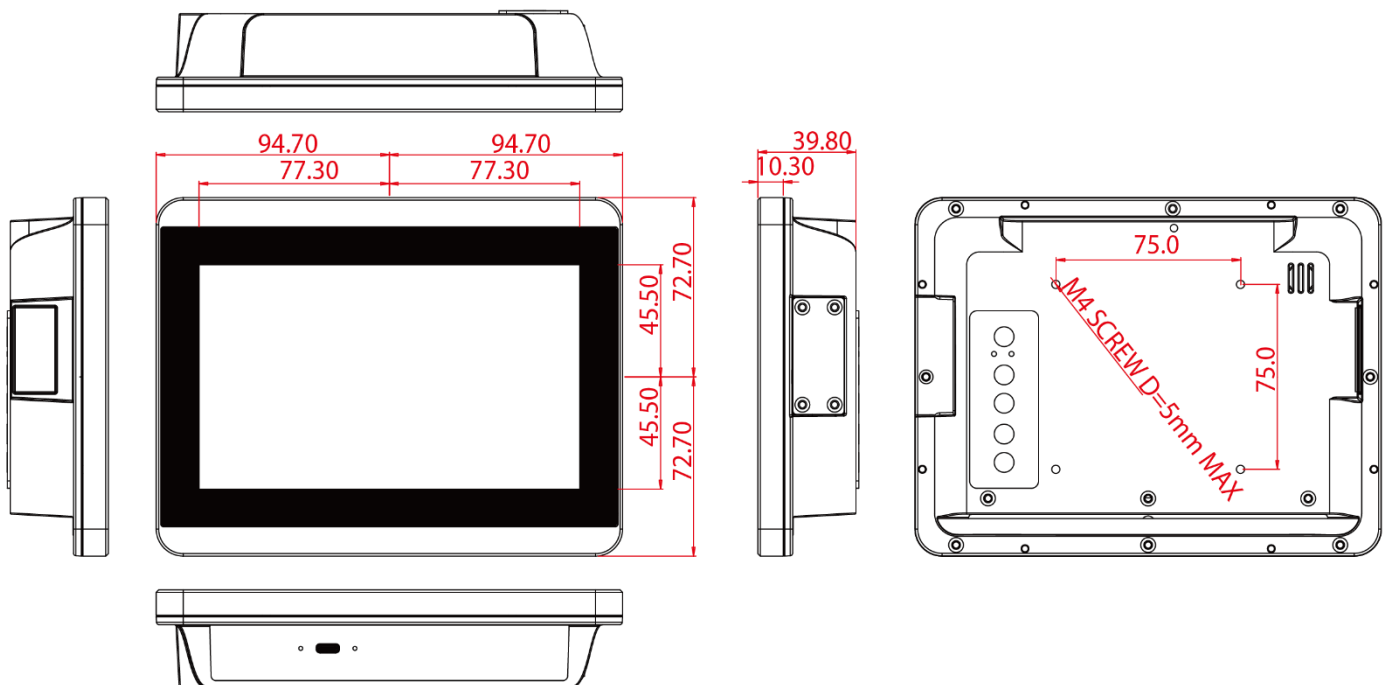
This section describes physical appearance of the Front IP65 Type C Display.

All dimensions shown in mm.

