WINMATE

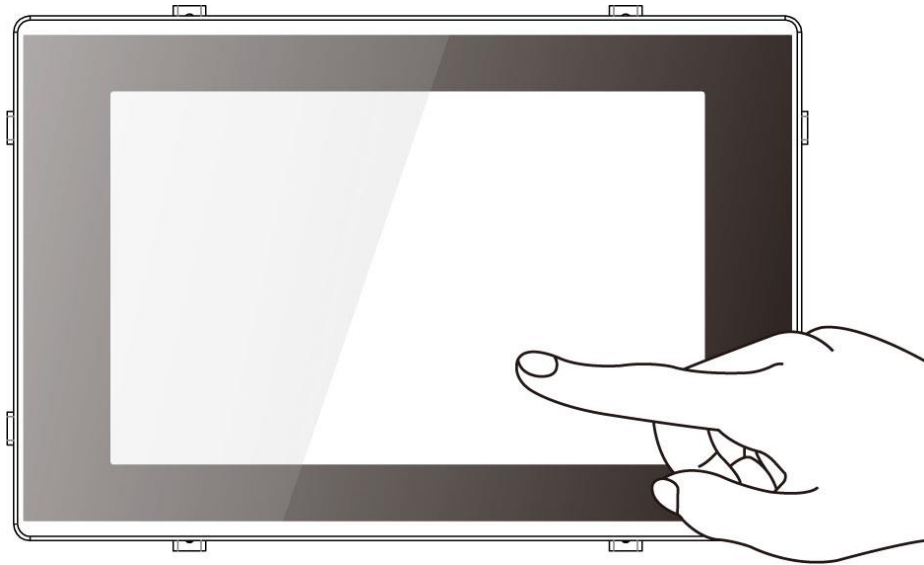# 7"/ 10.1"/ 12.1"/ 15"
S-Series HMI

Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz)

Model No. W07IB3S-PCO1AC-POE
W07IB3S-PCO1-POE
W07IB3S-PCT1-POE
W07IB3S-PCT1AC-POE
W10IB3S-PCH2AC-POE
W10IB3S-PCH2-POE
W10IB3S-PCH2LB
R12IB3S-PCM2AC-POE
R12IB3S-PCM2-POE
R15IB3S-PCC3-POE

Quick Start Guide

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

Contents

Preface

Copyright Notice

No part of this document may be reproduced, copied, translated, or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the prior written permission of the original manufacturer.

Trademark Acknowledgement

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

Disclaimer

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

Warranty

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

For example, the serial number 1W20Axxxxxxxx means October of year 2020.

Customer Service

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

You may need the following information ready before you call:
- Product serial number
- Software (OS, version, application software, etc.)
- Description of complete problem
- The exact wording of any error messages

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

Advisory Conventions

Five 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.

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!
Ne pas couvrir les ouvertures!

- 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.

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

  o The power cord or plug is damaged.
  o Liquid has penetrated into the equipment.
  o The equipment has been exposed to moisture.
  o The equipment does not work well or you cannot get it to work according to the user manual.
  o The equipment has been dropped and damaged.
  o The equipment has obvious signs of breakage.

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

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

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

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

- Cover workstations with approved anti-static material. Use a wrist strap connected to a work surface and properly grounded tools and equipment.
- Use anti-static mats, heel straps, or air ionizer for added protection.

- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting and removing connectors or test equipment.
- Keep the work area free of non-conductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Use filed service tools, such as cutters, screwdrivers, and vacuum cleaners that are conductive.
- Always put drivers and PCB's component side on anti-static foam.

Important Information

Federal Communications Commission Radio Frequency Interface Statement

This device complies with part 15 FCC rules.

Operation is subject to the following two conditions:

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

This equipment has been tested and found to comply with the limits for a class "B" digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at him own expense.

EC Declaration of Conformity

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

Electromagnetic Compatibility Directive (2014/30/EU)

- EN55024: 2010 EN 55022: 2010 Class B
  - IEC61000-4-2: 2009
  - IEC61000-4-3: 2006+A1: 2007+A2: 2010
  - IEC61000-4-4: 2012
  - IEC61000-4-5: 2014
  - IEC61000-4-6: 2013
  - IEC61000-4-8: 2010
  - IEC61000-4-11: 2004
- EN55022: 2010/AC:2011
- 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

About This Guide

This Guide applies to the S-Series HMI with Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz) CPU and provides description on how to use the HMI device, its components and features.

NOTE:

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

Chapter 1: Introduction

Congratulations on purchasing Winmate® S-Series HMI. Winmate® continues developing new generation of Human Machine Interfaces for Industry 4.0 and Internet of Things (IoT). Our S-Series HMI runs on Windows 10 1809 above version and Linux kernel v5.18 above version that allows installing the latest applications (APPs). Thereby wide customization possibilities are available to satisfy the needs of industrial automation.

1.1 Product Features

Winmate® S-Series HMI features:
- Projected Capacitive Multi-Touch (PCAP)
- Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz) CPU
- Fanless cooling system and ultra-low power consumption
- Front IP65 Water and Dust Proof
- Support PoE function
- Stylish design for room booking, access control, and room information applications

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.
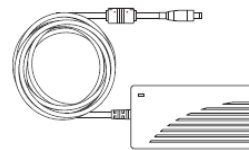
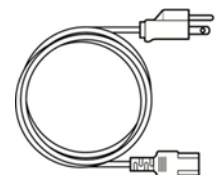Standard factory shipment list:
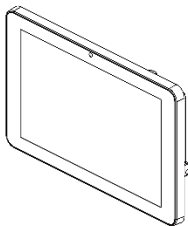
HMI Device	**Quick Start Guide (Hardcopy)**	**AC Adapter (12V/ 50W)**	**Power Cord**
Varies by product specifications	9152111I0000	Varies by product specifications	Varies by country
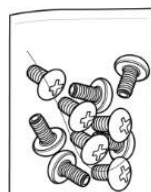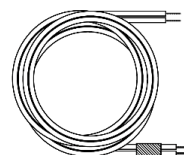
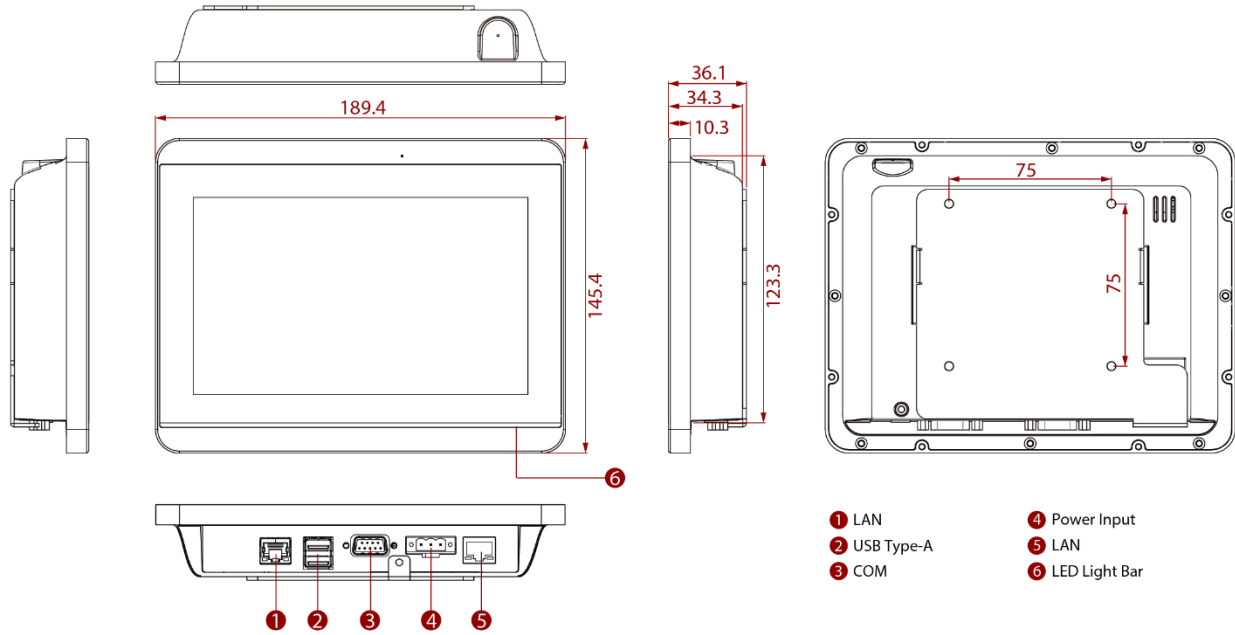| **3 pin Terminal Block**	**VESA Screws**	**Open Wire Cable with Terminal Block Connector**
94J602G030K0	Varies by product specifications	94EL02X020E0

Package content may vary based on your order.

