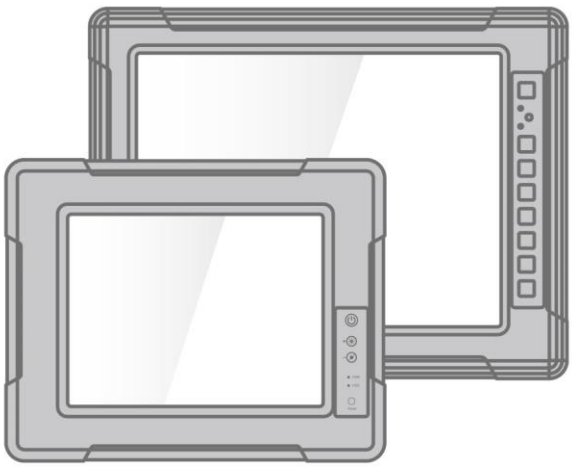
G-WIN Vehicle Mount

Panel PC

Intel® Core™ i5-7200U 2.5GHz (turbo to 3.1GHz)



Model No.:
R10IK3S-VMT2
R15IK3S-VMC3(HB)

Quick Start Guide

Version 1.0
Document Part Number: 9152111I102S

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

Contents

Preface

FCC 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.

European Union

Electromagnetic Compatibility Directive (2014/30/EU)

- EN55024: 2010/ A1: 2015
  - IEC61000-4-2: 2009
  - IEC61000-4-3: 2006+A1: 2007+A2: 2010
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014
  - IEC61000-4-6: 2014
  - IEC61000-4-8: 2010
  - IEC61000-4-11: 2004
- EN55032: 2012/AC:2013
- EN61000-3-2:2014
- EN61000-3-3:2013

Low Voltage Directive (2014/35/EU)

- EN 60950-1:2006/A11:2009/A1:2010/A12:2011/ A2:2013

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

Copyright Notice

Trademark Acknowledgement

Disclaimer

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Warranty

Winmate Inc. 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.

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.

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 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.

Chapter 1: Introduction

Congratulations on purchasing Winmate® G-WIN Vehicle Mount Panel PC. Winmate® G-WIN Vehicle Mount Panel PC comes with fanless, low power but high performance platform design, sunlight readable panel, WLAN integration, great ability for anti-shock & vibration, IP65 protection and anti-corrosion coating with aluminum alloy housing.

Both of great mobility and robust design are fitting the demands for every harsh environment applications such as logistics, transportation/ fleet management, heavy vehicles, utility and also outdoor usage.

1.1 Features

Winmate® G-WIN Vehicle Mount Panel PC features:

- IP65-proof enclosures (except I/O parts)
- Fanless, streamlined enclosure for highly efficient heat dissipation
- Compliance with MIL-STD 810 & IEC 60068-2-27 for shock and vibration test
- Aluminum housing with anti-corrosion
- 5 Wire resistive touch/ Anti-reflective protection glass
- Optional GPS, 4G/ WLAN (Either one)
- Wide range 9-36V DC input
- Mounting options suitable for vehicle mounting: VESA Mount, Yoke Mount and Roof Mount
- Compliance with EN50155

1.2 Package Contents

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 accessories:

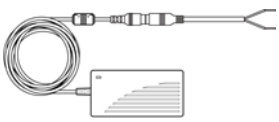
- **3 Pin Terminal Block**
  Cable:94EL02X020E0
  Connector:604520105004

- **Quick Start Guide (Hardcopy)**
  9152111I102S

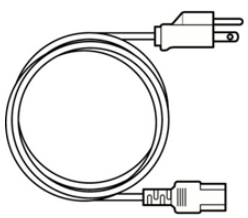
- **Driver CD & User Manual**
  9171111K102L

- **Touch Driver CD**
  9171111T100D

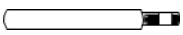
Optional Accessories:



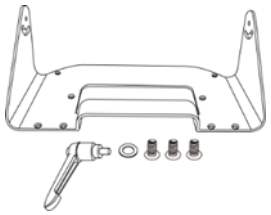
- **AC Adapter**
  50W:90PO12050000
  80W:90PO12800000



