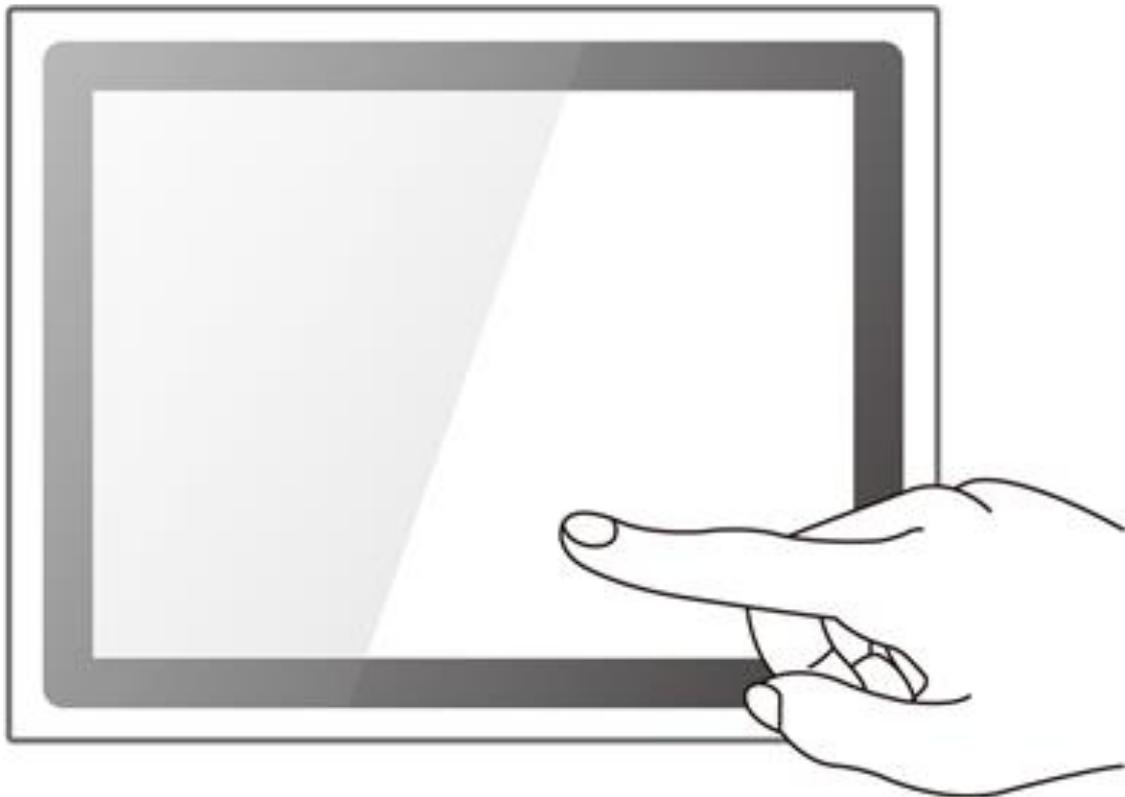


IP65 Stainless Flat PCAP Panel PC

Intel® Core™ Whiskey Lake i5-8265U 1.6GHz

15"/ 17"/ 19"/ 21.5"/ 23.8"



Model No. R15IW3S-SPC3
R17IW3S-SPA1
R19IW3S-SPM1
W22IW3S-SPA3
W24IW3S-SPA2

Quick Start Guide

Document Version 1.1
Document Part No. 91521110107W

Contents

Introduction	5
Features	5
Package Content	6
Product Overview	7
Dimensions 15"	7
Dimensions 17"	7
Dimensions 19"	8
Dimensions 21.5"	8
Dimensions 23.8"	9
Physical Buttons and LED Indicators	10
Connectors	11
Getting Started	12
Turning On Turning ON	12
How to Enable Watchdog	13
Turning Off Your Device	14
Touch Mode	15
Installation	18
Wiring Requirements	18
Connector Pin Assignments	19
Power Cable	19
Serial Cable	20
Ethernet Cable	20
USB 2.0 Cable	21
Mounting	22
VESA Mounting	22
Yoke Mounting	23
Specifications	24
Appendix	26
Appendix A: Cleaning the Monitor	26
Appendix B: Winmate Software Development Kit	27

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 his 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

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Trademark Acknowledgement

Brand and product names are trademarks or registered trademarks of their respective owners.

Disclaimer

Winmate Inc. 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

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 (e. g., with A for October, B for November and C for December).

For example, the serial number 1W14Axxxxxxx 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.

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 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 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 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 charges, ou dans un sac anti-statique lorsqu'elles ne sont pas dans le chassis.

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.

Introduction

Congratulations on purchasing Winmate® IP65 Flat Stainless PCAP Series Panel PC. Winmate® IP65 Flat Stainless PCAP Series Panel PC is rugged, industrial-grade panel PC series built to withstand challenging environments, undergoing rigorous testing to ensure safety and top performance. All of the models in the series are sealed to IP65 standard. Stainless housing features anti-corrosion properties making it suitable for food, chemical and pharmaceutical industries. PCAP multi-touch screen supports glove mode and provides even more convenience for the operator.

Wimate® IP65 Flat Stainless PCAP Panel PC goes beyond that of the standard industrial panel computers with elegant, edge-to-edge design, rugged construction, powerful performance, and flexible mounting options.

Features

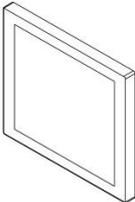
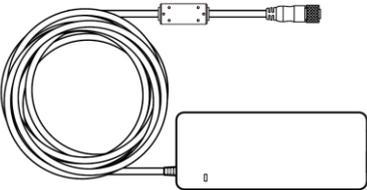
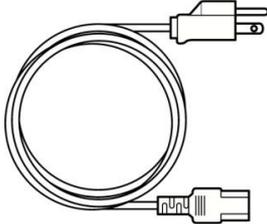
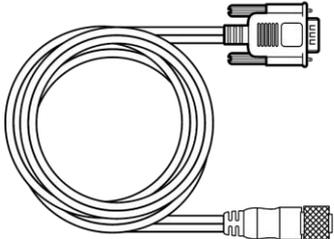
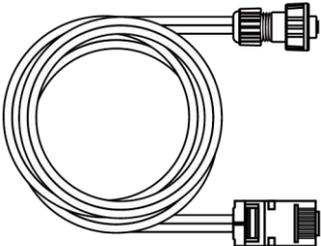
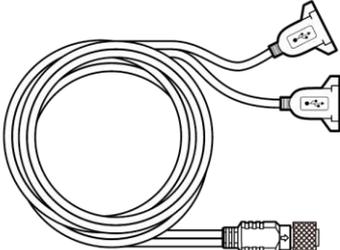
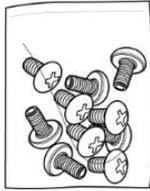
Wimate® IP65 Flat Stainless PCAP Panel PC features:

- Intel® Core™ Whiskey Lake i5-8265U 1.6GHz
- SUS 316/ AISI 316 stainless steel for food and chemical industries
- Sealed to IP65 for protection against water and dust
- A true flat, easy-to-clean front surface with edge-to-edge design
- Flat multi-touch panel pc with superior readability and PCAP technology
- Various mounting solutions, Yoke mount and VESA mount
- Plenty of I/O s including USB 2.0, RS-232 serial port and RJ45-10/100/1000 LAN ports
- Waterproof ports with adapter cables for external connectivity
- Rain/ Glove Mode

Package Content

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:

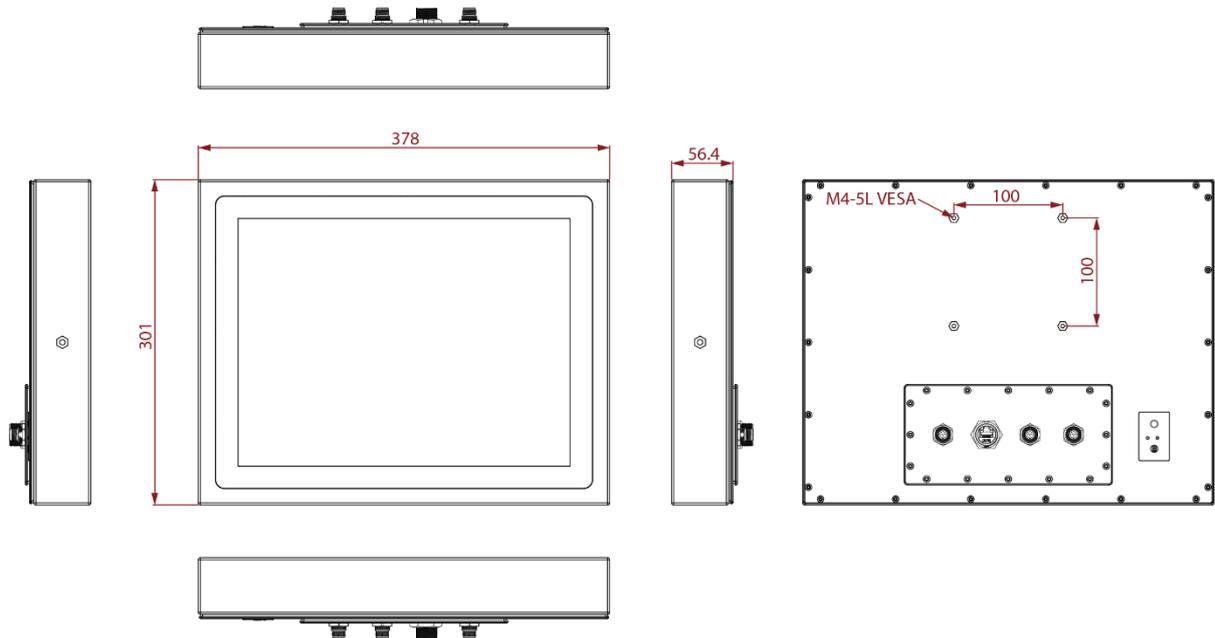
		
Panel PC	Quick Start Guide (Hardcopy)	Driver CD & User Manual
Varies by product specifications	Part No. 91521110107W	Part No. 91711110101P
		
AC Adapter	Power Cable*	Serial Cable
Part No. 50W: 90PO12050006 Part No. 84W: 90PO12084000	Varies by country	Part No. 94G0123090Q0
		
Ethernet Cable	USB Cable	VESA Screws
Part No. 94I0080080KF	Part No. 9480128080K0	Part No.913511101101

Product Overview

This section contains mechanical drawing of the Panel PC. Notice that this is a simplified drawing and some components are not marked in detail.

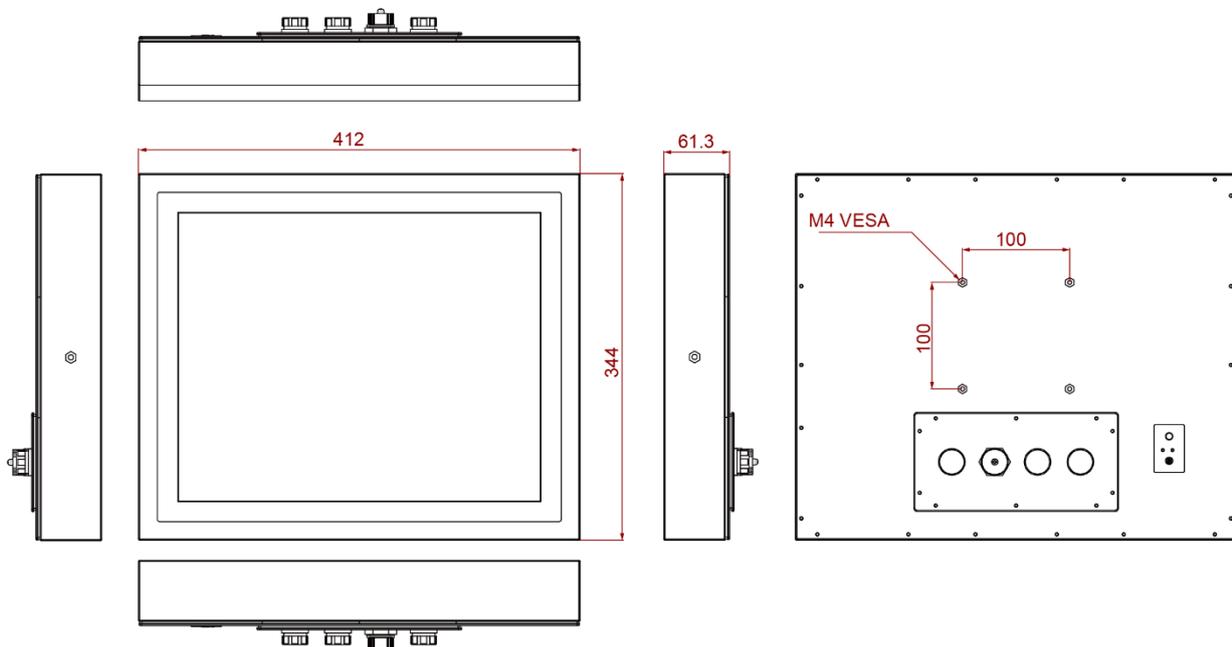
Dimensions 15"

Unit: mm



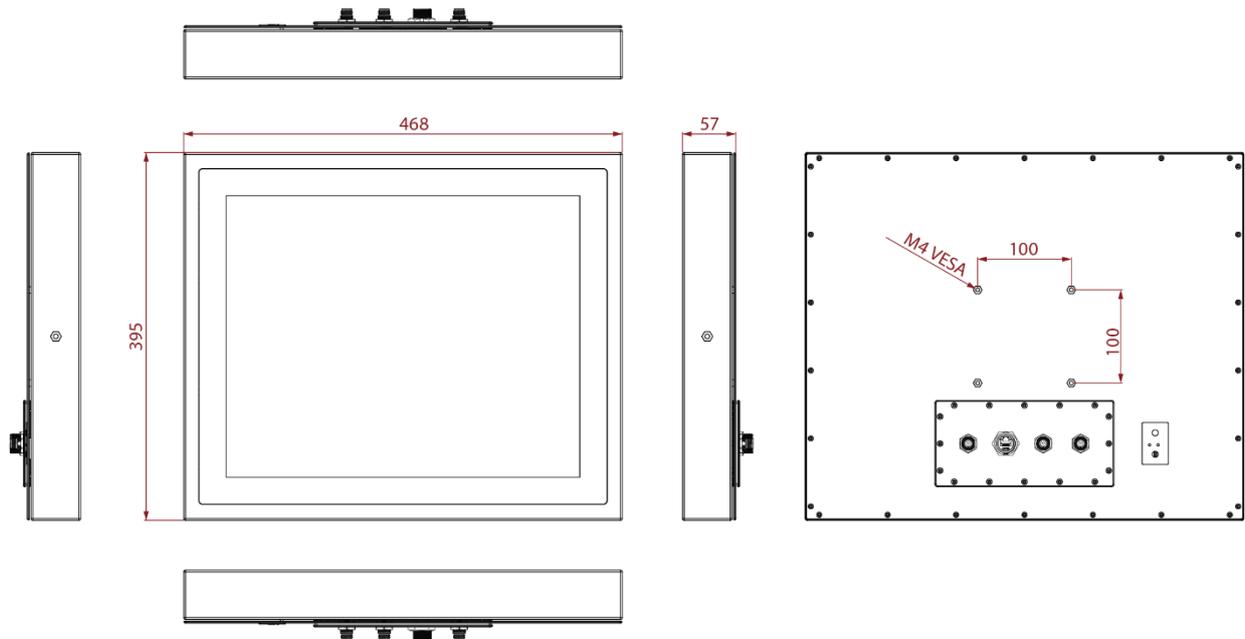
Dimensions 17"