1.3 Description of Parts

This section describes appearance, connectors' layout and mechanical dimensions of S-Series HMI. Notice that this is a simplified drawing and some components are not marked in detail. Please contact our sales representative if you need further product information.
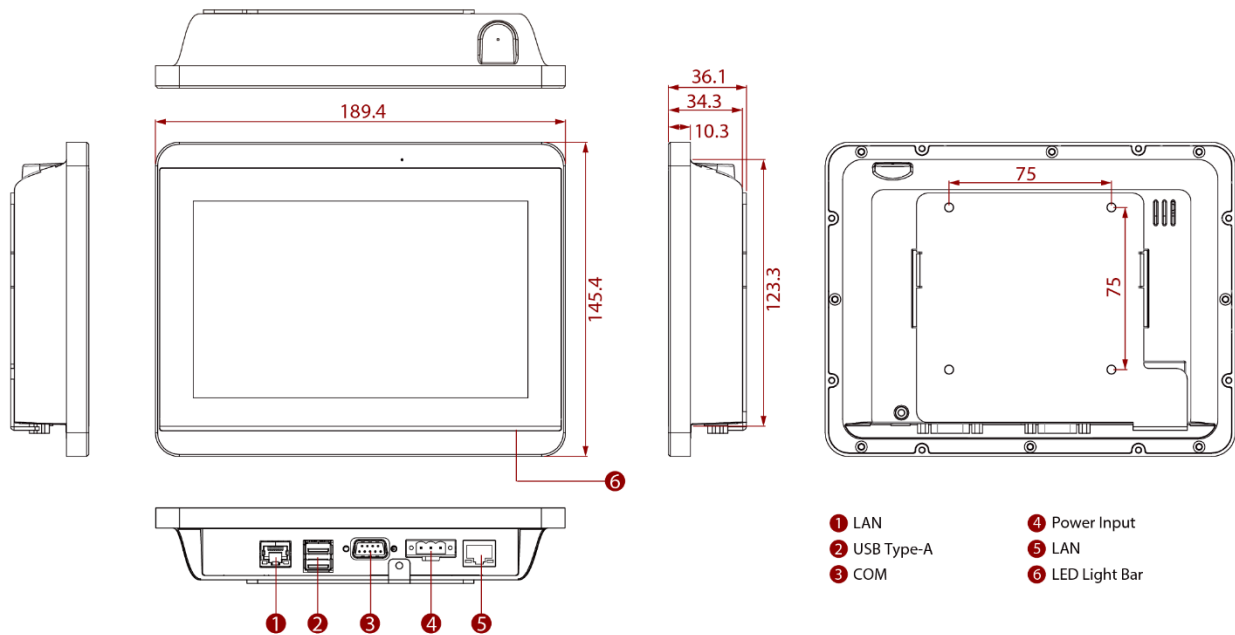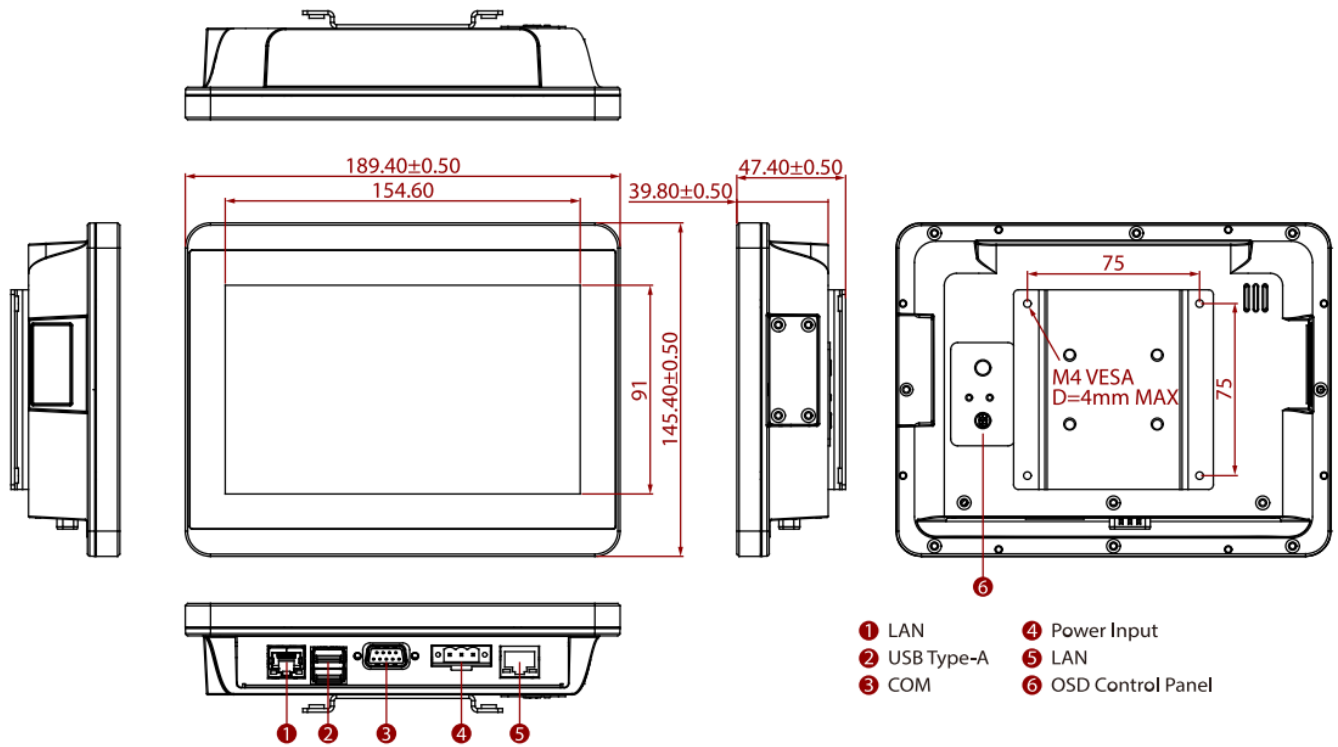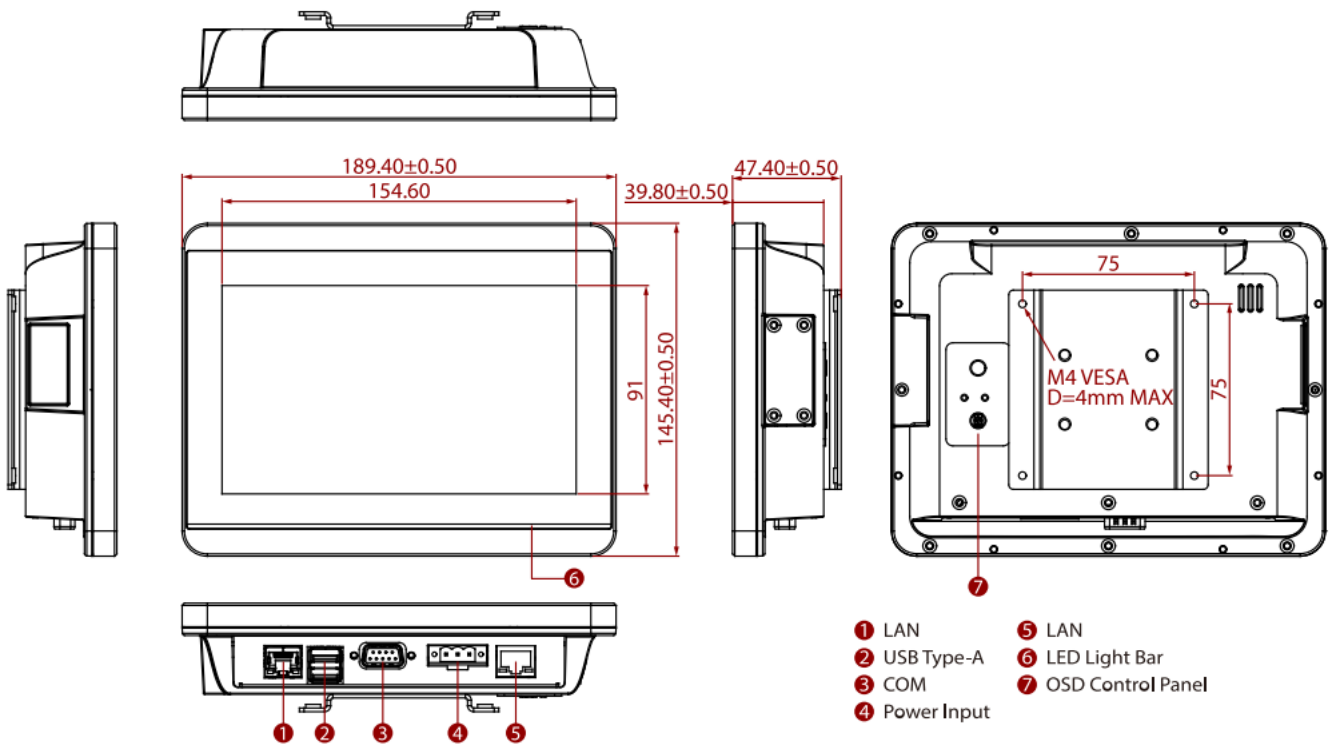
W07IB3S-PCO1AC-POE