- **Power Cord**
  Varies by destination



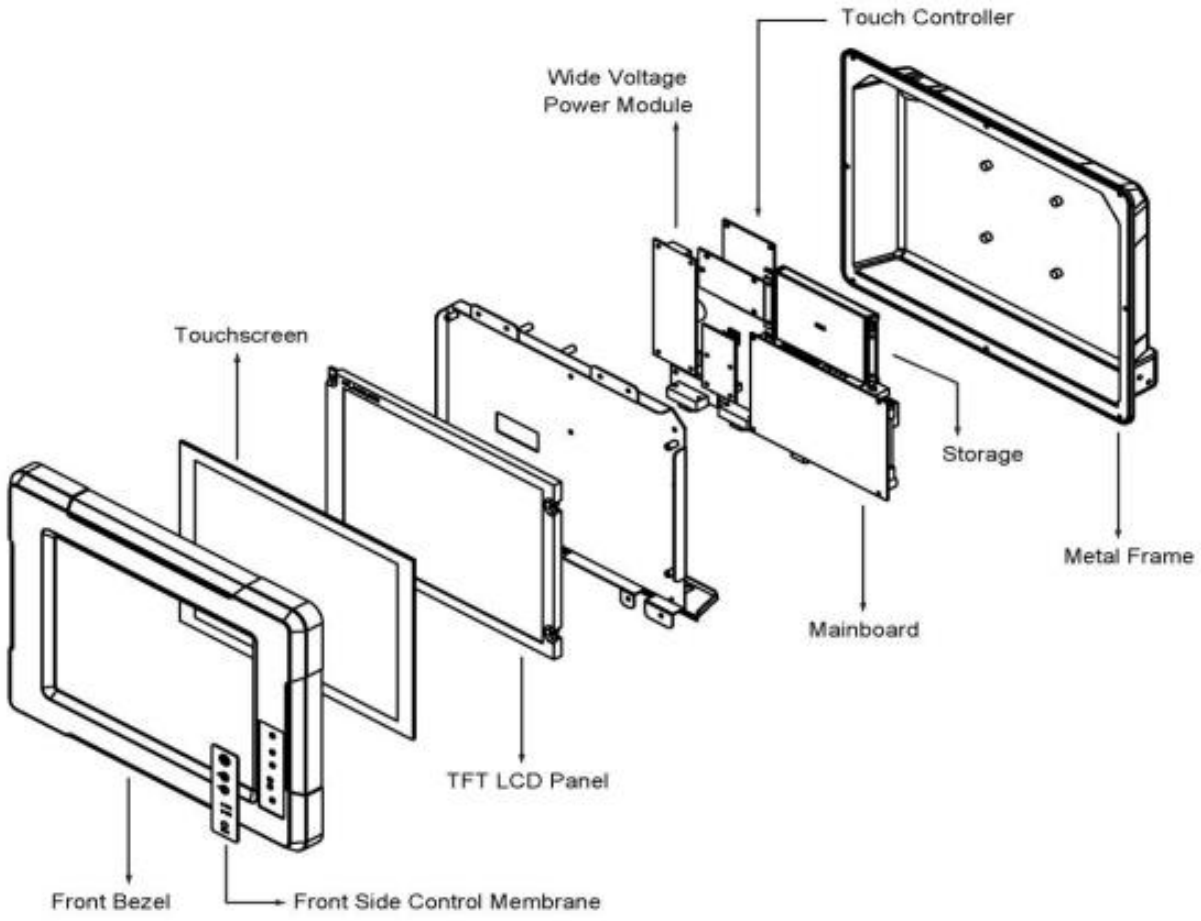
- **WLAN Antenna**
  391000020202



Mounting Bracket
10.4”99KK00Z00010
15” 99KK15A00001

1.3 Mechanical Concept

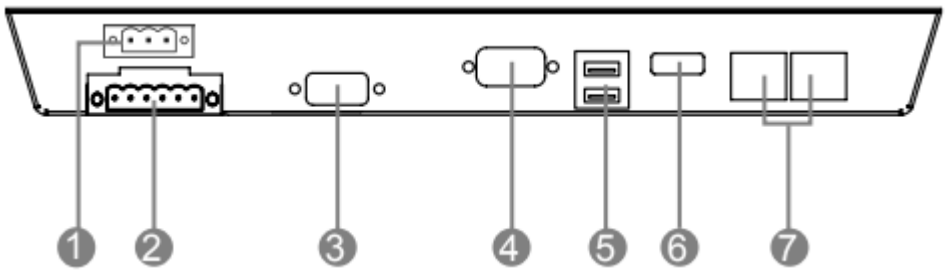
On the picture below you can see spare parts exploded drawing of a standard G-WIN Vehicle Mount Panel PC.



1.4 Description of Parts

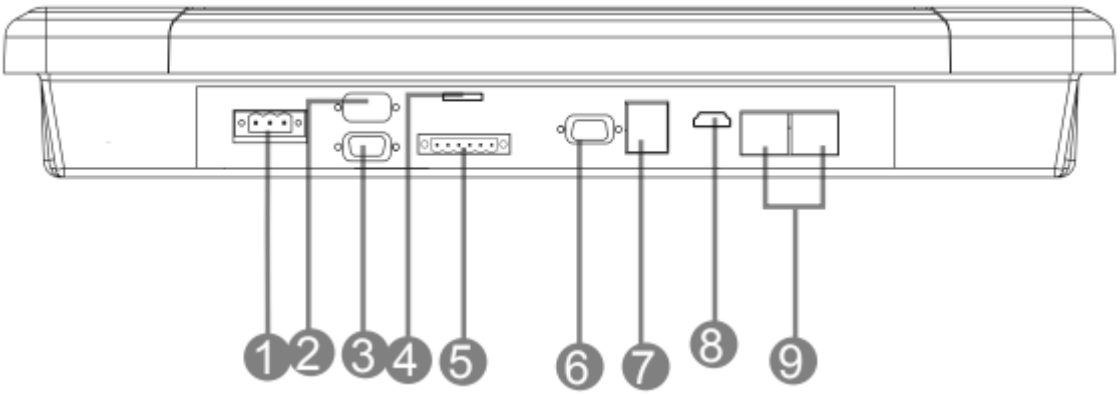
1.4.1 Connector Placement

G-WIN Panel PC 10.4”



№	Description	№	Description
①	9-36V DC Terminal Block	⑤	2 x USB3.0
②	CAN Bus or Digital I/O (Optional)	⑥	HDMI1.4a
③	RS-232	⑦	2 x RJ45
④	RS232/422/485		

G-WIN Panel PC 15”

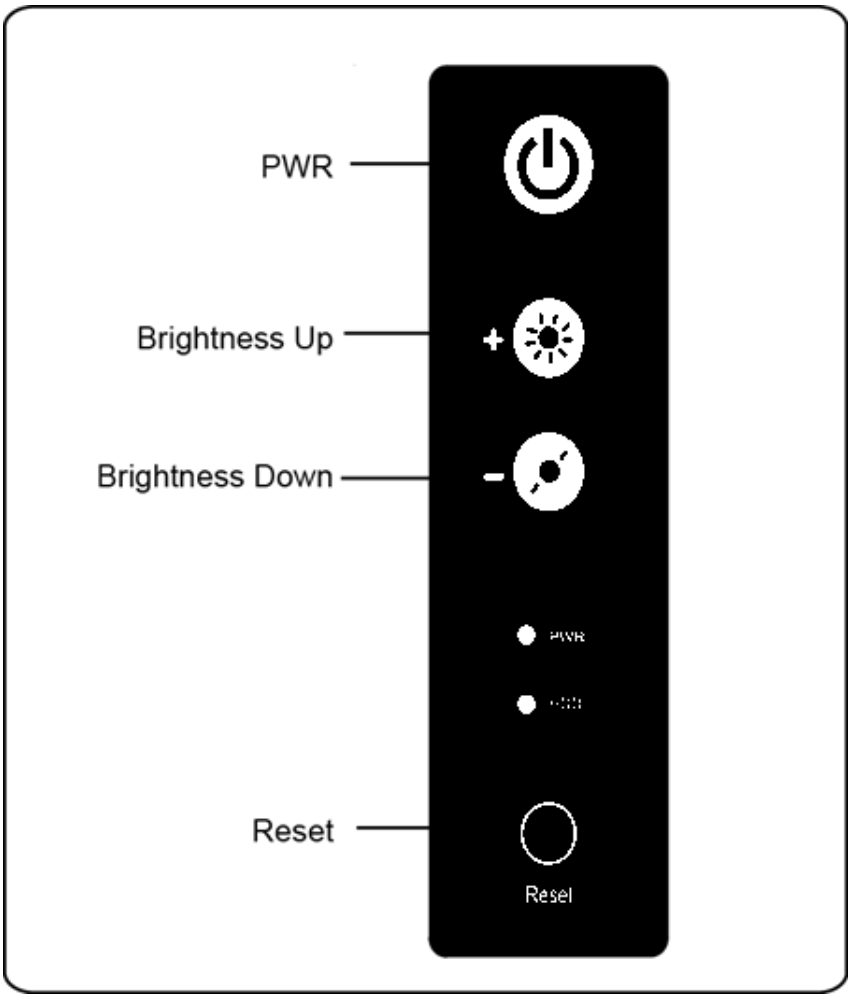


№	Description	№	Description
①	9-36V DC Terminal Block	⑥	RS-232/ 422/485
②	RS-232 (Optional)	⑦	2 x USB3.0
③	RS-232	⑧	HDMI 1.4a
④	SIM Card Slot (Optional)	⑨	2 x RJ45
⑤	CANBus/ GPIO (Optional)		

1.4.2 Physical Buttons and LED Indicators

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

G-WIN Panel PC 10.4”