Unit: mm



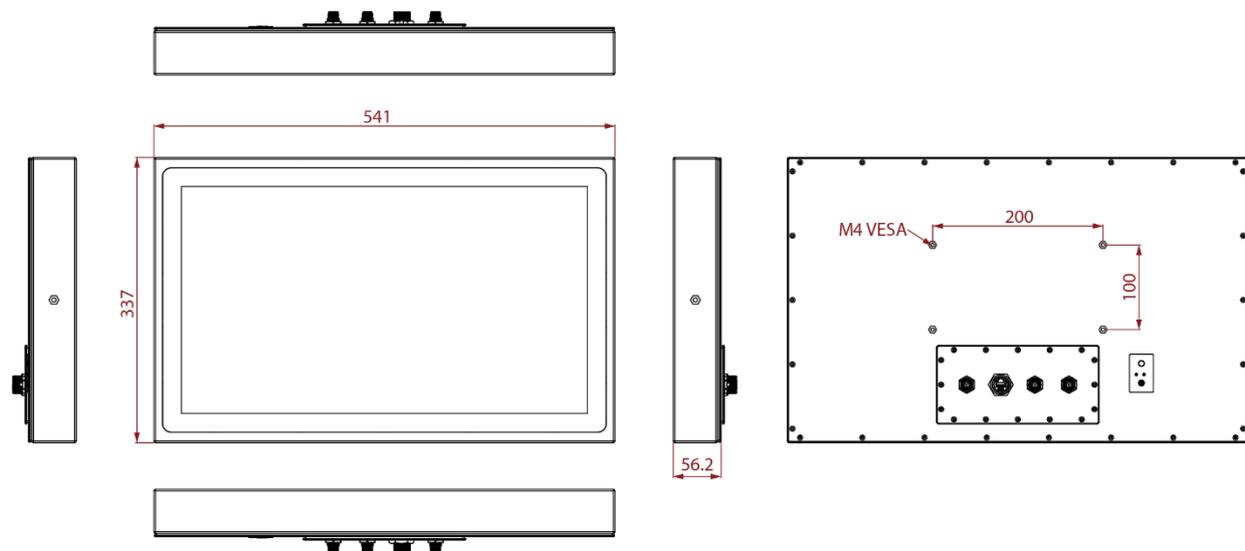
Dimensions 19"

Unit: mm



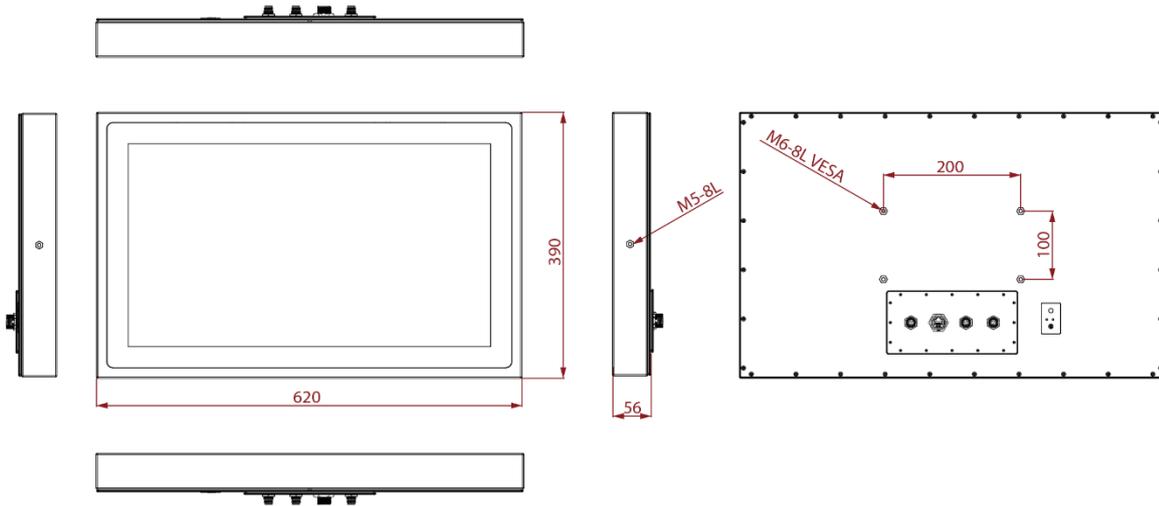
Dimensions 21.5"

Unit: mm



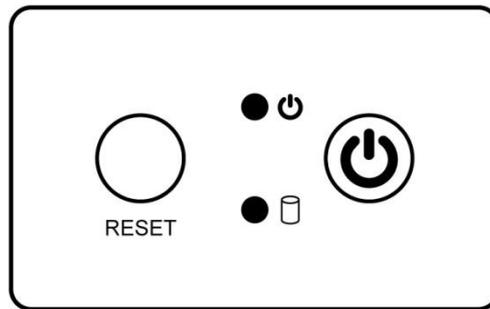
Dimensions 23.8"

Unit: mm

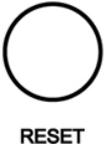


Physical Buttons and LED Indicators

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



Physical Buttons

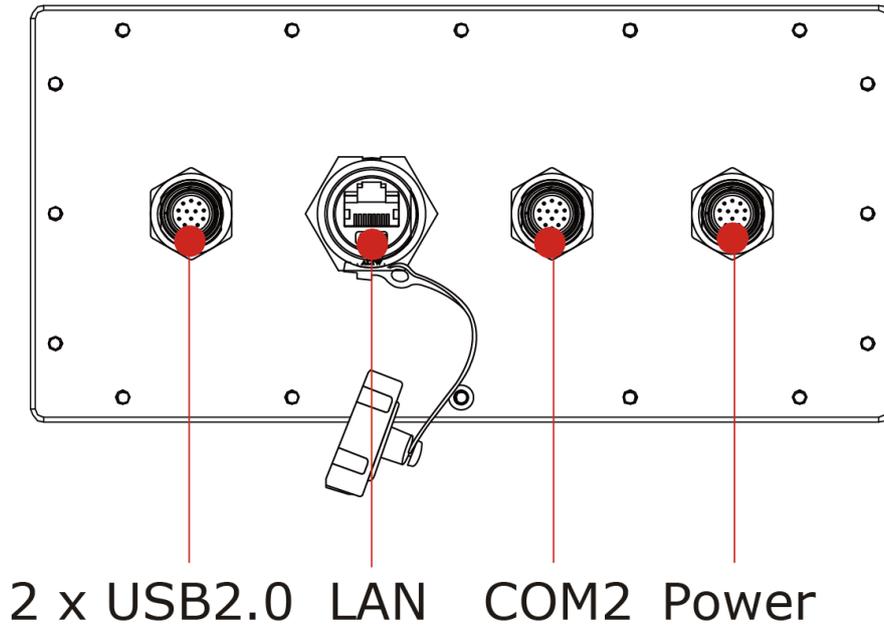
Icon	Button	Description
	Reset	Press to reset the system
	Power On/ Off	Press to power on or power off the device

LED Indicators

LED Type	Status	Description
	On	Power is on
	Off	Power is off
	Blinking	Storage activity (Data is being read or written)
	Off	System is idle

Connectors

IP65 Flat Stainless PCAP Panel PC has IP65 type connectors with protection cap.