W07L100-GCT1-C

W07L100-GCO1-HB-C

W10L100-GCH2-C

263.3
40.2
172
75
M4 SCREW
75

R10L100-GCT2-C

252.41
210.5
41.4
15.2
87.32
161.31
157.9
197.8
113.47
113.47
120.71
120.71
90
90
50
50
37.5
37.5
8.73
93.4
44
44
44
93.4
8-M4 SCRWE D=5mm
10-M4 SCRWE D=8mm
37.37
49.87
37.63
50.13
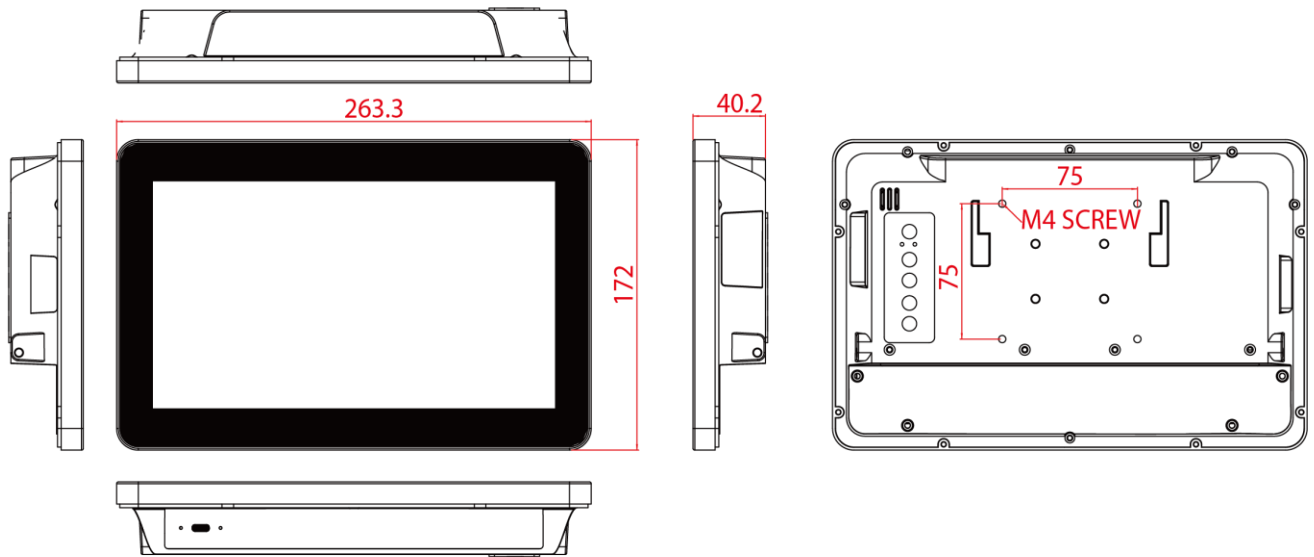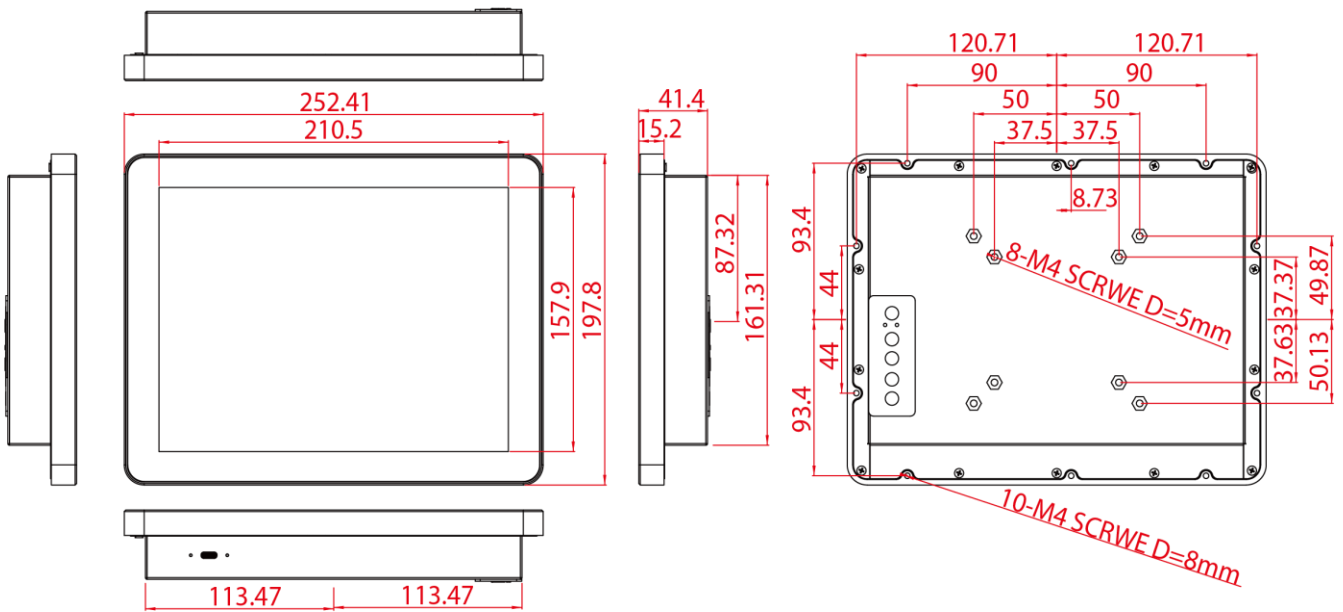
R12L100-GCM2-C
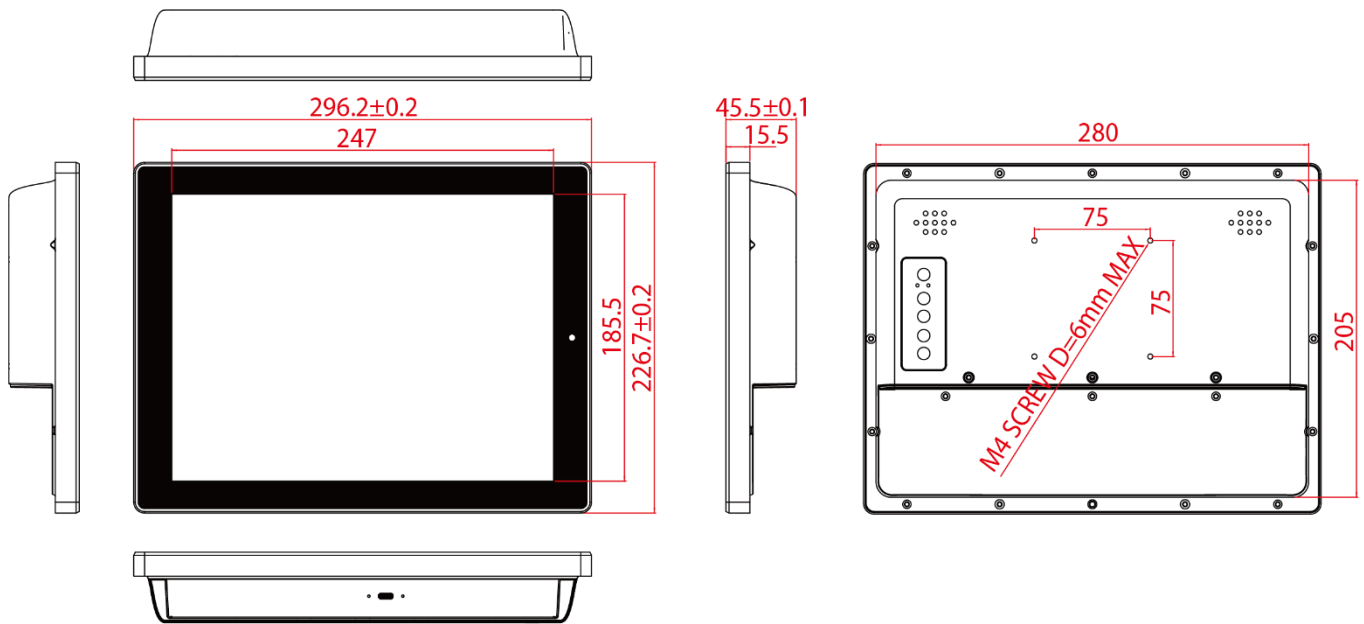
R15L600-GCC3-C (Alu. Housing Design)/ R15L600-PTC3-C