Unit: mm

❶ LAN   ❹ Power Input
❷ USB Type-A   ❺ LAN
❸ COM   ❻ LED Light Bar

W07IB3S-PCO1-POE

Unit: mm

❶ LAN   ❹ Power Input
❷ USB Type-A   ❺ LAN
❸ COM   ❻ LED Light Bar

W07IB3S-PCT1-POE

Unit: mm

189.40±0.50
154.60
39.80±0.50
47.40±0.50
91
145.40±0.50
75
75
M4 VESA
D=4mm MAX

❶ LAN   ❹ Power Input
❷ USB Type-A   ❺ LAN
❸ COM   ❻ OSD Control Panel

W07IB3S-PCT1AC-POE

Unit: mm

189.40±0.50
154.60
39.80±0.50
47.40±0.50
91
145.40±0.50
75
75
M4 VESA
D=4mm MAX

❶ LAN   ❺ LAN
❷ USB Type-A   ❻ LED Light Bar
❸ COM   ❼ OSD Control Panel
❹ Power Input

W10IB3S-PCH2AC-POE

Unit: mm

❶ LAN	❹ Power Input
❷ USB Type-A	❺ LAN
❸ COM	❻ LED Light Bar

W10IB3S-PCH2-POE

Unit: mm

❶ LAN	❹ Power Input
❷ USB Type-A	❺ LAN
❸ COM	❻ LED Light Bar

W10IB3S-PCH2LB

Unit: mm

4-M4 VESA MOUNT D=5

75

75

Cutout:250x159mm

❶ LAN
❷ USB Type-A
❸ COM
❹ Power Input
❺ LAN
❻ LED Light Bar
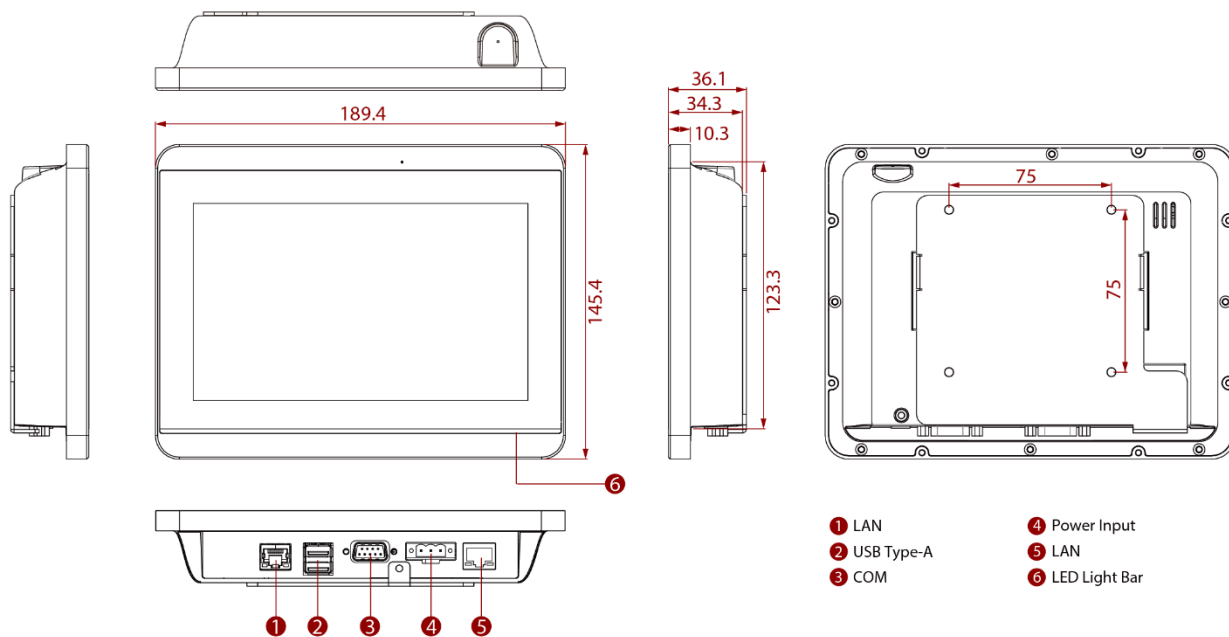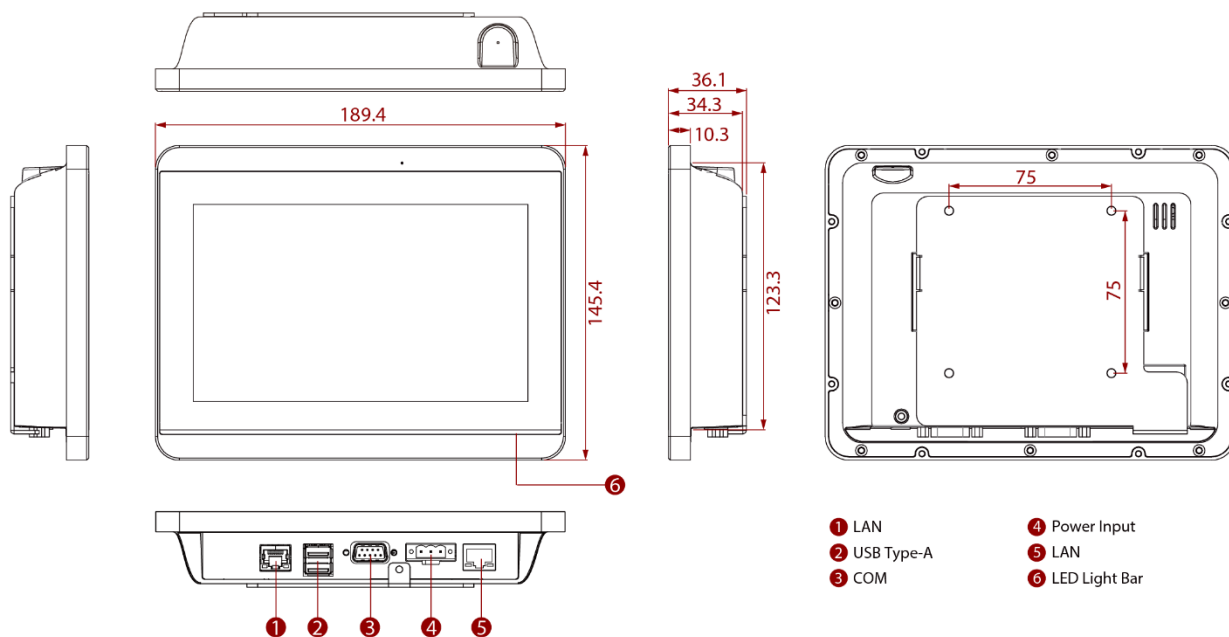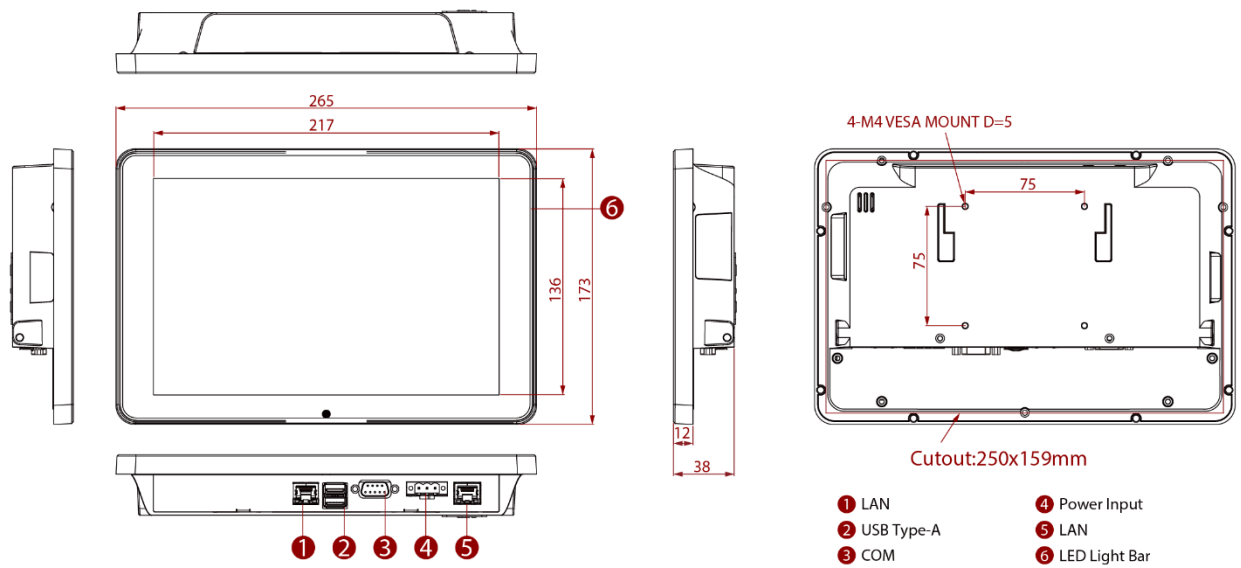
R12IB3S-PCM2AC-POE