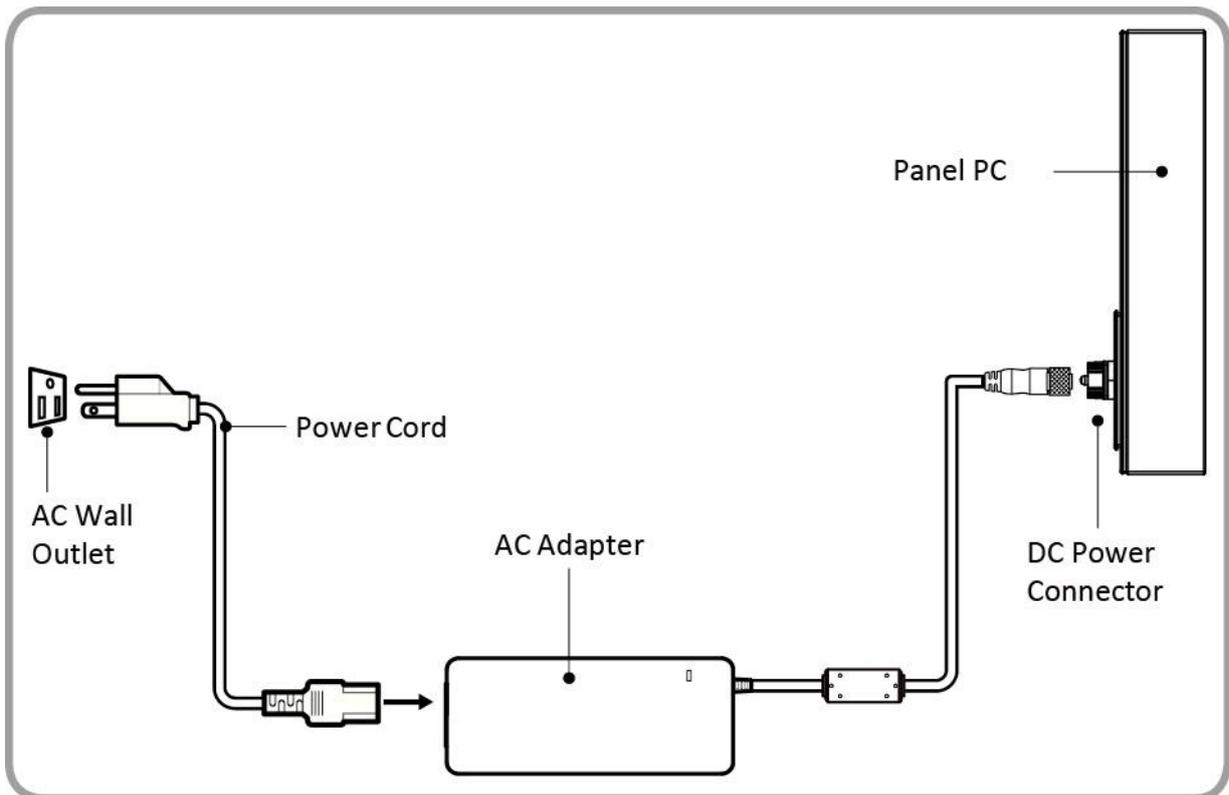


Getting Started

Turning On Turning ON

Follow the following steps to turn on your device:

1. Connect the AC adapter to the DC-in jack connector located on the back side of the Panel PC.
2. Connect the power cord to AC adapter.
3. Plug the power cord to the AC outlet and the device will turn on automatically.



AC Adapter specifications vary by panel size.

Size	15"	17"	19"	21.5"	23.8"
AC Adapter	12V/ 80W				
Power Consumption*	38W (typ.)	43W (typ.)	45W (typ.)	56W (typ.)	56W (typ.)

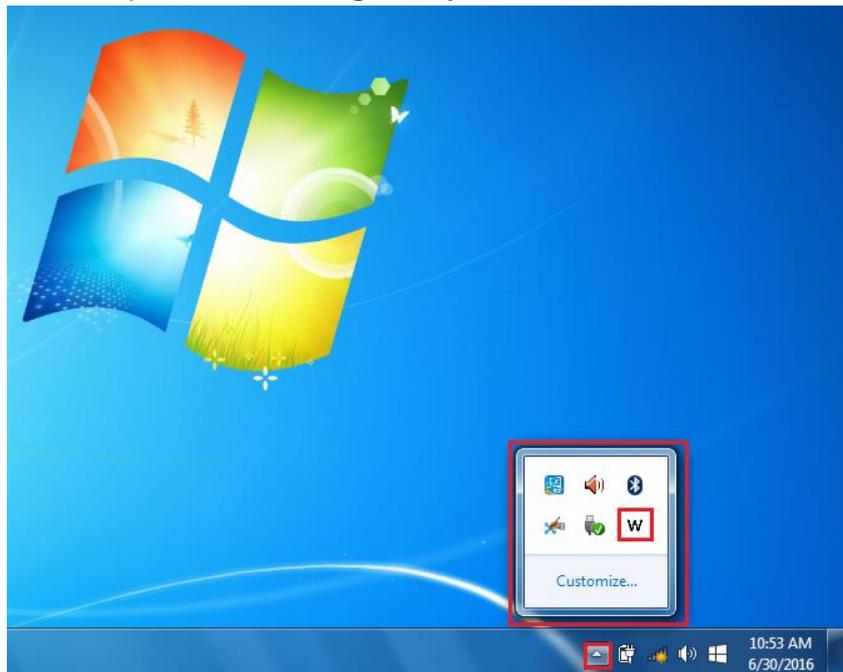
*With maximum backlight and high CPU load.

How to Enable Watchdog

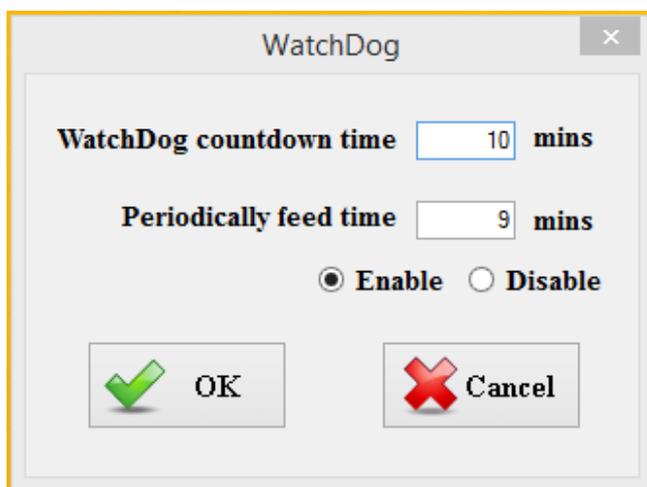
To enable Watchdog, you need to download Winmate Watchdog utility. Find more information on Watchdog in “Watchdog Guide” that you can download from Winmate Download Center or File Share. Refer to the User Manual for more details.

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.