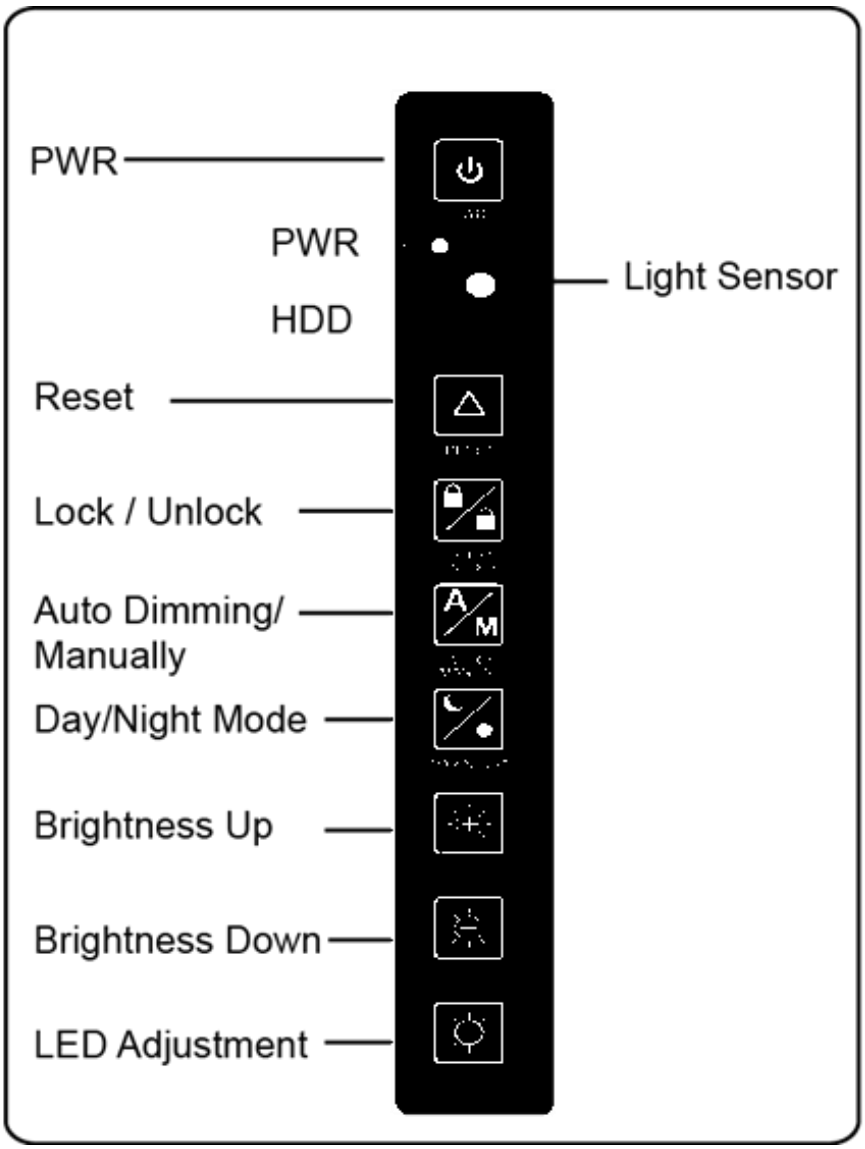
Physical Buttons

Icon	Button	Function
	Power	Turn ON or turn OFF the Panel PC.
	Brightness UP	Increase the brightness of the display screen, or allows user to navigate items of a single OSD menu.
	Brightness DOWN	Decrease the brightness of the display screen, or allows user to navigate items of a single OSD menu.
Reset	Reset	Clear any pending errors or events and brings a system to normal condition or an initial state.

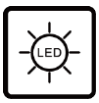
LED Indicators

Indicator	Color	Definition
PWR	Green	Power is ON and the device functions normally
	Orange	Panel PC is suspended
HDD	Green	HDD is active
	OFF	HDD is inactive

G-WIN Panel PC 15”



Physical Buttons

Icon	Button	Function
	Power	Turn ON or turn OFF the Panel PC.
	Reset	Clear any pending errors or events and brings a system to normal condition or an initial state.
	Lock / Unlock	Tap this button to lock / unlock the function of OSD panel.
	Auto Dimming/ Manually	Tap the button once to AUTOMATICALLY adjust brightness mode. Press the button again to MANUALLY adjust brightness mode.
	Day/ Night Mode	Tap this button to enter DAY MODE. Tap this button to enter NIGHT MODE to increase visibility in low-light conditions.
	Brightness UP	Increase the brightness of the display screen, or allows user to navigate items of a single OSD menu.
	Brightness DOWN	Decrease the brightness of the display screen, or allows user to navigate items of a single OSD menu.
	LED Adjustment	Adjust the brightness of the LED.

LED Indicators

Indicator	Color	Definition
PWR	Green	Power is ON and the device functions normally.
	Orange	Panel PC is suspended.
HDD	Green	HDD is active.
	OFF	HDD is inactive.

Chapter 2: Getting Started

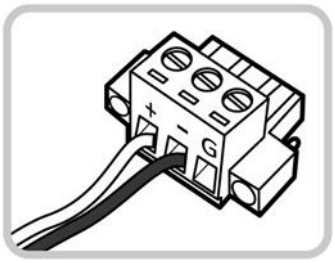
2.1 Turning On and Off Your Device

To turn on the Panel PC:

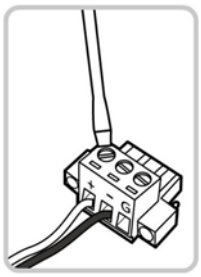
1. Connect the Panel PC to the source of power.
2. Press the power on switch to turn the Panel PC on.
3. Press “DEL” to enter the CMOS setting and check the BIOS setup.

Connecting to DC Power Source

1. Connect the 3-pin terminal block.



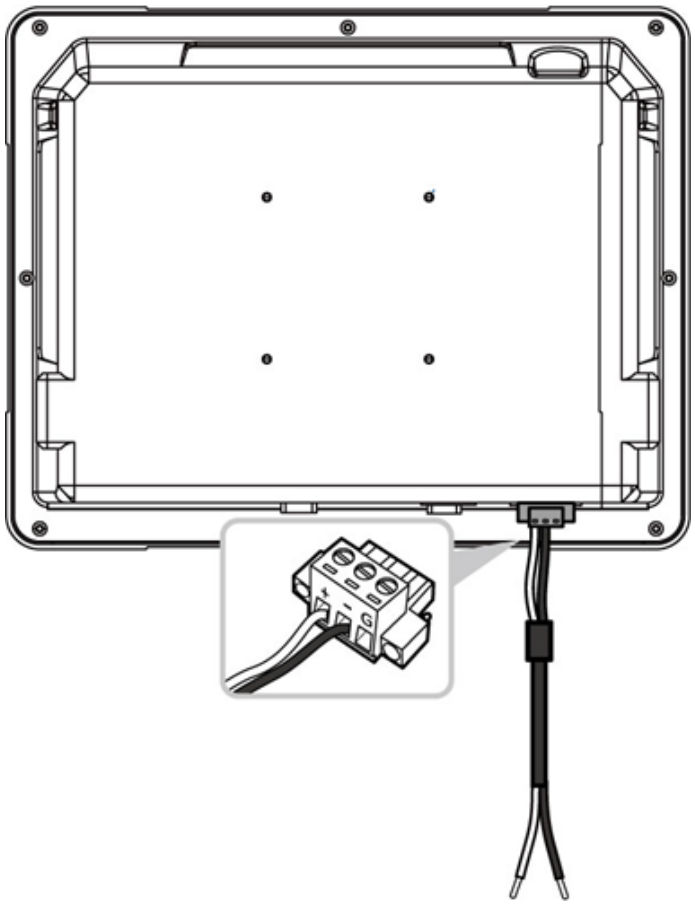
2. Screw the Terminal block to fix the cable.