Unit: mm

4-M4 VESA MOUNT D=5

37.50 37.50

63.50

11.50

Cutout: 282*207mm

❶ LAN
❷ USB Type-A
❸ COM
❹ Power Input
❺ LAN

R12IB3S-PCM2-POE

Unit: mm

Cutout:250x159mm

❶ LAN	❹ Power Input
❷ USB Type-A	❺ LAN
❸ COM	❻ LED Light Bar

R15IB3S-PCC3-POE

Unit: mm

Vesa 4-M6 5mm
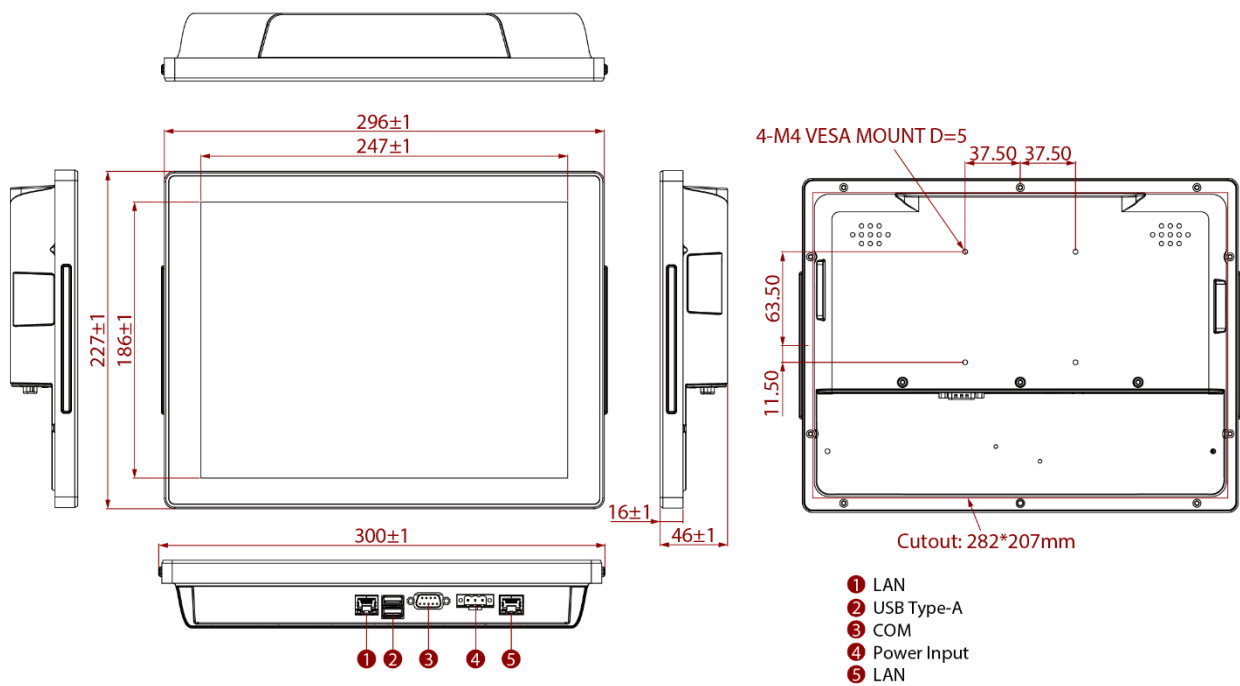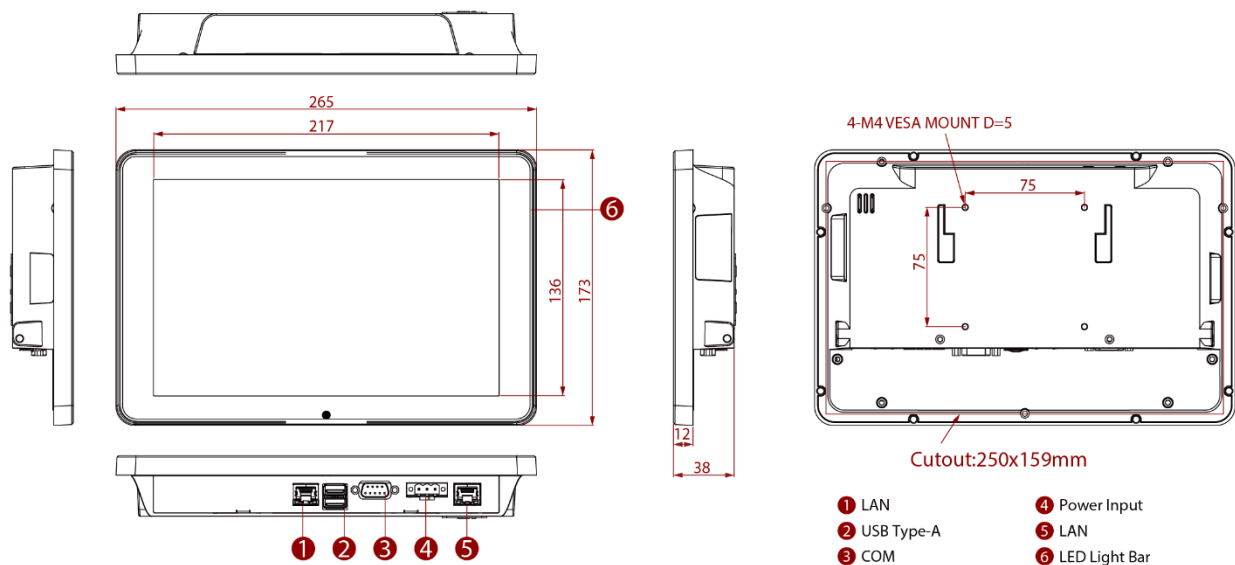
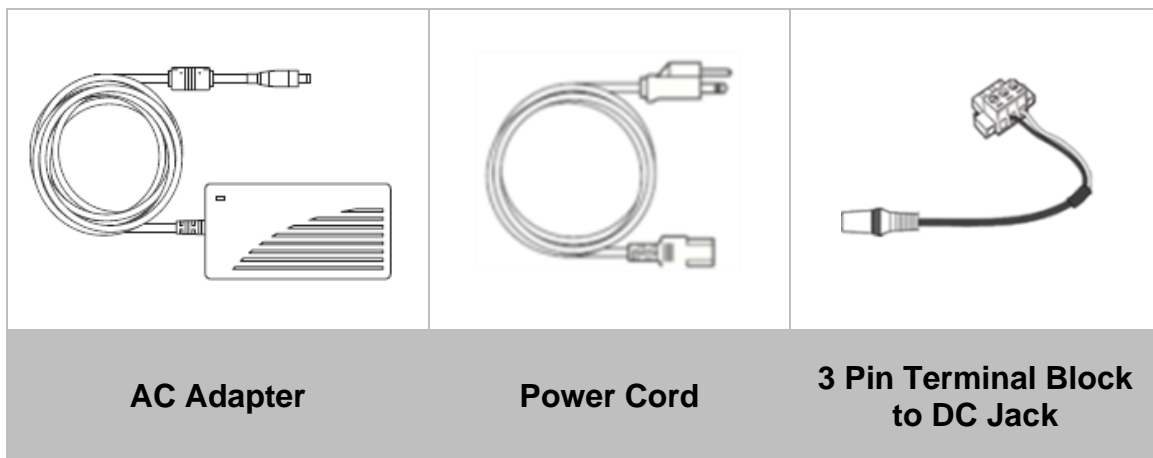| ❶ LAN	❹ Power Input
❷ USB Type-A	❺ LAN
❸ COM	
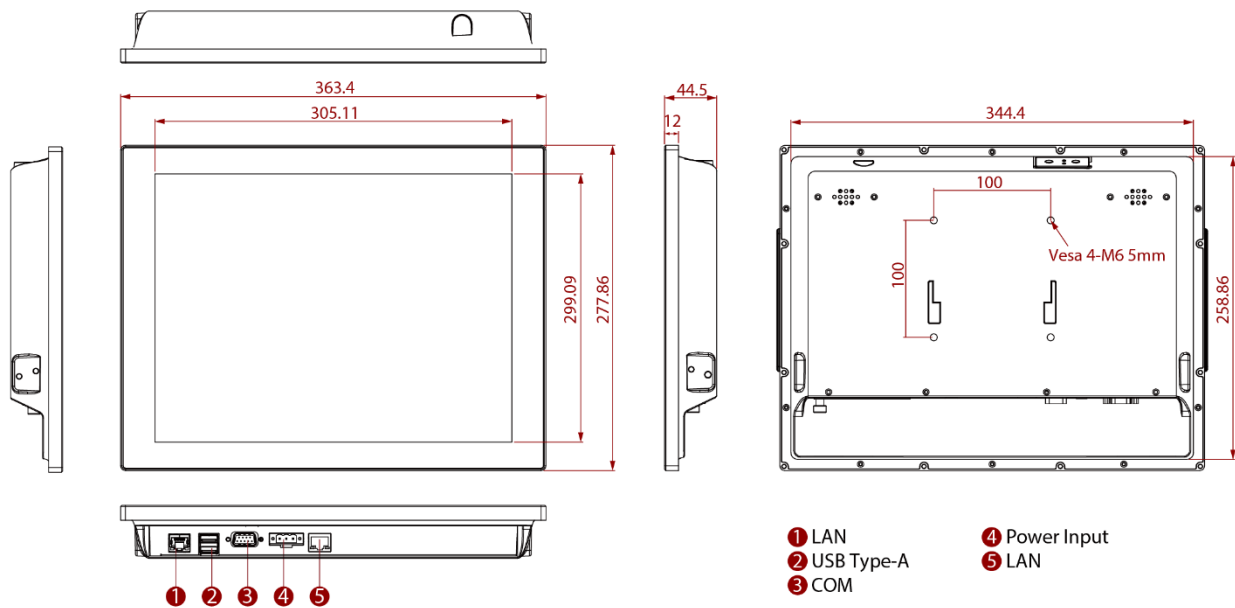
Chapter 2: Getting Started