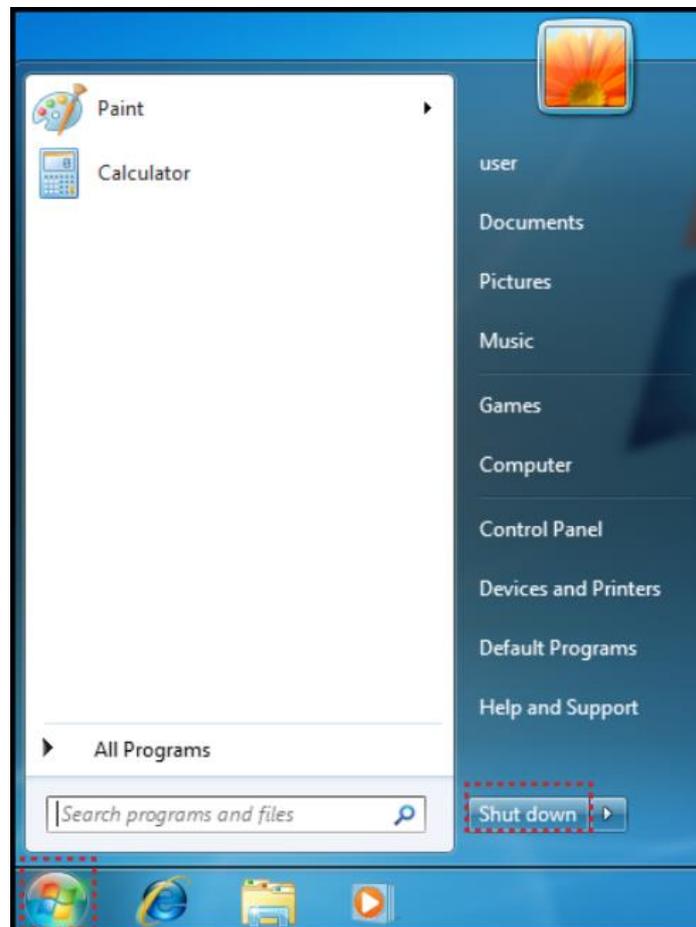
Every 9 min watchdog timer will be reset to 10 min.

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

Turning Off Your Device

To shut down your device, do the following:

Tap **Start** () > **Shut down**.



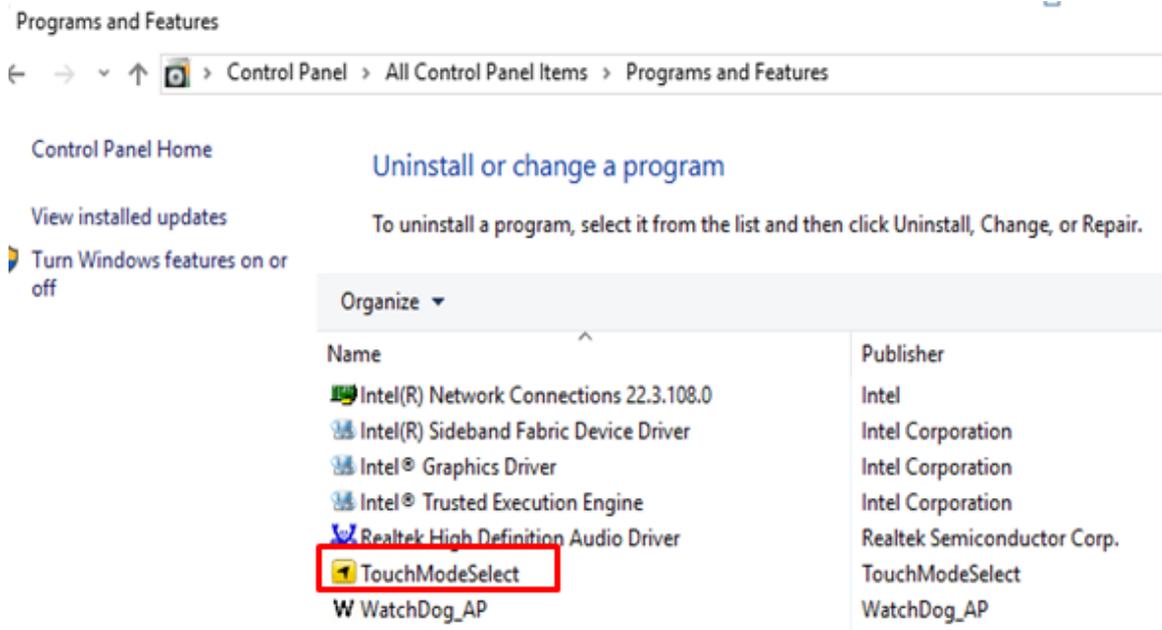
Wait for your Panel PC to completely turn off before disconnecting the power cord (if necessary).

Touch Mode

IP65 Stainless P-Cap Panel PC has three types touch modes pre-installed with Windows OS.



The icon is on the bottom right corner of the toolbar.

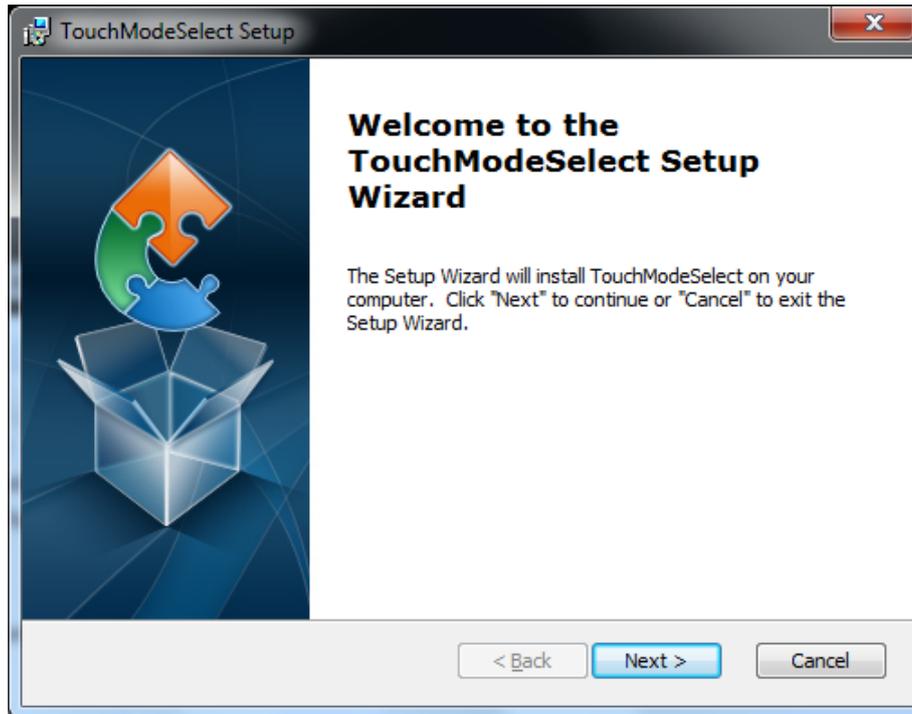


If the OS is not installed, please download the application on our website for switching the touch modes. If you cannot find it, please download it from Winmate Download Center or contact Winmate sales representative.

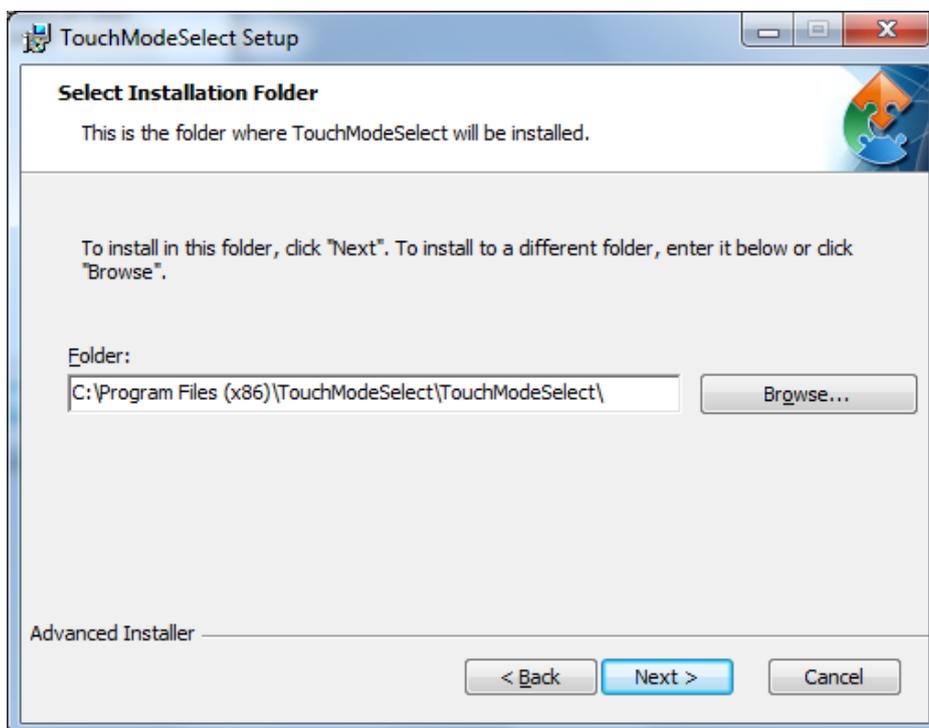
Follow the instructions below to install the *TouchModeSelect* Utility.