3. Connect terminal block to the Panel PC.

“+”Connect to power supply until it get 9~36V DC.

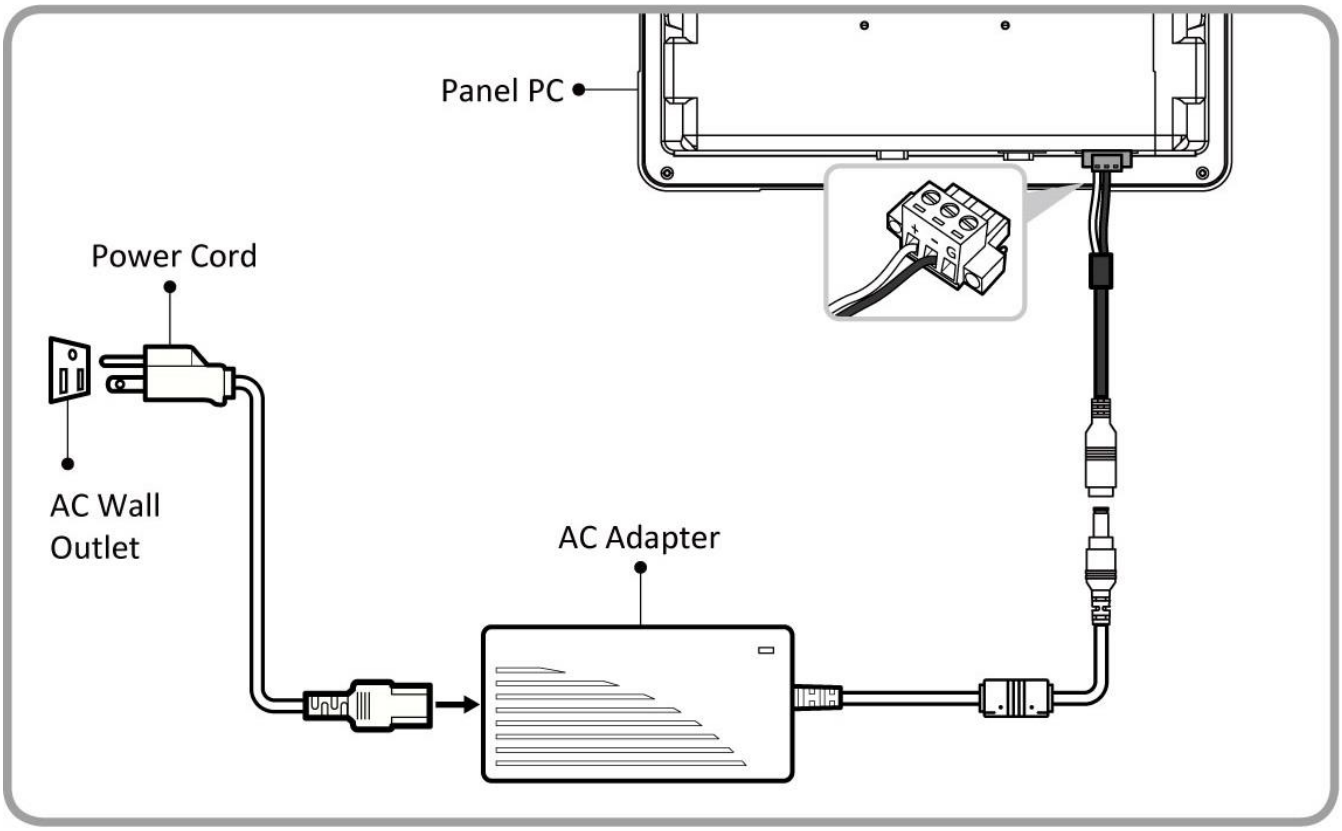
“-”Connect to power supply until 0V.



The device is ready to work once is connected to the source of power.

Connecting to AC Power Source

1. Connect the AC adapter to the 3 pin terminal block located on the back side of the Panel PC.
2. Connect the power cord to AC adapter.
3. Plug the power cord in to the AC outlet and the device will turn on automatically.



AC Adapter specifications vary by panel size.

Size	10.4”	15”
AC Adapter	12V/ 50W	12V/ 80W

Caution
Use only the AC adapter included in your package. Using other AC adapters may damage the device.

Alternating Current
This product must be grounded. Use only a grounded AC outlet. Install the additional PE ground wire if the local installation regulations require it.

To turn off the Panel PC:

To shut down your device, do the following: Tap Start ( ) > Shut down.

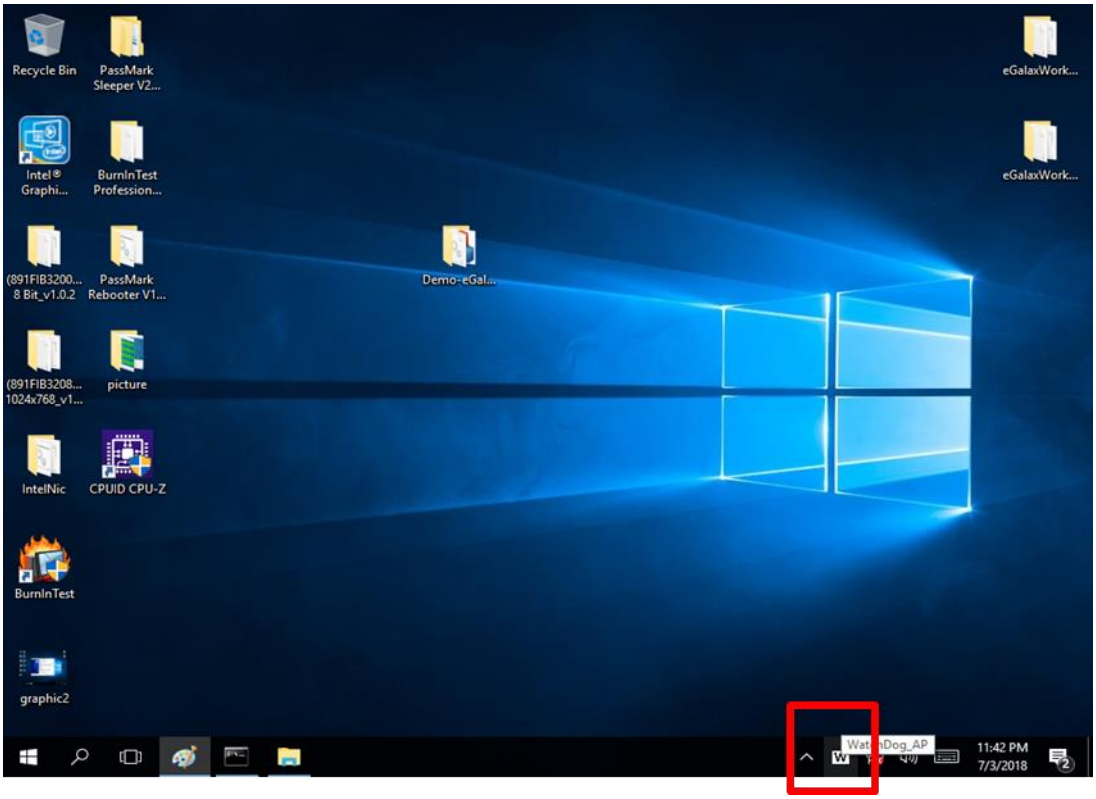
Wait for your Panel PC to completely turn off before disconnecting the power cord (if necessary).