W15L100-PTA3-C

W18L100-PTA1-C
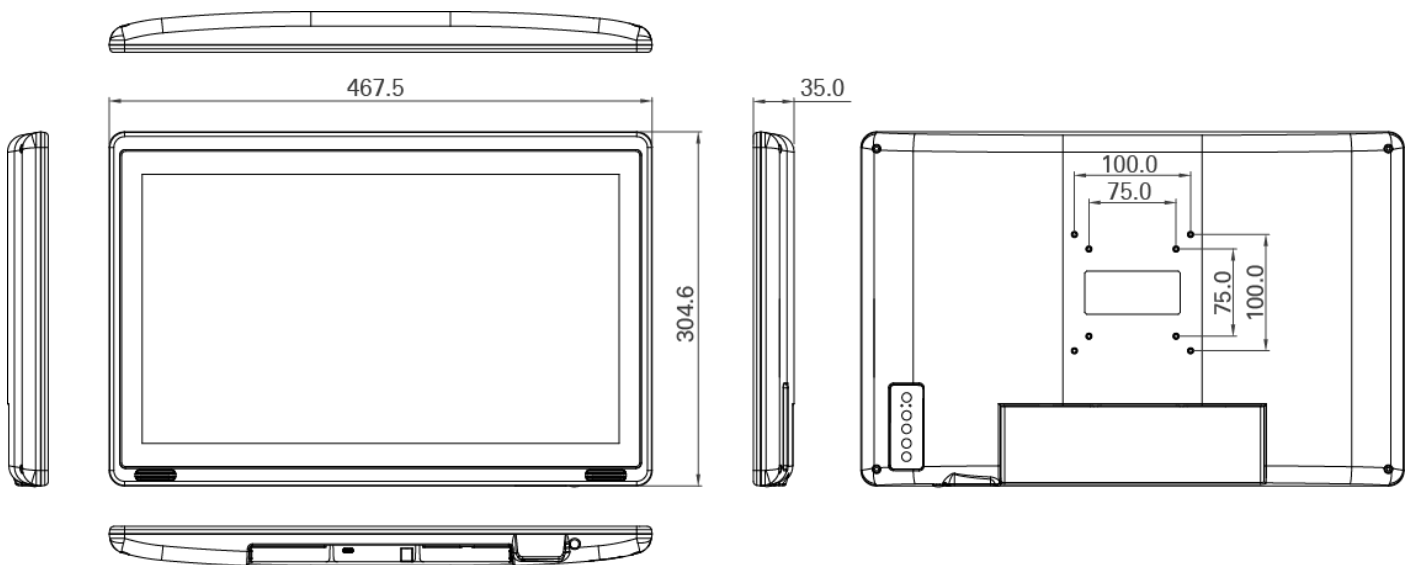
1.5 External Connectors

Terminal interfaces are located on the bottom side of the display.
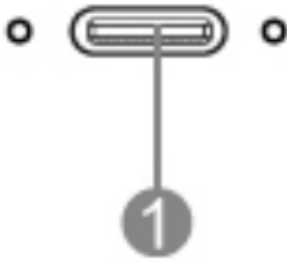
Item	Description
1	**USB 3.1 Type C (Alt mode)** – Lockable connector. Connects external devices and provides power to the monitor. Power source need support 5V/3A.