1. Download, install and execute **TouchModeSelect_1.2.3** setup wizard.

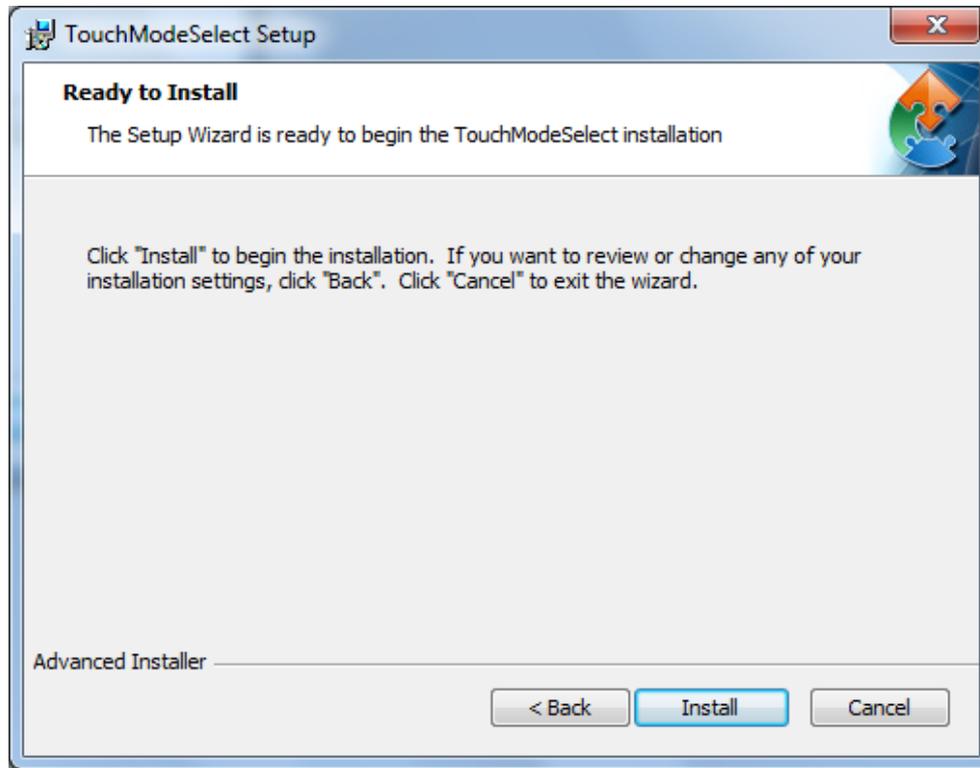
2. Click **Next** to continue.



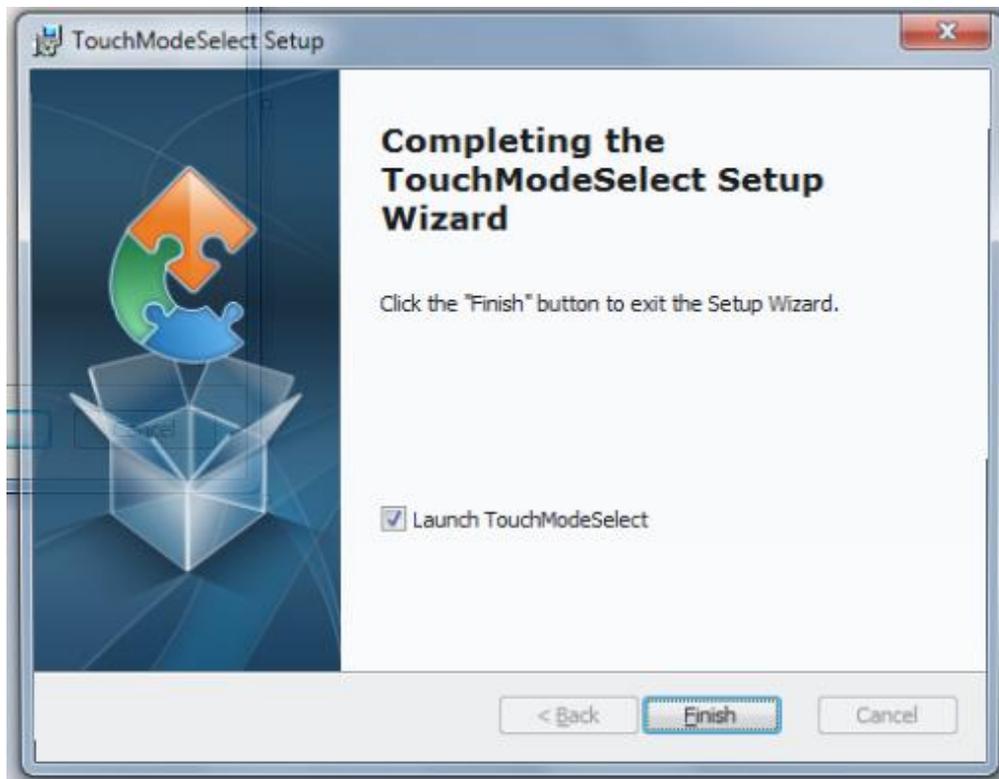
3. Select the installation folder, and click **Next** to continue.



4. The Setup Wizard is ready to begin the **TouchModeSelect** installation. Click **Install** to proceed.



5. When installation is complete, click **Finish** button to exit the Setup Wizard.



Installation

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

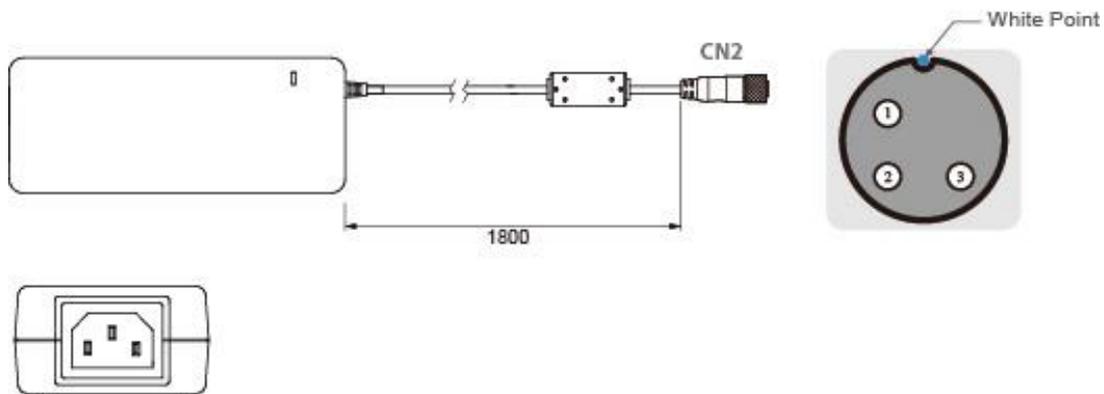
- Do not run signal or communication wiring and power wiring in the same conduit. To avoid interference, wires with different signal characteristics (i.e., different interfaces) should be routed separately.
- Be sure to disconnect the power cord before installing and/or wiring your device.
- Verify the 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.