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

2.1 Powering On

2.1.1 AC Adapter Components

| AC Adapter | Power Cord | 3 Pin Terminal Block to DC Jack |

Safety Precautions:
- Do not use the adapter in a high moisture environment
- Never touch the adapter with wet hands or foot
- Allow adequate ventilation around adapter while using
- Do not cover the adapter with paper or other objects that will reduce cooling
- Do not use the adapter while it is inside a carrying case
- Do not use the adapter if the cord is damaged
- There are NO serviceable parts inside
- Replace the unit if it is damaged or exposed to excess moisture

While using the AC Adapter always:
- Plug-in the power cord to easy accessible AC outlet
- Plug-in the AC adapter to a grounded outlet

ALTERNATING CURRENT / MISE À LE TERRE!
This product must be grounded. Use only a grounded AC outlet. Install the additional PE ground wire if the local installation regulations require it.
*If you do not use a grounded outlet while using the device, you may notice an electrical tingling sensation when the palms of your hands touch the device.

Ce produit doit être mis à la terre. Utiliser seulement un cordon d'alimentation avec mise à la terre. Si les règlements locaux le requiert, installer des câbles de mise à la terre supplémentaires.
*Si vous n'utiliser pas une prise d'alimentation avec mise à la terre, vous pourriez remarquer une sensation de picotement électrique quand la paume de vos mains touche à l'appareil.

2.1.2 Power Considerations

The HMI device operates on external DC power. Use the AC adapter included in the package.

CAUTION/ATTENTION

Use only the AC adapter included in your package
(Rating: Output 12 V/ 4.16A). Using other AC adapters may damage the device.

Utiliser seulement le convertisseur AC inclu avec votre appareil (Puissance: Sortie 12 V/ 4.16A). Utiliser d'autres convertisseurs pourraient endommager l'appareil.

2.1.3 Connecting the Power

Installation Instruction:
1. Connect a 3-pin terminal block to the HMI connector.
2. Connect the other side of the terminal block to the AC adapter.
3. Connect the AC adapter to the power cord.
4. Plug in the power cord to a working AC wall outlet. The device will boot automatically.
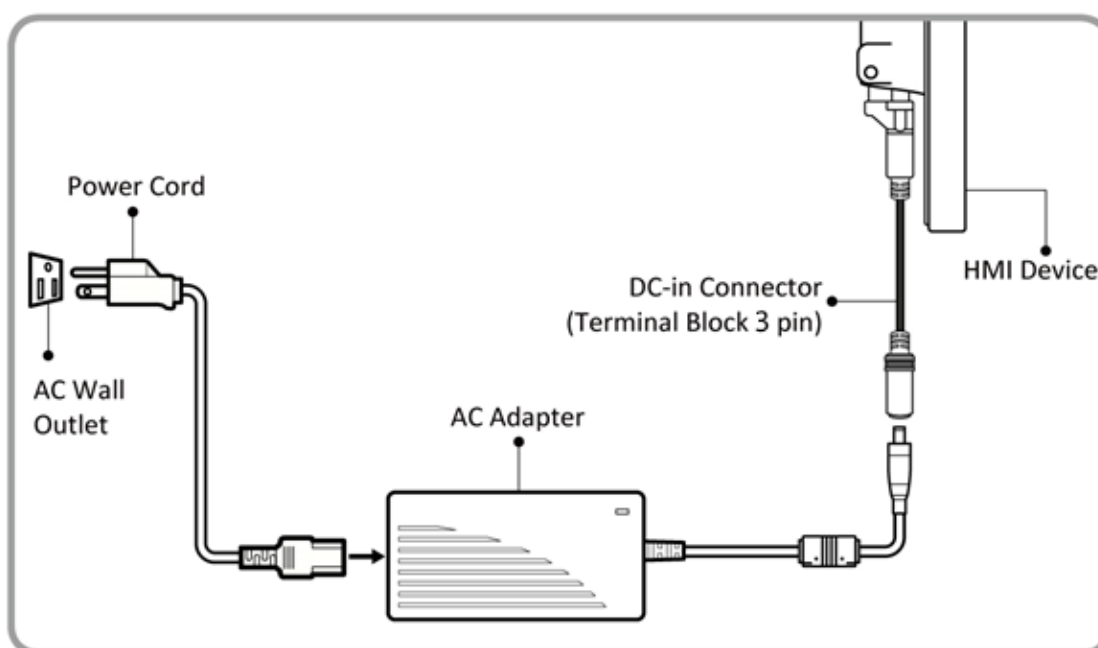
Note:
1. Power cords vary in appearance by region and country.
2. Based on the model, terminal block connector may be located either on the bottom or on the rear side of the HMI device.
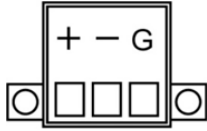
2.2 Connector Pinouts

2.2.1 DC Input Connector

Terminal Block
DC power source input is a 3-pin terminal block connector. Power Input is 12V DC in.

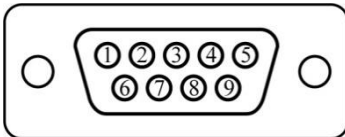|	Minimum Voltage 11.4V
⚠	Maximum Voltage 12.6V
Voltage	Maximum Current 4.2A

🛈 **IMPORTANT:**
Support PoE (optional), requires IEEE 802.3at 25W power input

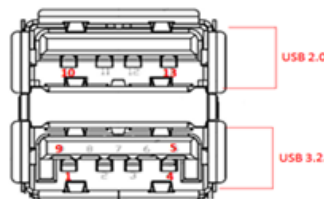## 2.2.2 Serial Port Connector

RS-232/422/485

Pin №	RS-232 (Default)	RS-422	RS-485
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

2.2.3 Two USB: USB 2.0, USB 3.2 Gen 1x1（5Gbps）Connector

Pin №	Signal Name	Pin №	Signal Name
1	+5V USB3.2 Gen 1 x1（5Gbps）	2	U2DN0
3	U2DP0	4	USB_GND
5	U3RXDN1	6	U3RXDP1
7	USB_GND	8	U3TXDN1
9	U3TXDP1	10	+5VUSB2.0
11	U2DN1	12	U2DP1
13	USB_GND		

2.2.4 LAN1: Gigabit Ethernet Connector

The S-Series HMI supports one Gigabit Ethernet interface for connecting to the internet.

Pin №	Signal Name
1	MDI0+
2	MDI0-
3	MDI1+
4	MDI1-
5	MDI2+
6	MDI2-
7	MDI3+
8	MDI3-

2.2.5 LAN2: Gigabit Ethernet with PoE Connector

The S-Series HMI supports one Gigabit Ethernet interface for connecting to the internet.

Pin №	Signal Name
1	TRDT3
2	TRD3-
3	TRD3+
4	TRD2+
5	TRD2-
6	TRDT2
7	TRDT4
8	TRD4+
9	TRD4-
10	TRD1-
11	TRD1+
12	TRDT1
13	VC+
14	VC-
15	VC+
16	VC-

2.3 Configuring Serial Port Settings

Serial port COM1 can be configured for RS-232, RS-422 or RS-485. Jumpers are located on the motherboard. You need to open the housing in order to access the jumpers.

CAUTION/ ATTENTION

It is recommended to use factory jumper settings. Opening the housing when it is sealed may damage the device and its parts.

Il est recommandé d'utiliser la configuration d'usine de cavalier. Ouvrir le chassis lorsqu'il est scellé peut endommagé l'appareil et ses pièces.

Note:

A pair of needle nose pliers may be helpful when working with jumpers. If you have any doubts about the best hardware configuration for your application, contact your local distributor or sales representative before you make any changes. Generally, you simply need a standard cable to make most connections.

The jumper setting diagram is shown below. When the jumper cap is placed on both pins, the jumper is SHORT. The illustration below shows a 3-pin jumper; pins 1 and 2 are short. If you remove the jumper cap, the jumper is OPEN.