1.6 Physical Buttons and LED Indicators

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

OSD Panel
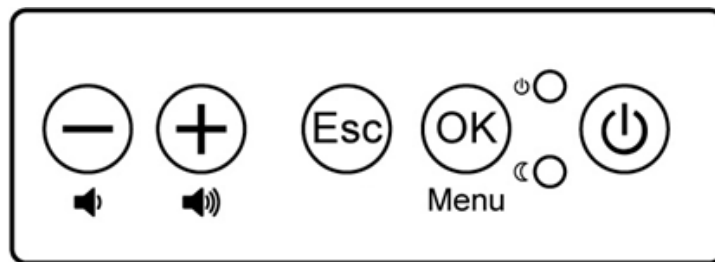
Physical Buttons

DOWN-Press to lower down the volume.
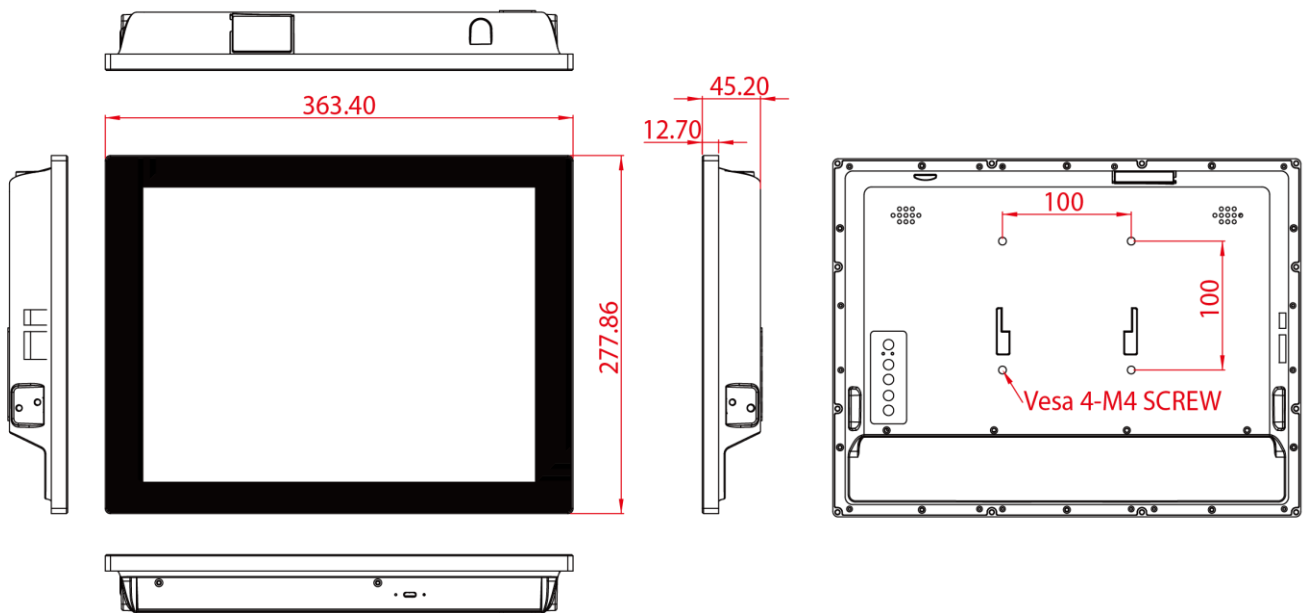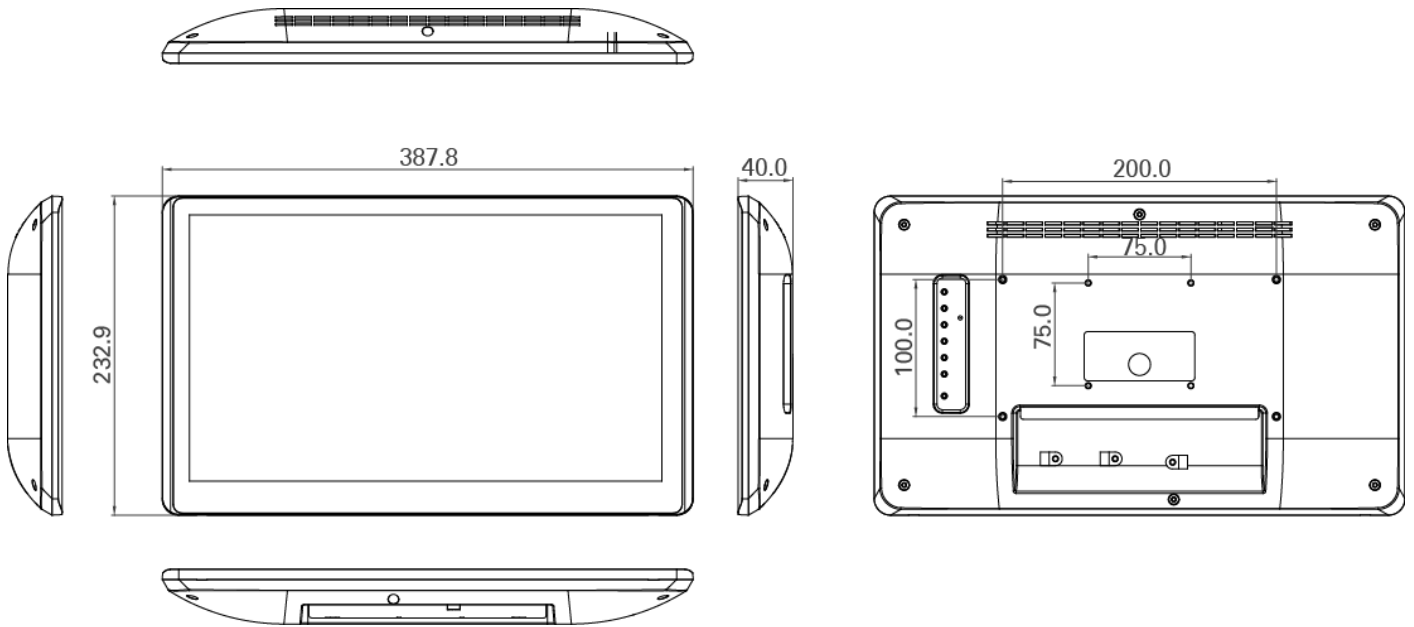
UP- Press to increase the volume.