Connector Pin Assignments

This Panel PC 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.

Power Cable

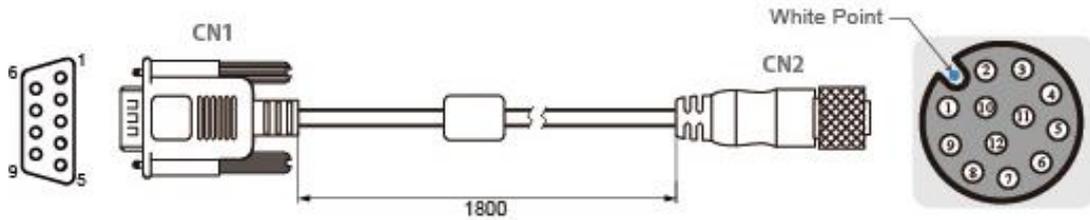
The Flat Stainless PCAP Panel PC has IP65 connector. Use power cable to connect Panel PC to the source of power. Flat Stainless PCAP Panel PC support 12V DC power input.



Pin No.	Symbols	Color		Pin No.	Symbols	Color
CN1-1	VIN -	NO ASSIGN	↔	CN2-1	VCC+	Flow Adapter
CN1-2	VIN -	NO ASSIGN	↔	CN2-2	GND	Flow Adapter
CN1-3	VIN -	NO ASSIGN	↔	CN2-3	VCC -	Flow Adapter

Serial Cable

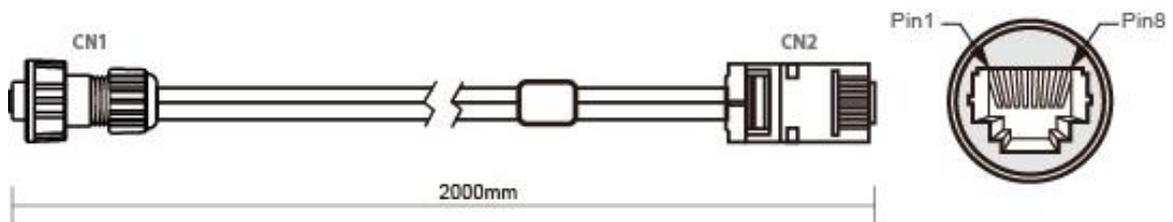
The Flat Stainless PCAP Panel PC has IP65 serial port connector. Use serial cable to connect serial interfaces.



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

Ethernet Cable

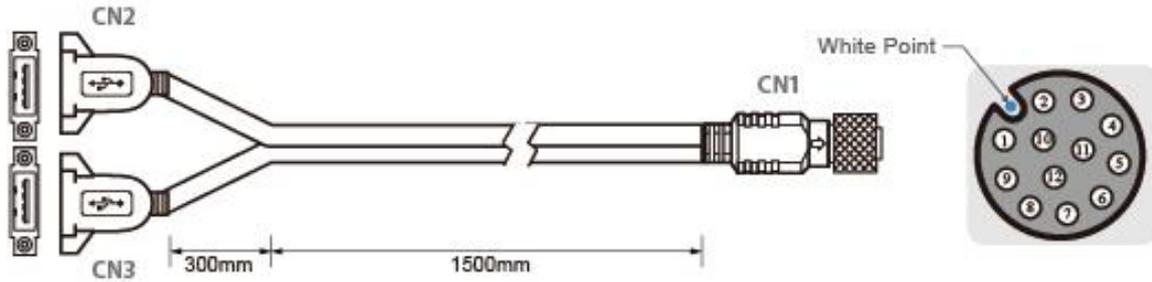
The Flat Stainless PCAP Panel PC has IP65 Ethernet connector. Use Ethernet cable to connect the Panel PC to the Internet.



Plug	Wire Color	Conn.	
1	Orange / White	1	Twist
2	Orange	2	
3	Green / White	3	Twist
4	Blue	4	
5	Blue / White	5	
6	Green	6	Twist
7	Brown / White	7	
8	Brown	8	

USB 2.0 Cable

Flat Stainless PCAP Panel PC has one full IP65 USB 2.0 connector. Use USB 2.0 cable to connect external devices such as mouse or keyboard to the Panel PC.



Pin No.	Symbols	Color		Pin No.	Symbols	Color	
CN1-2	VCC	RED	↔	CN2-1	VCC	RED	} twisted pair
CN1-3	D-	WHITE	↔	CN2-2	D-	WHITE	
CN1-4	D+	GREEN	↔	CN2-3	D+	GREEN	
CN1-5	GND	BLACK	↔	CN2-4	GND	BLACK	
CN1-6	VCC	RED	↔	CN3-1	VCC	RED	} twisted pair
CN1-7	D-	WHITE	↔	CN3-2	D-	WHITE	
CN1-8	D+	GREEN	↔	CN3-3	D+	GREEN	
CN1-9	GND	BLACK	↔	CN3-4	GND	BLACK	
CN1-1	GND	Braid	↔	Braid connect to the housing			

Mounting

IP65 Flat Stainless PCAP Panel PC devices come with different mounting options suitable for most of the industrial and commercial applications.

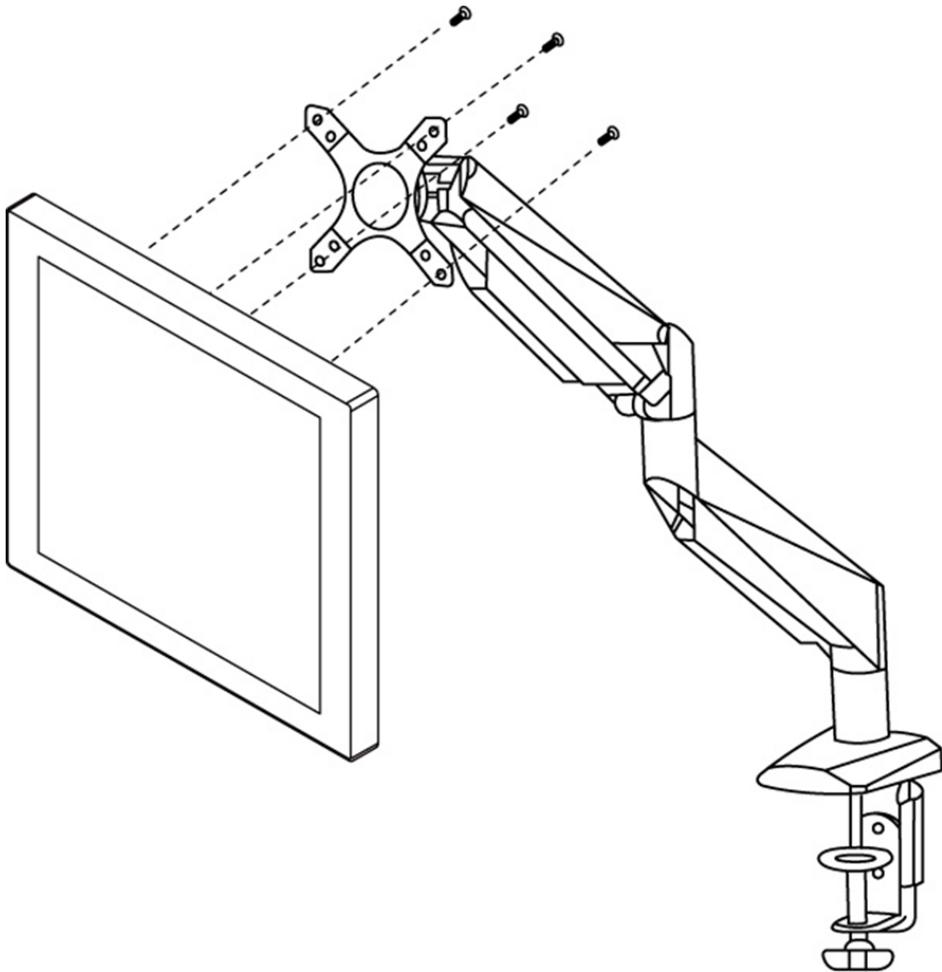
VESA Mounting

The 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
15", 17", 19"	100 x 100 mm	VESA M4x5 mm
21.5"	100 x 200 mm	VESA M4x5 mm
23.8"	100 x 200 mm	VESA M6x8 mm