PIN 1-2 SHORT
PIN 3 OPEN
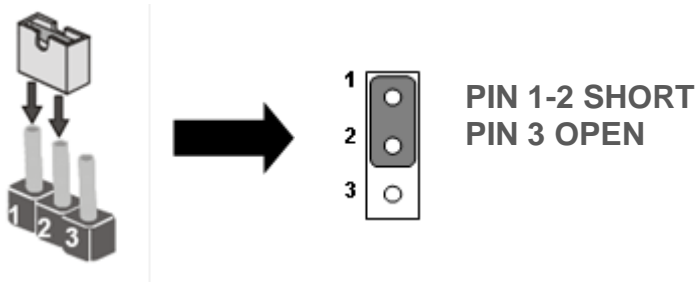
The picture below shows RS-232/422/485 (J8/J9) jumper setting.
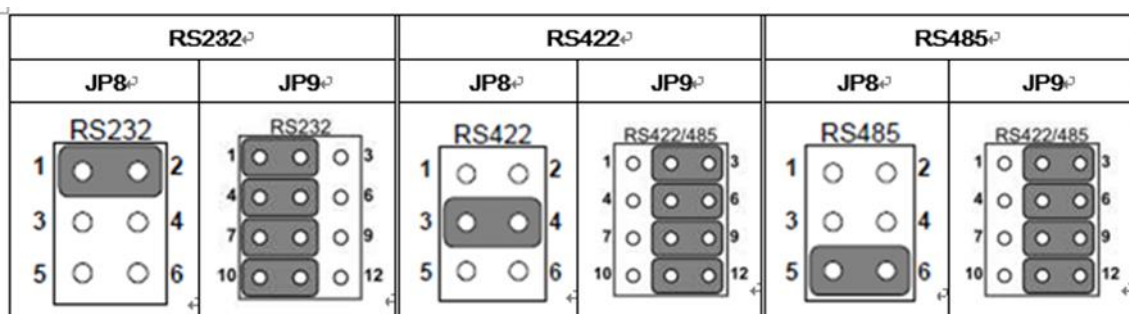
Example: To make RS-232 settings, set the jumper 8, pin 1-2 to the SHORT position, and jumper 9, pin 1-2, 4-5, 7-8, 10-11 to the SHORT position.

Chapter 3: Mounting

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

3.1 Cable Mounting Considerations

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

Refer to Chapter 2.1 for the cable installation instruction.

CAUTION/ ATTENTION

Observe all local installation requirements for connection cable type and protection level.

Suivre tous les règlements locaux d'installations, de câblage et niveaux de protection.

CAUTION/ ATTENTION

Turn off the device and disconnect other peripherals before installation.

Éteindre l'appareil et débrancher tous les périphériques avant l'installation.

ALTERNATING CURRENT / MISE À LE TERRE!

To prevent electrical shock, the Safety Ground location on the rear must be bonded to the local earth ground through a minimum 12 AWG wire as short as possible

Pour éviter les chocs électriques, l'emplacement de la prise terre à l'arrière doit être lié à terre locale, à travers un 12 AWG minimum et aussi court que possible.

3.2 Safety Precautions

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

3.3 Mounting Guide

S-series HMI devices come with different mounting options suitable for most of the industrial and commercial applications. The main mounting approach is rear mount - very user-friendly in terms of installation. 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.

3.3.1 VESA Mount

VESA Mount is a widely used mounting solution suitable for all kinds of industrial applications. Notice that VESA Mount solution for 7" series HMI need a VESA bracket.

Model Name	Dimensions	Screw Hole Diameter
W07IB3S-PCO1AC-POE	75 x 75 mm	VESA M5 x 5 mm
W07IB3S-PCO1-POE	75 x 75 mm	VESA M5 x 5 mm
W07IB3S-PCT1-POE	75 x 75 mm	VESA M4 x 5 mm
W07IB3S-PCT1AC-POE	75 x 75 mm	VESA M4 x 5 mm
W10IB3S-PCH2AC-POE	75 x 75 mm	VESA M4 x 5 mm
W10IB3S-PCH2-POE	75 x 75 mm	VESA M4 x 5 mm
W10IB3S-PCH2LB	75 x 75 mm	VESA M4 x 5 mm
R12IB3S-PCM2AC-POE	75 x 75 mm	VESA M4 x 5 mm
R12IB3S-PCM2-POE	75 x 75 mm	VESA M4 x 5 mm
R15IB3S-PCC3-POE	100 x 100 mm	VESA M6 x 5 mm
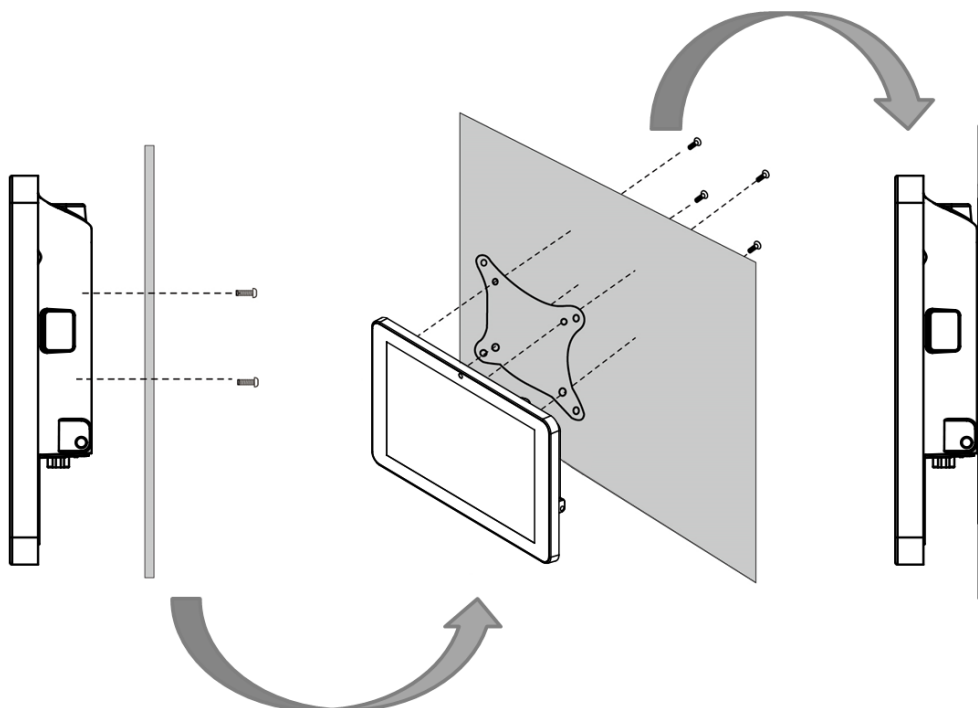
with customer's bracket

Mounting Steps:

1.   Screw VESA bracket to the fixture (ex. wall) with four M4 x 3 mm VESA screws.
2.   Place the device on VESA bracket.

3.3.2 Panel Mount

Panel Mount solution is suitable for many applications where HMI should be embedded in the machine. With this mounting solution flat surface leave no bezel in the front. In addition to elegant design, rear mount solution is making the HMI unit easy to clean and maintain. The HMI device is secured to the fixture from the rear by using the mounting brackets included in the package.
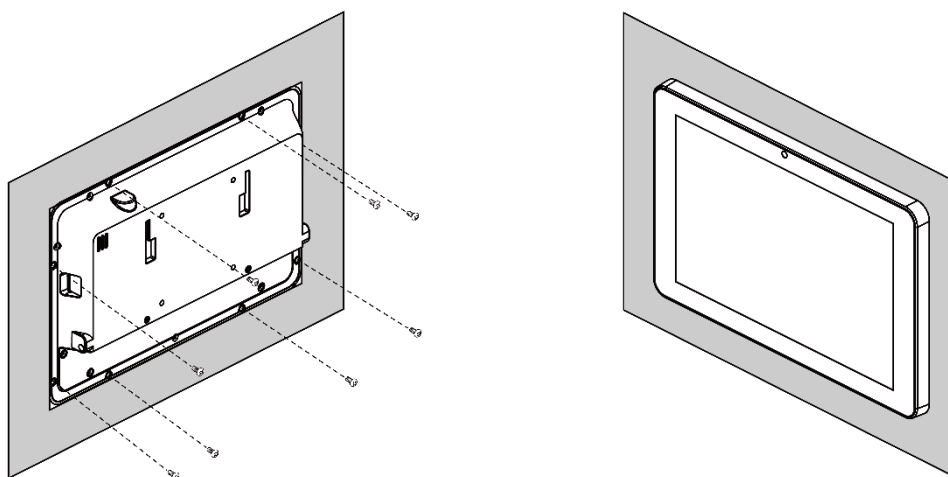
Size	7"	10.1"	12.1"	15"
Cutout dimension (W x D in mm)	175.5 x 131.5	250 x 159	282 x 207	346.5 x 261