ESC - 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.

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, 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 USB Type-C Display 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.
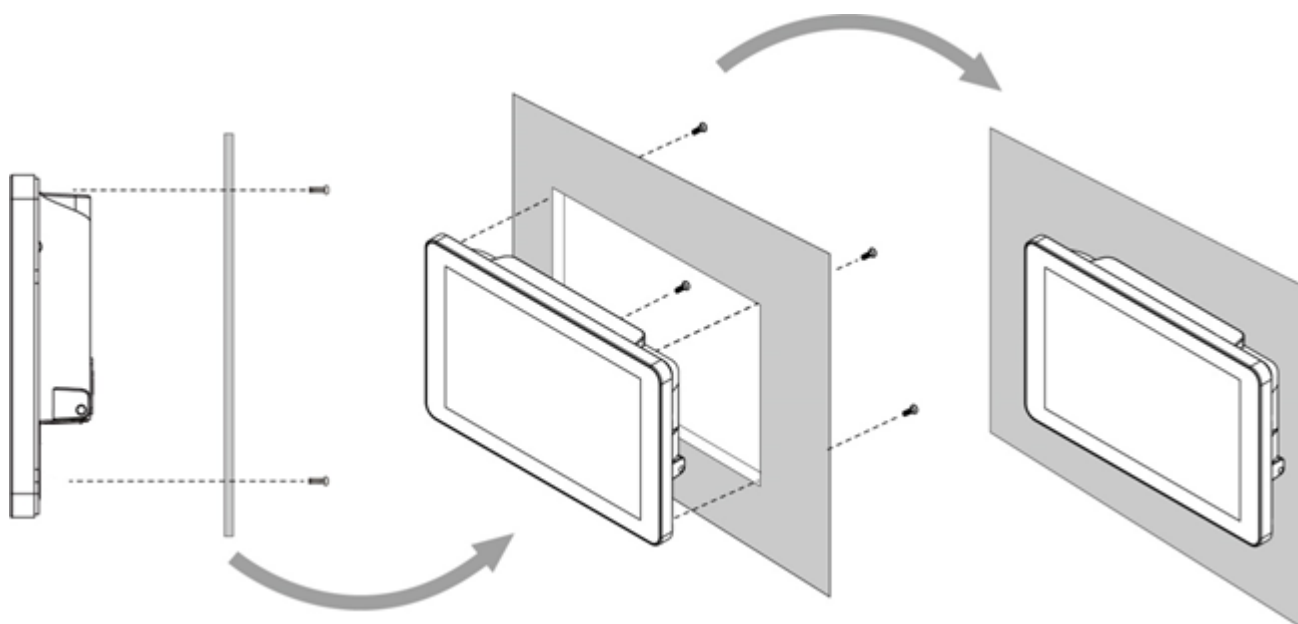
Size	Wall Cutout, mm	Screw
7"	174.4 x 130.4	M4x4
10.1"	250 x 158.6	M4x5
10.4"	227 x 174.5	M4x5
12.1"	282 x 206	M4x5
15"	345.4 x 260	M6x4