Mounting Instruction:

1. Screw VESA bracket to the fixture (ex. swing arm) with four VESA screws.
2. Place the device on VESA bracket.

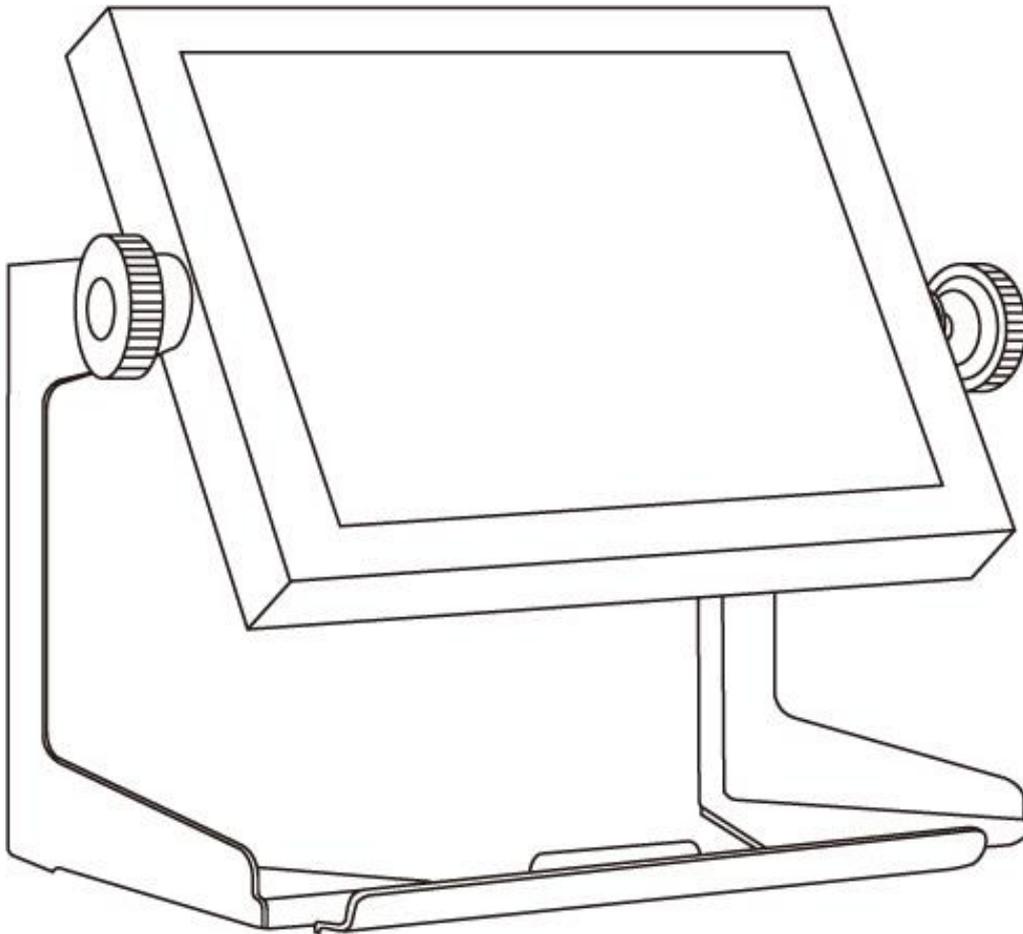


Yoke Mounting

Yoke Mount solution allows installing the Panel PC with the bracket (not supplied by Winmate).

Mounting instruction:

1. Place the Panel PC on the bracket stand, aiming screw holes for each other.
2. Secure screws to fix the device upon the bracket stand.
3. Firmly secure the locking handle to the Panel PC.



Specifications

Hardware Specifications

	Model Name				
	R15IW3S-SPC3	R17IW3S-SPA1	R19IW3S-SPM1	W22IW3S-SPA3	W24IW3S-SPA2
Display					
Size	15"	17"	19"	21.5"	23.8"
Resolution	1024 x 768	1280 x 1024	1280 x 1024	1920 x 1080	1920 x 1080
Brightness	300 <i>cd/m²</i>	350 <i>cd/m²</i>	250 <i>cd/m²</i>	250 <i>cd/m²</i>	250 <i>cd/m²</i>
Contrast Ratio	2000 : 1 (typ.)	1000 : 1 (typ.)	1000:1 (typ.)	3000 : 1 (typ.)	3000 : 1 (typ.)
Viewing Angle	-88~88(H); -88~88(V)	-85~85(H); -80~80(V)	-85~85(H); -80~80(V)	-89~89(H); -89~89(V)	-89~89(H); -89~89(V)
Max Colors	16.2M	16.7M	16.7M	16.7M	16.7M
Touch	PCAP (Default)	PCAP (Default)	PCAP (Default)	PCAP (Default)	PCAP (Default)
System					
Processor	Intel® Core™ i5 -8265U (6M Cache, 1.6GHz up to 3.9 GHz)	Intel® Core™ i5 -8265U (6M Cache, 1.6GHz up to 3.9 GHz)	Intel® Core™ i5 -8265U (6M Cache, 1.6GHz up to 3.9 GHz)	Intel® Core™ i5 -8265U (6M Cache, 1.6GHz up to 3.9 GHz)	Intel® Core™ i5 -8265U (6M Cache, 1.6GHz up to 3.9 GHz)
System Memory	1 x SO-DIMM, DDR4 2400 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional)	1 x SO-DIMM, DDR4 2400 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional)	1 x SO-DIMM, DDR4 2400 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional)	1 x SO-DIMM, DDR4 2400 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional)	1 x SO-DIMM, DDR4 2400 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional)
Storage	64GB	64GB	64GB	64GB	64GB
SSD Interface	1 x Mini PCIe SSD				
Security	Trusted Platform Module (TPM 2.0)				
Input/ Output Connectors					
Ethernet LAN	1 x RJ45 - 10/100/1000 Mbps				
COM	1 x RS232				
USB	2 x USB Type-A Receptacle				
Power	1 x 12VDC				

	Model Name				
	R15IW3S-SPC3	R17IW3S-SPA1	R19IW3S-SPM1	W22IW3S-SPA3	W24IW3S-SPA2
Mechanical Specification					
Cooling System	Fanless	Fanless	Fanless	Fanless	Fanless
Mounting	Yoke Mount, VESA Mount				
Housing	Stainless steel SUS 316/ AISI 316				
Environmental Consideration					
Operating Temperature	0°C to +45°C				
Operating Humidity	30% to 90% (non-condensing)				
IP Rating	Full IP65				
Power Specifications					
Power Input	12V DC IN (Lockable Power Jack)				
Power Consumption	38W (typ.)	43W (typ.)	45W (typ.)	56W (typ.)	56W (typ.)
Standards and Certification					
Certification	CE, FCC, RoHs				

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 IP65 Flat Stainless PCAP Panel PC.

Item	File Type	Description
1	SDK	Watchdog SDK
2	Utility	Watchdog Utility

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.

Winmate Download Center

Go to <https://www.winmate.com/> > Support > Download Center > Full IP65 Stainless PPC > IP65 Flat PCAP Series – Bay Trail

Or follow the link:

<http://www.winmate.com.tw/DownCenter/DownLoadCenter.asp?DownType=4302>