Mounting Steps:
1. Prepare a cutout on a fixture according to the cutout dimensions. Place the device on the fixture.
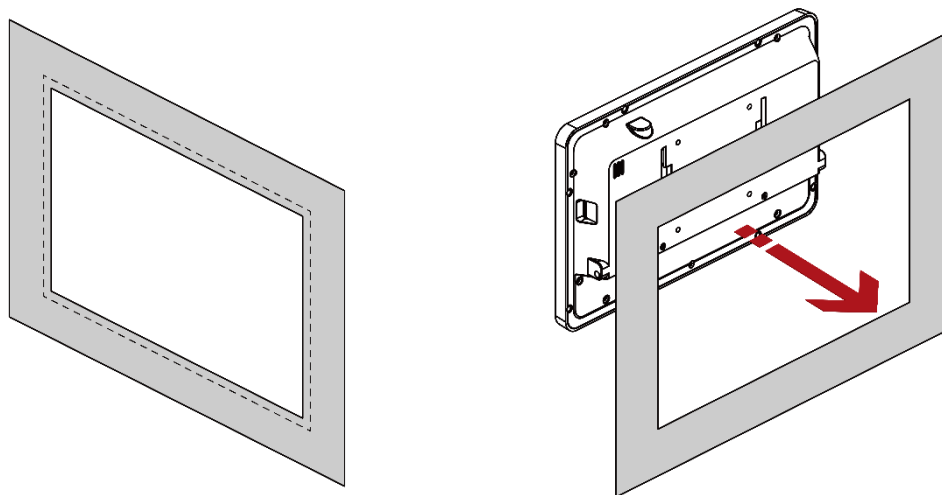
2. Secure the HMI to the fixture by screws. Connect power and other peripherals to the HMI unit.
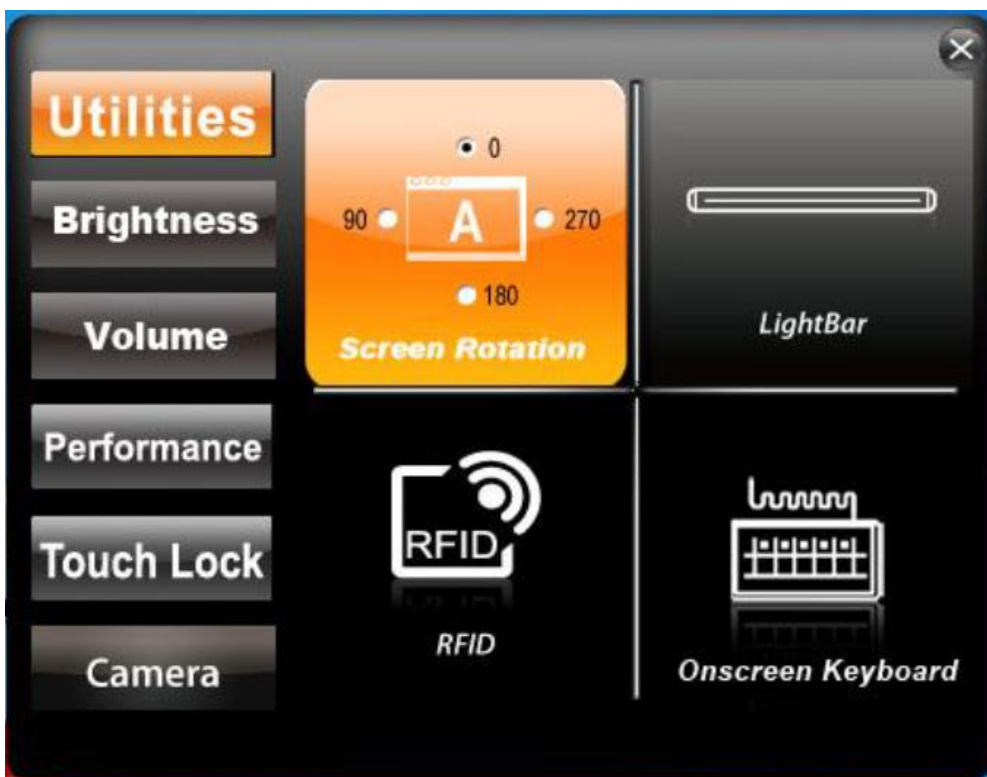
Chapter 4: Using the HMI Panel PC

4.1 HotTab Menu

To open the Hot Tab menu:
1. Double-click the Hot Tab icon on the Windows desktop.

2. The Hot Tab main menu will appear on the screen as shown below.
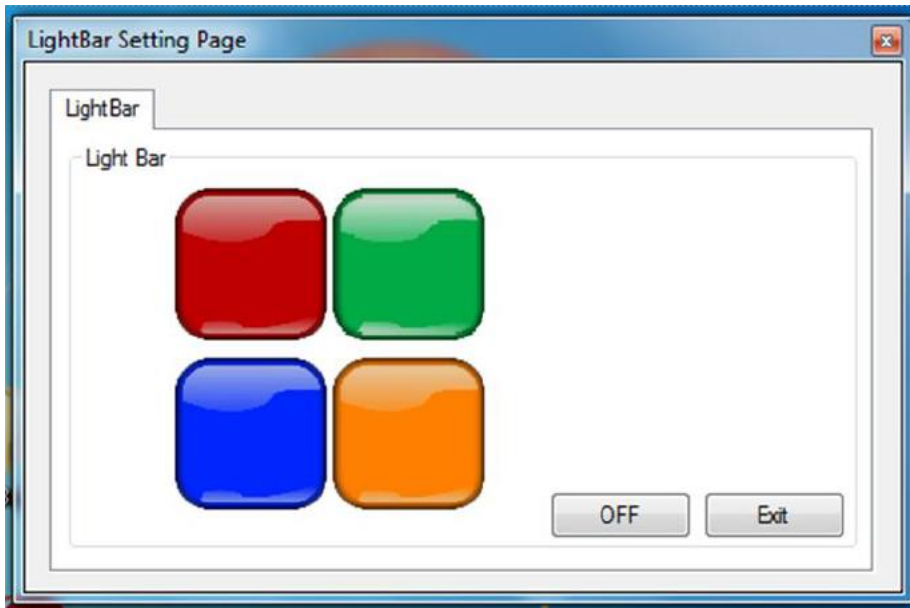

NOTE:
RFID and LED Light Bar are optional features and may not be present in your model.

4.2 Testing LED Light Bar

Tap Light Bar to access the LED light bar control panel, and select Red / Green / Blue/ Orange color to be displayed on the LED Bar.
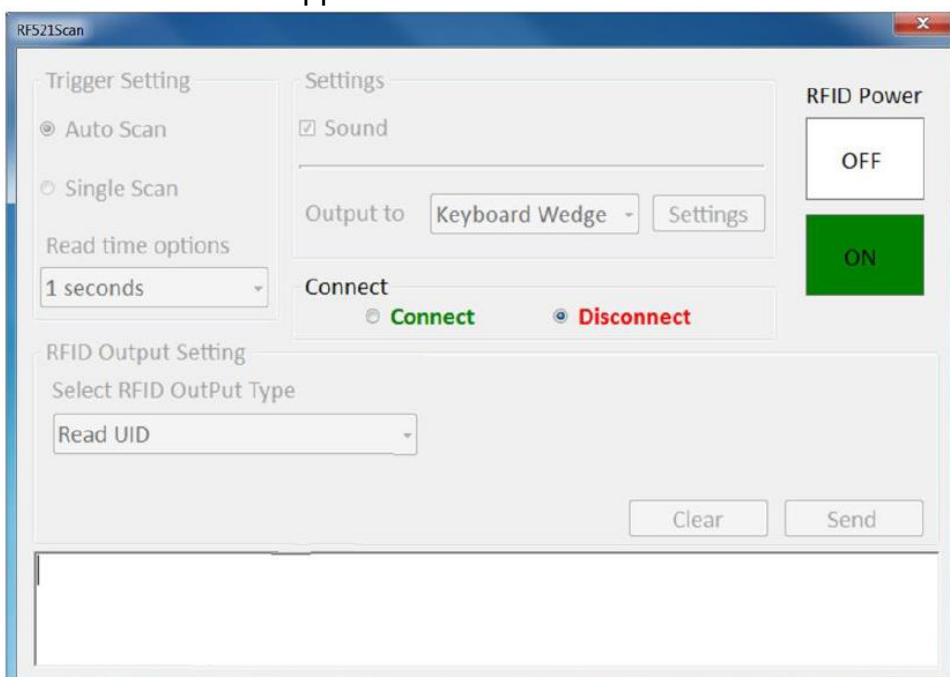

4.3 Using HF RFID Reader

Notice that HF RFID Reader is an optional feature for E-Series HMI and may not be present in your device. HF RFID is commonly used for ticketing, payment, and data transfer applications.
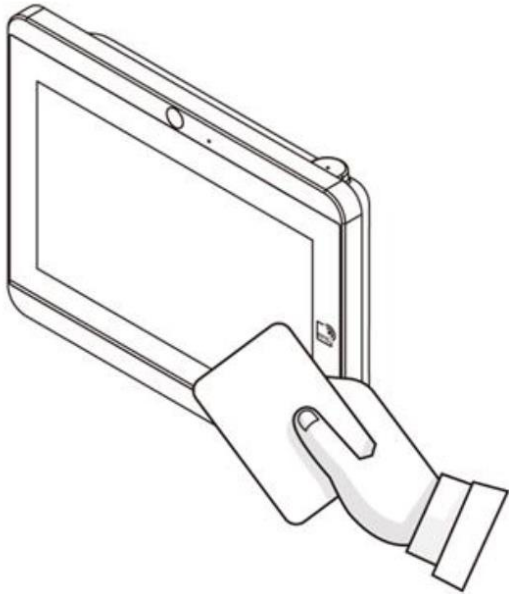
4.3.1 HF RFID Reader Location

To enable the HF RFID Reader feature, perform the following procedure:
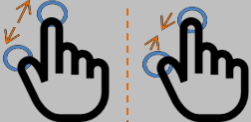
1. Launch RF Scan application.