2.2 How to Enable Watchdog

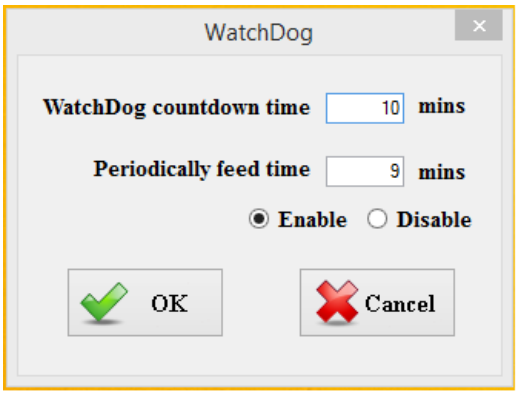
To enable Watchdog, you need to download Winmate Watchdog utility. Find more information on Watchdog in “Watchdog Guide” that you can download from Winmate Download Center or File Share. Refer to the User Manual for more details.

To enable watchdog in Watchdog AP follow the instructions below:

1. On the right bottom side of the desktop screen, click **triangle button** to show hidden icons.
2. Click icon to open Watchdog utility.



3. In Watchdog utility window set countdown time and periodically feed time, or disable watchdog.



Example:

Every 10 min watchdog will monitor the system, in case any error occurs the system will restart automatically when the countdown time reaches 0.

Every 9 min watchdog timer will be reset to 10 min.

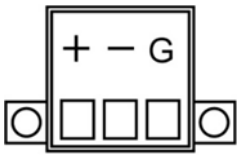
Setting	Description
Watchdog Countdown Time	The system automaticity restarts when this countdown time reaches zero. *Default: 10 min*
Periodically Feed Time	To set a cycle time to automatically reset watchdog timer. *Default: 9 min*
Enable / Disable	Enable or disable watchdog. *Default: Enable*

Chapter 3: Installation

3.1 Connecting to Other Devices

3.1.1 Power Input Connector

G-WIN Vehicle Mount Panel PC uses 3 Pin Terminal Block for power input and accepts voltage 9-36V DC.

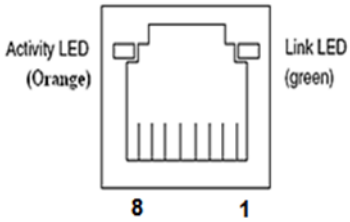


Voltage

Minimum Voltage 9V
Maximum Voltage 36V
Maximum Current 6.6A

3.1.2 Ethernet (LAN) Connector

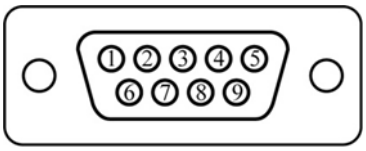
The G-WIN Panel PC supports one RJ45 10/100/1000 Mbps Ethernet interface for connecting to the internet.



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

3.1.3 Serial Interface (RS-232) Connector

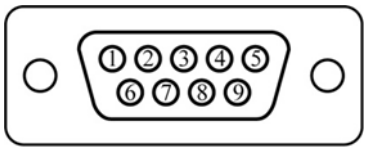
Use RS-232 serial port connector to connect your Panel PC to external devices such as mouse, modem or printer. You can configure serial port settings via jumpers located on the motherboard.



Pin №	Signal Name	Pin №	Signal Name
1	DCD	2	DSR
3	RXD	4	RTS
5	TXD	6	CTS
7	DTR	8	RI
9	GND	10	GND

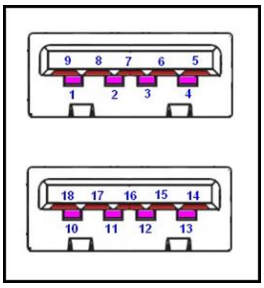
3.1.4 Serial Interface (RS-232/422/485) Connector

Use RS-232/422/485serial port connector to connect your Panel PC to external devices such as mouse, modem or printer.



Pin №	RS232	RS422	RS485
1	DCD	TxD-	D-
2	RXD	TxD+	D+
3	TXD	RxD+	NC
4	DTR	RxD-	NC
5	GND	GND	GND
6	DSR	NC	NC
7	RTS	NC	NC
8	CTS	NC	NC
9	RI	NC	NC

3.1.5 USB 2.0 and USB 3.0 Connector



Pin №	Name	Pin №	Name
1	+5V	2	USB_D-
3	USB_D+	4	GND
5	STDA_SSRX-	6	STDA_SSRX+
7	GND_DRAIN	8	STDA_SSTX-
9	STDA_SSTX+	10	+5V
11	USB_D-	12	USB_D+
13	GND	14	STDA_SSRX-
15	STDA_SSRX+	16	GND
17	STDA_SSTX-	18	STDA_SSTX+

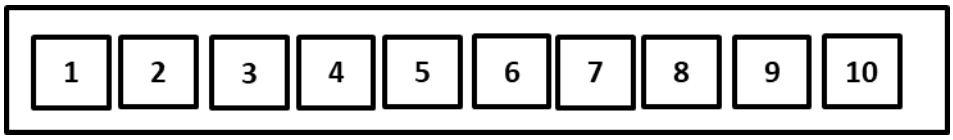
3.1.6 HDMI Connector

G-WIN Panel PC uses HDMI1.4a connector to connect to the external display.