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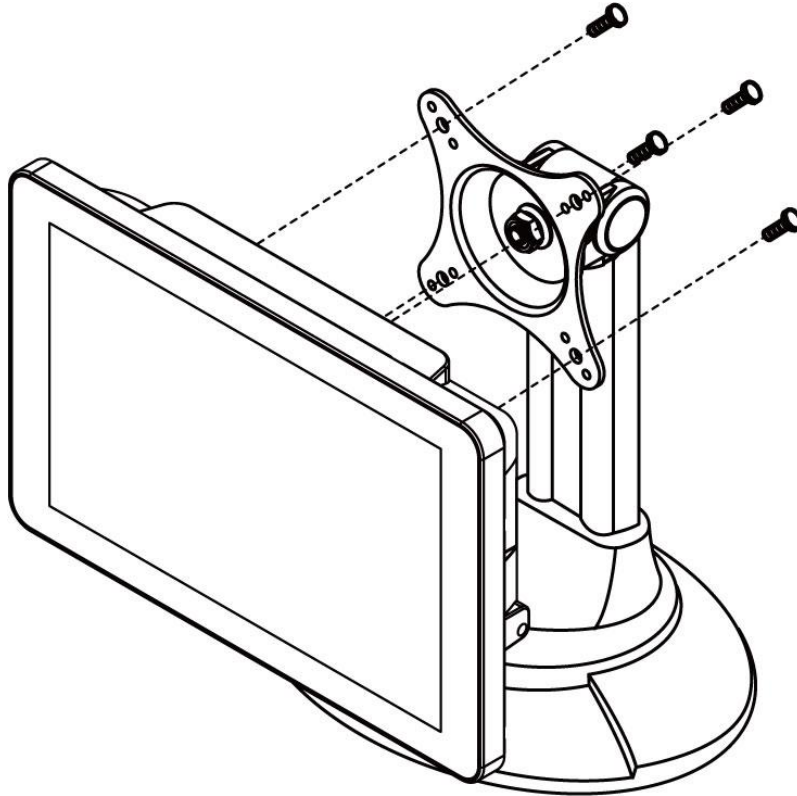
The picture is for demonstration purposes only. VESA Mount accessories are not supplied by Winmate.

Size	VESA Plate
7", 10.1", 10.4", 12.1"	75x75 mm
10.4", 15"	100x100 mm
15.6"	75x75 mm，200x100 mm
18.5"	75x75 mm，100x100 mm

2.3 Connecting Peripherals

This Display comes with USB Type-C interface located on the bottom panel. 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.

To display video and sound from an external PC follow the instructions below.
1. Turn off your computer and unplug external computer's power cable.
2. Connect a USB 3.1 Type C cable from your external PC to the USB 3.1 Type C port on the display.
3. Connect the power cable to the display and the other side to power adapter.
4. Plug the power adapter into an electrical outlet.
5. Turn on external computer and display.
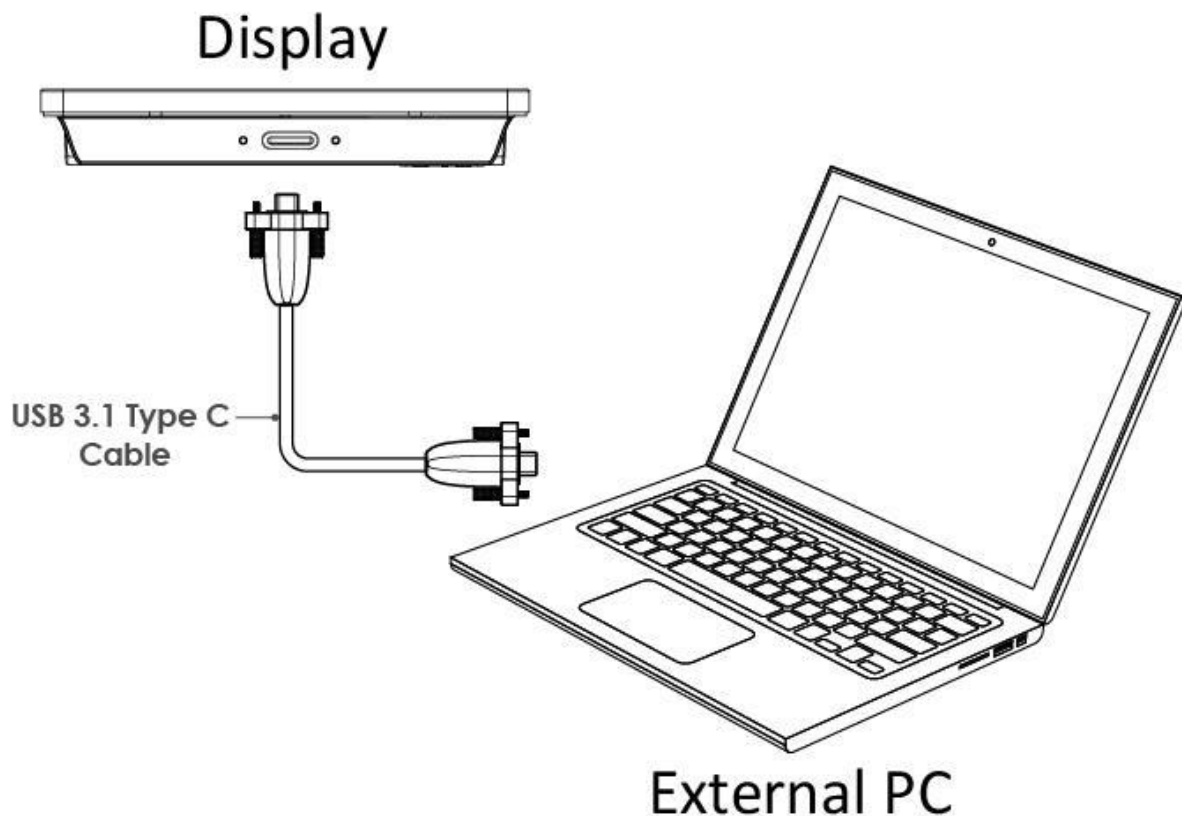
Note:

For the optimal results, select display native resolution as the external computer's input resolution.

2.4 USB Type-C Connector Description

USB Type-C connector supports **Alt mode** and transmits power, video and sound.

Pin Assignment and signal names for USB 3.1 Type-C connector
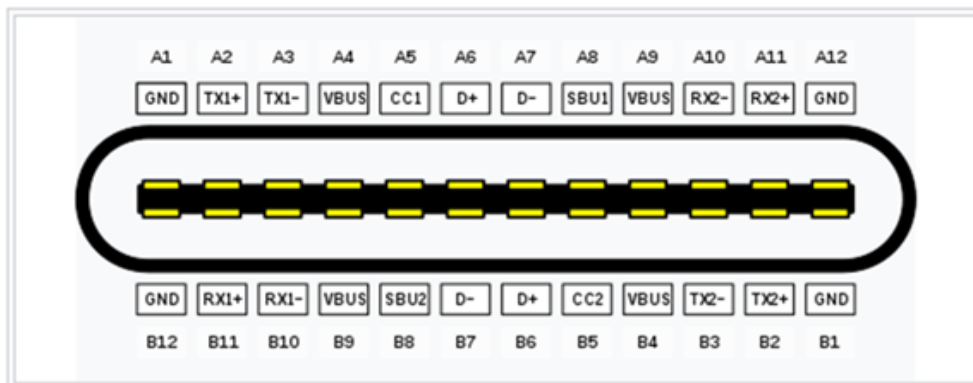
Pin	Signal Name	Pin	Signal Name
A1	GND	B1	GND
A2	TX1+	B2	TX2+
A3	TX1-	B3	TX2-
A4	VBUS	B4	VBUS
A5	CC1	B5	CC2
A6	D+	B6	D+
A7	D-	B7	D-
A8	SUB1	B8	SUB2
A9	VBUS	B9	VBUS
A10	RX2-	B10	RX1-
A11	RX2+	B11	RX1+
A12	GND	B12	GND

Important:

Power Source needs to support 5V/3A.

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. Connect USB Type-C cable to the connector of your device. Make sure the cable fits to the connector, then tighten the O-ring (by turning clockwise) to secure the connection.
2. Connect the other side of USB Type-C cable to external computer.
3. Turn on the external computer.
4. 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	• 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	• 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 screen is too bright (too dark)	• Check if the brightness or contrast control is at the appropriate position, not at the Maximum (Minimum).
The screen is shaking or waving	• 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.
The screen shuts down when running BIOS if my display is connected to external PC via USB Type-C cable	• When running BIOS your device's screen shuts down until the OS system turns on. • Use adapter, ex. USB type-C to HDMI adapter, to connect your device to external PC to see BIOS progress and do settings.

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		
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.		
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.		
RECALL	**YES**	**Select and execute**	
	Recall the factory default setting		
	NO	**Select and execute**	
	Return to main menu		
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 A: Hardware Specifications