Pin №	Signal Name	Pin №	Signal Name
1	TMDS_DATA2+	2	GND
3	TMDS_DATA2-	4	TMDS_DATA1+
5	GND	6	TMDS_DATA1-
7	TMDS_DATA0+	8	GND
9	TMDS_DATA0-	10	TMDS_CLOCK+
11	GND	12	TMDS_CLOCK-
13	CEC	14	NC
15	DDC_CLOCK	16	DDC_DATA
17	GND	18	5V
19	Hot Plug Detect		

3.1.7 Digital Input/ Output Connector (Optional)

Notice that Digital Input/ Output Connector is an optional connector for G-WIN Vehicle Mount Panel PC and may not be present in your device.



Pin №	Signal Name	Pin №	Signal Name
1	GND	2	+5V
3	DOUT3	4	DOUT1
5	DOUT2	6	DOUT0
7	DINT3	8	DINT1
9	DINT2	10	DINT0

 Voltage	**Digital input**
	Low: close to GND; High: +5V

3.2 Mounting

G-WIN Vehicle Mount Panel PC devices come with different mounting options suitable for most of the industrial and commercial applications.

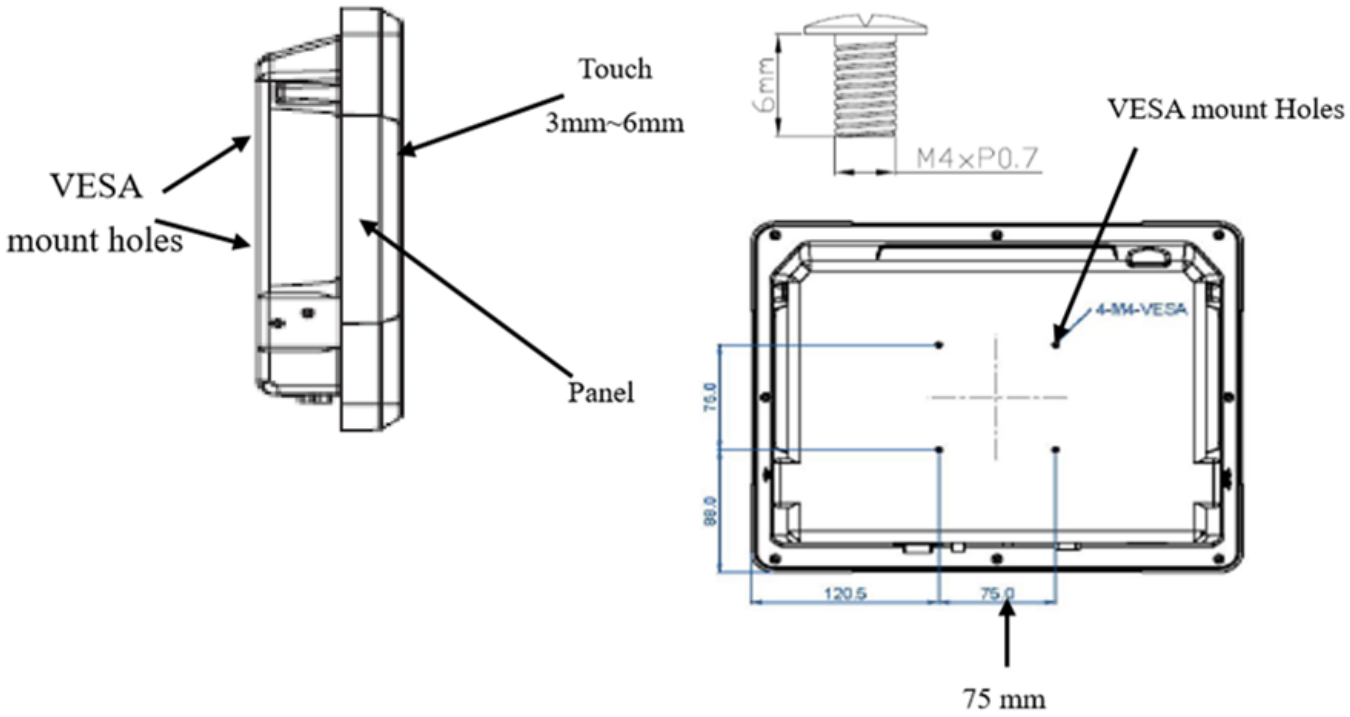
3.2.1 VESA Mounting

G-WIN Vehicle Mount Panel PC has VESA mount holes on the rear side. Follow instructions below to mount the unit with VESA Mount bracket (not supplied by Winmate).

Size	VESA Plate Dimensions	Screw hole diameter
10.4”	75 x 75 mm	VESA M4x6 mm
15”	100 x 100 mm	VESA M6x8 mm

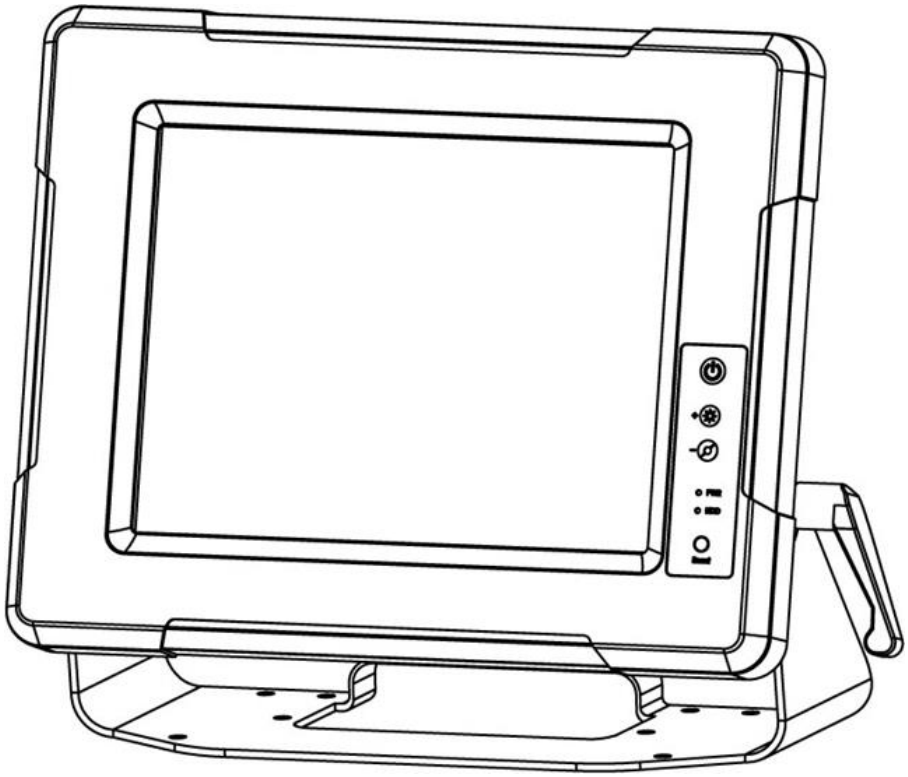
Mounting Steps:

1. Screw VESA Bracket to the fixture (ex. wall) with M4 flathead screws.
2. Place the device on VESA bracket.
3. Carefully mount the device to the fixture (for ex. wall).
4. When the installation is complete, plug the power cord into a grounded AC outlet. Turn on the power.



3.2.2 Yoke Mounting

Yoke Mount solution allows to mount your device on a wall or ceiling. You can purchase dash/ yoke mounting kit from Winmate as an optional accessory.

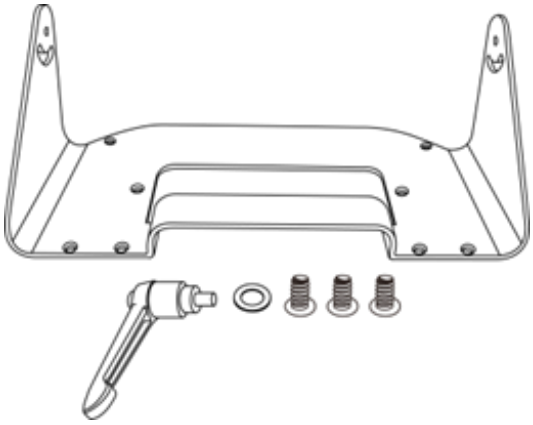


Yoke Mounting Kit:

Size	Winmate Part Number
10.4”	99KK00Z00010

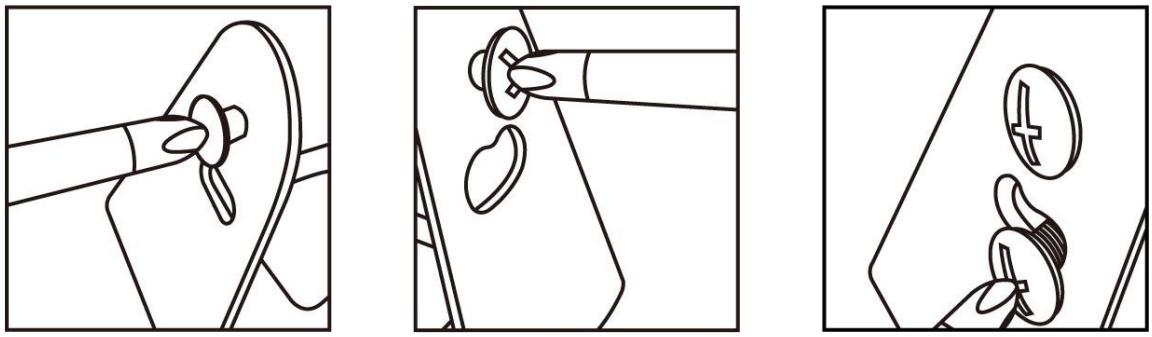
Yoke Mount Kit includes:

- One bracket stand
- Three M5 x10 screws with washer
- One locking handle adjustment tool with metal washer

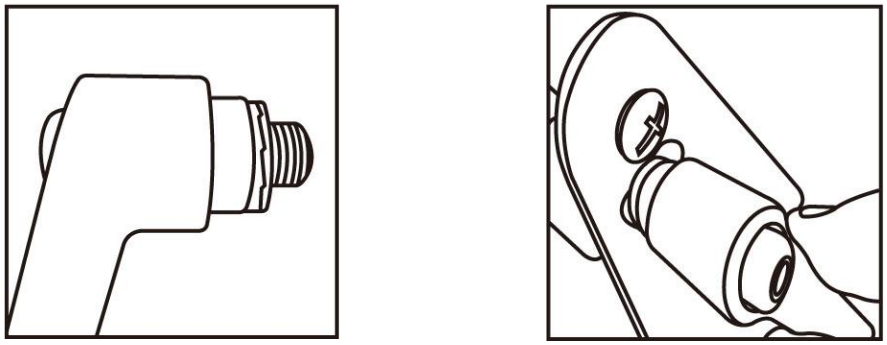


Mounting steps:

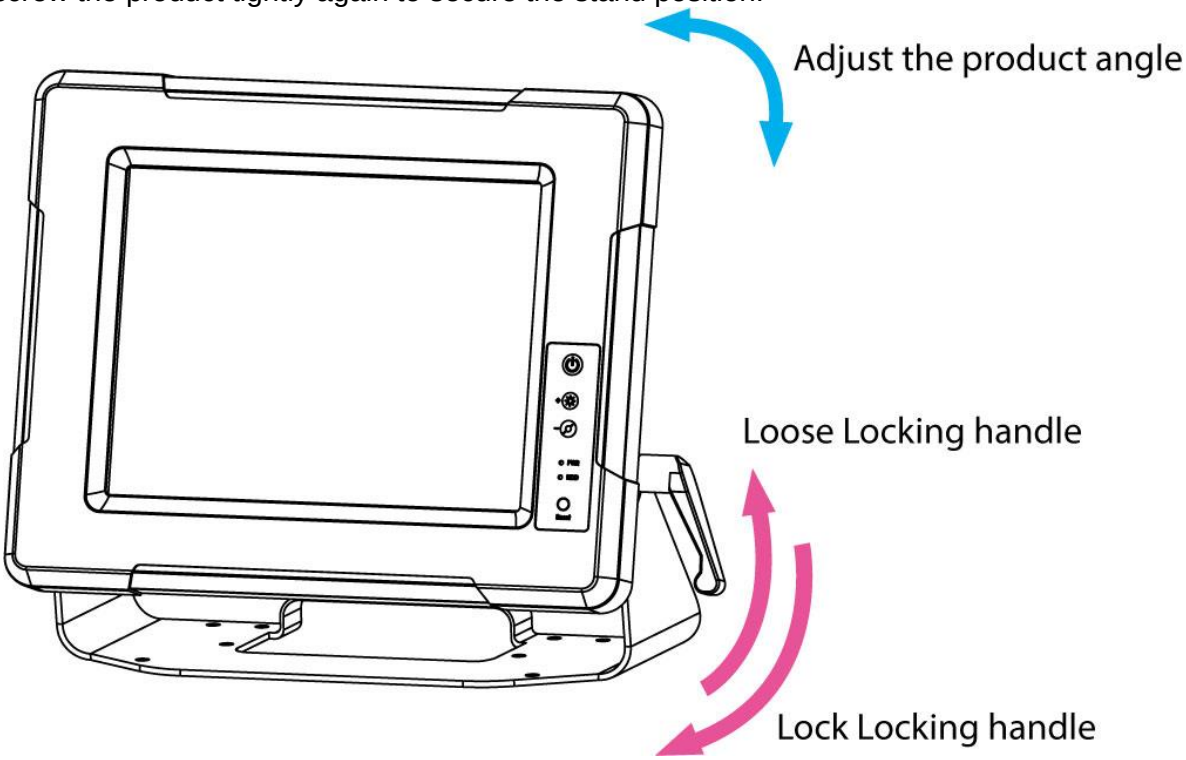
1. Place the G-WIN Vehicle Mount Panel PC on the bracket stand, aiming screw hole for each other.
2. Secure three M5x10 screws to fix the device upon the bracket stand.