	Model Name				
	W07L100-GCT1-C	W07L100-GCO1-HB-C	W10L100-GCH2-C	W10L100-GCH1-HB-C	R10L100-GCT2-C
Display					
Size/Type	7" (Wide)	7" (Wide)	10.1" (Wide)	10.1" (Wide)	10.4"
Resolution	1024 x 600	1024 x 600	1280 x 800	1024 x 600	1024 x 768
Brightness	320 nits	1000 nits	350 nits	800 nits	350 nits
Contrast Ratio	500:1 (typ.)	700:1 (typ.)	800:1 (typ.)	800:1 (typ.)	1200:1 (typ.)
Viewing Angle	-75~75(H); -75~70(V)	-75~75(H); -75~70(V)	-85~85(H); -85~85(V)	-80~80(H); -80~75(V)	-88~88(H); -88~88(V)
Active Display Area, mm	153.6(H) x 90(V)	153.6(H) x 90(V)	216.96 (H)x 135.6 (V)	222.72 (H) x 125.28 (V)	210.4(H) x 157.8 (V)
Max Colors	16.7M(6bit)	16.7M(8bit)	16.7M(8bit)	16.7M(8bit)	16.2M(6bit)
Touch	Projected Capacitive, Optional Protection Glass	Projected Capacitive, Optional Protection Glass	Projected Capacitive, Optional Protection Glass, Optional AG Coating	Projected Capacitive, Optional Protection Glass	Projected Capacitive, Optional Protection Glass
Input/ Output					
Interfaces	USB Type-C	USB Type-C	USB Type-C	USB Type-C	USB Type-C
Audio					
Audio	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)
Physical Buttons & LED Indicators					
Buttons	5 Keys	5 Keys	5 Keys	5 Keys	5 Keys
LED Indicators	Power, Standby	Power, Standby	Power, Standby	Power, Standby	Power, Standby
Power Specifications					
Power Input	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A
Power Consumption	6W	9W	8W	13W	10W
Mechanical Specifications					
Mounting	Panel mount, VESA mount 75x75	Panel mount, VESA mount 75x75	Panel mount, VESA mount 75x75	Panel mount, VESA mount 75x75	Panel mount, VESA mount 75x75, 100x100
Environment Considerations					
Operating Temperature	0°C to +50°C				
Storage Temperature	-10°C to +60°C				
IP Rating	Front IP65				
Standards and Certification					
Safety	CE, FCC				

	Model Name				
	R12L100-GCM2-C	R15L600-PTC3-C	R15L600-GCC3-C	W15L100-PTA3-C	W18L100-PTA2-C
Display					
Size/Type	12.1"	15"	15"	15.6"	18.5" (Wide)
Resolution	1024 x 768	1024 x 768	1024 x 768	1920 x 1080	1366 x 768
Brightness	500 nits	300 nits	300 nits	300 nits	250 nits
Contrast Ratio	700:1 (typ.)	2000:1 (typ.)	2000:1 (typ.)	700:1 (typ.)	1000:1 (typ.)
Viewing Angle	-80~80(H); -70~70(V)	-88~88(H); -88~88(V)	-88~88(H); -88~88(V)	-85~85(H); -85~85(V)	-85~85(H); -80~80(V)
Active Display Area, mm	245.76(H)x 184.32(V)	304.128(H)x 228.096(V)	304.1(H) x 228.1(V)	344.16(H)x 193.59(V)	409.8 (H) x 230.4 (V)
Max Colors	16.2M	16.2M (6 bits)	16.2M (6 bits)	16.2M	16.7M
Touch	Projected Capacitive, Optional Protection Glass	Projected Capacitive, Optional Protection Glass, Optional AG Coating	Projected Capacitive, Optional Protection Glass, Optional AG Coating	Projected Capacitive, Optional Protection Glass	Projected Capacitive, Optional Protection Glass
Input/ Output					
Interfaces	USB Type-C	USB Type-C	USB Type-C	USB Type-C	USB Type-C
Audio					
Audio	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)	2 x 1W Speaker (Optional)
Physical Buttons & LED Indicators					
Buttons	5 Keys	5 Keys	5 Keys	5 Keys	5 Keys
LED Indicators	Power, Standby	Power, Standby	Power, Standby	Power, Standby	Power, Standby
Power Specifications					
Power Input	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	USB Type-C Alt mode, power source need support 5V/3A	12V DC Input (2.5ø DC Jack)
Power Consumption	12W	12W	12W	13W	22W
Mechanical Specifications					
Mounting	Panel mount, VESA mount 75x75, 100x100	Panel mount, VESA mount 75x75, 100x100	Panel mount, VESA mount 75x75, 100x100	VESA mount 75x75, 200x100	VESA mount 75x75, 100x100
Environment Considerations					
Operating Temperature	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C	0°C to +50°C
Storage Temperature	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C	-10°C to +60°C
IP Rating	Front IP65	Front IP65	Front IP65	Front IP65	Front IP65
Standards and Certification					
Safety	CE, FCC				

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	Frequency (Hz)	USB Type C
800 x 600	60	✔
1024 x 768	60	✔
1280 x 1024	60	✔
1366 x 768	60	✔
1600 x 1200	60	✔
1680 x 1050	60	✔
1920 x 1080	60	✔
1920 x 1200	60	✔

For more information about available input signals and OSD navigation, please refer to R6C AD Board Manual included in the package.

You can also download R6C AD Board Manual 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.

Notes

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