3. Secure tightly locking handle to the Panel PC.

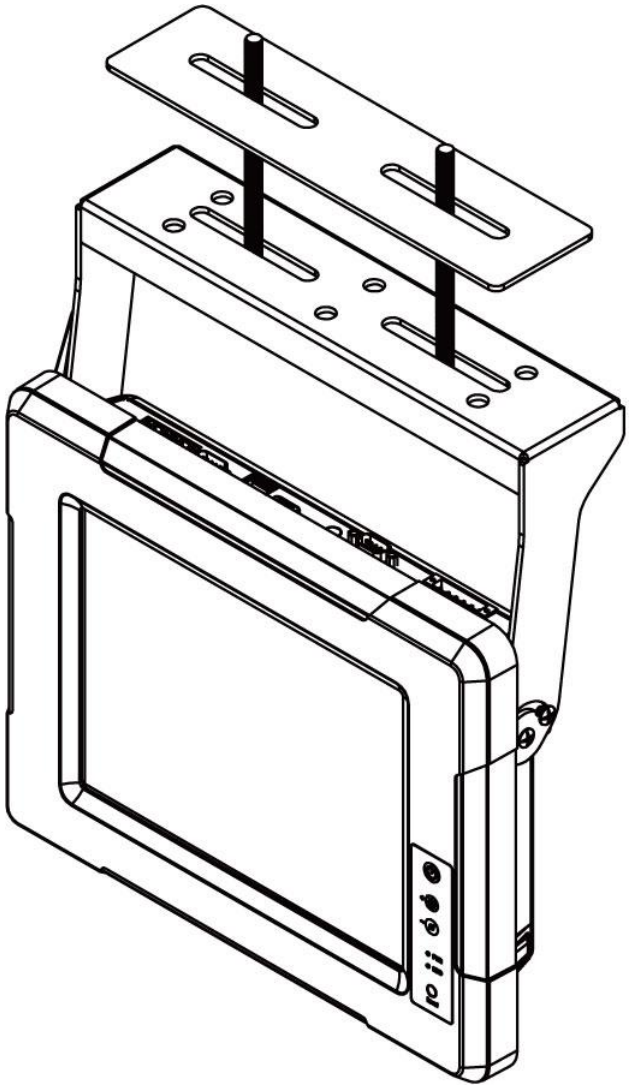


4. Loosen the hand-screw adjustment tool, then you can adjust product angle on the stand. Then screw the product tightly again to secure the stand position.



3.2.3 Roof Mounting

Roof mounting allows mounting your device on the roof. You can purchase roof mounting kit from Winmate as an optional accessory.

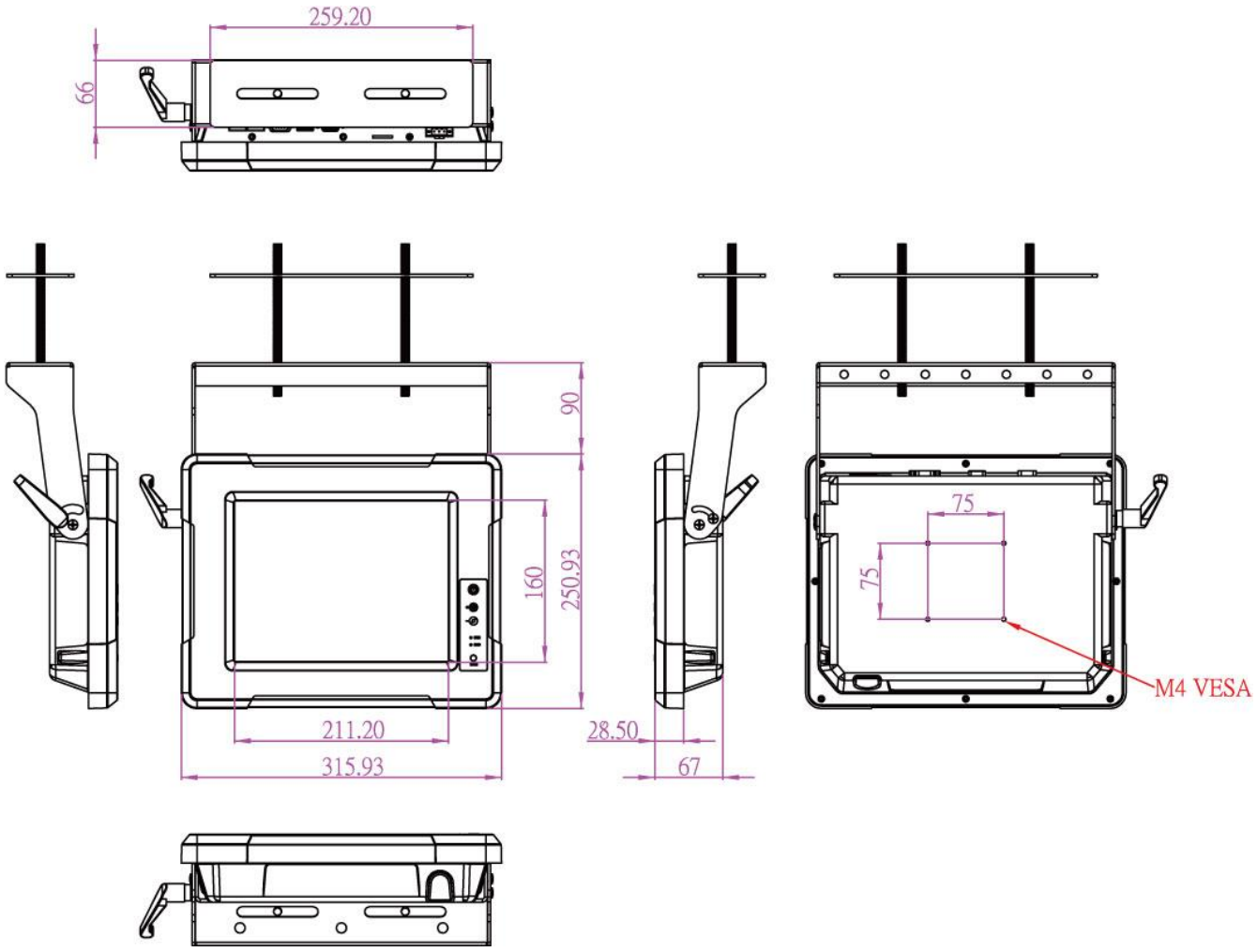


U-Shape Mounting Kit:

Size	Winmate Part Number
10.4”	98K010A00018

U-Shape Mounting Kit Mechanical Drawing

For 10.4” G-WIN Vehicle Mount Panel PC



Appendix

Appendix A: 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.

Appendix B: Winmate Software Development Kit

Winmate provides the following SDK and Utilities for the Panel PC.

Item	File Type	Description
1	SDK	Watchdog SDK
2	Utility	Watchdog Utility
3	SDK	Digital I/O SDK

To find the Drivers and SDK, please refer to the Driver CD that comes in the package or contact us. Also, you can download drivers from Winmate Download Center.

Go to www.winmate.com >Support > Download Center > Rugged Series > G-WIN Rugged PC-IK32

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