2. Tap on Connect, and the setting utility will show up as below.

3. Tap on the ON button.

4. To scan the card, bring it close to the right bottom front side of device with RFID icon.
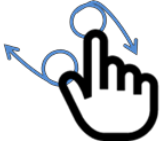
5. Tap on the Disconnect button to stop the connection with built-in HF RFID reader.

4.4 Multi-touch

The touchpad supports the core gestures for Windows.

Gesture	Windows Usage	Gesture Action	Action
Tap/ Double-tap	Click / Double-click	Click or double- click	
Panning with Inertia	Scrolling	Drag one or two fingers up and down	
Selection/Drag *(left to right with one finger)*	Mouse-drag/ Selection	Drag one finger left/right	
Zoom	Zoom (default to CTRL key + scroll wheel)	Move two fingers apart/ toward each other	

Gesture	Windows Usage	Gesture Action	Action
Rotate	No system default unless handled by Application (using WM_Gesture API)	Move two fingers in opposite directions *or* Use one finger to pivot around another	
Two-Finger tap	N/A - Exposed through Gesture API, used by Application discretion	Tap two fingers at the same time (where the target is the midpoint between fingers)	
Press and Hold	Right-click	Press, wait for blue-ring animation to complete, then release	
Flicks	Default: Pan Up/ Down/ Back, and Forward	Make quick drag gestures in the described direction	

Reference from Microsoft®

Chapter 5: AMI BIOS Setup

5.1 Main Menu

When you enter BIOS setup, the first menu that appears on the screen is the main menu. The Main menu displays the basic information about yoursystem including BIOS version, processor RC version, system language, time, and date. It contains the system information including BIOS version, processor RC version, system language, time, and date.

```
Aptio Setup Utility - Copyright (C) 2022 American Megatrends, Inc.
 Main  Advanced  Chipset  Security  Boot  Save & Exit

 BIOS Information                                        Choose the system default
 BIOS Vendor             American Megatrends              language
 Core Version            5.010
 Compliancy              UEFI 2.4; PI 1.3
 Project Version         IB32SV300 x64
 Build Date and Time     05/06/2022 12:52:40

 CPU Configuration
 Microcode Patch         90a

 Memory Information
 Total Memory            4096 MB (LPDDR3)

 TXE Information                                         →←: Select Screen
 Sec RC Version          00.05.00.00                    ↑↓: Select Item
 TXE FW Version          01.00.04.1089                  Enter: Select
                                                        +/-: Change Opt.
 System Language         [English]                      F1: General Help
                                                        F2: Previous Values
 System Date             [Sun 05/22/2022]               F3: Optimized Defaults
 System Time             [23:09:52]                     ESC: Exit

 Access Level            Administrator



            Version 2.17.1246. Copyright (C) 2022 American Megatrends, Inc.
```

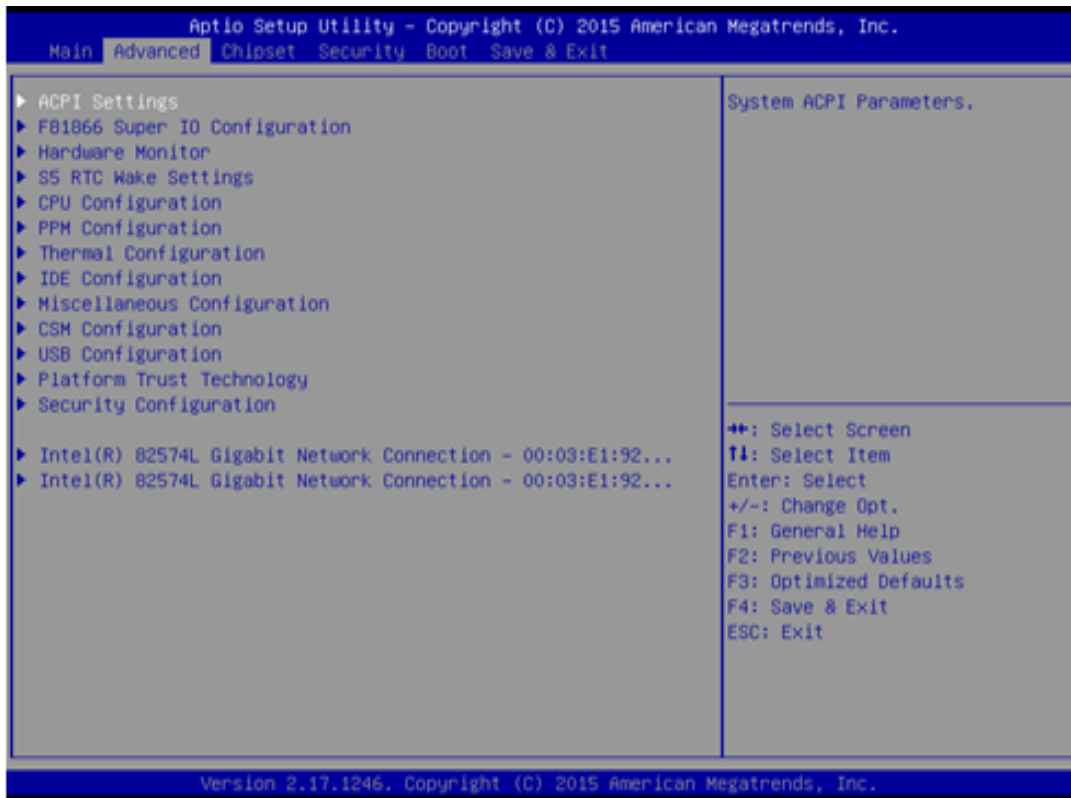| BIOS Setting	Description	Setting Option	Effect
System Language	Displays the system language. [English] is set up by default.	Adjustment of the language	Set the language in other language. The language in this device is English.
System Date/Time	This is current date setting. The time is maintained by the battery when the device is turned off.	Date and time changes.	Set the date in the format [mm/dd/yyyy]; The time in the format: [hh/mm/ss]
Access Level	The current user access settings	Changes to the level of access	Administrator is set up by the default

5.2 Advanced Menu

The advanced menu also uses to set configuration of the CPU and other system devices. There are sub menus on the left frame of the screen.

IMPORTANT:
Handle advanced BIOS settings page with caution. Any changes can affect the operation of your computer.

Advanced Configuration and Power Interface (ACPI) settings allow to control how the power switch operates. The power supply can be adjusted for power requirements. You can use the screen to select options of ACPI configuration. A description of the selected items will appear on the right side of the screen.

```
           Aptio Setup Utility - Copyright (C) 2015 American Megatrends, Inc.
      Main  Advanced  Chipset  Security  Boot  Save & Exit

 ▶ ACPI Settings                                            System ACPI Parameters.
 ▶ F81866 Super IO Configuration
 ▶ Hardware Monitor
 ▶ S5 RTC Wake Settings
 ▶ CPU Configuration
 ▶ PPM Configuration
 ▶ Thermal Configuration
 ▶ IDE Configuration
 ▶ Miscellaneous Configuration
 ▶ CSM Configuration
 ▶ USB Configuration
 ▶ Platform Trust Technology
 ▶ Security Configuration

 ▶ Intel(R) 82574L Gigabit Network Connection - 00:03:E1:92...    ←→: Select Screen
 ▶ Intel(R) 82574L Gigabit Network Connection - 00:03:E1:92...    ↑↓: Select Item
                                                                  Enter: Select
                                                                  +/-: Change Opt.
                                                                  F1: General Help
                                                                  F2: Previous Values
                                                                  F3: Optimized Defaults
                                                                  F4: Save & Exit
                                                                  ESC: Exit

           Version 2.17.1246. Copyright (C) 2015 American Megatrends, Inc.
```

| BIOS Setting	Description	Setting Option	Effect
ACPI Settings	Configures ACPI settings	Enter	Opens submenu
F81866 Super IO Configuration	Configures IO settings	Enter	Opens submenu
Hardware Monitor	Configures Hardware Monitor settings	Enter	Opens submenu
S5 RTC Wake Settings	Configures RTC Wake parameters	Enter	Opens submenu
CPU Configuration	Configures CPU settings	Enter	Opens submenu
PPM Configuration	Configures PPM settings	Enter	Opens submenu
Thermal Configuration	Configures Thermal Parameters	Enter	Opens submenu
IDE Configuration	Configures IDE Parameters	Enter	Opens submenu

BIOS Setting	Description	Setting Option	Effect
Miscellaneous Configuration	Configures Miscellaneous Parameters	Enter	Opens submenu
CSM Configuration	Configures CSM Parameters	Enter	Opens submenu
USB Configuration	Configures USB Settings	Enter	Opens submenu
Platform Trust Technology	Configures Platform Trust Technology parameters	Enter	Opens submenu
Security Configuration	Configures Security parameters	Enter	Opens submenu

Chapter 6: Driver Installation

6.1 Chipset Driver

Follow instructions below to install Chipset driver.

1. Open the Driver CD (included in the package) and select **Chipset** driver. When installation window will pop up, select **Next**.
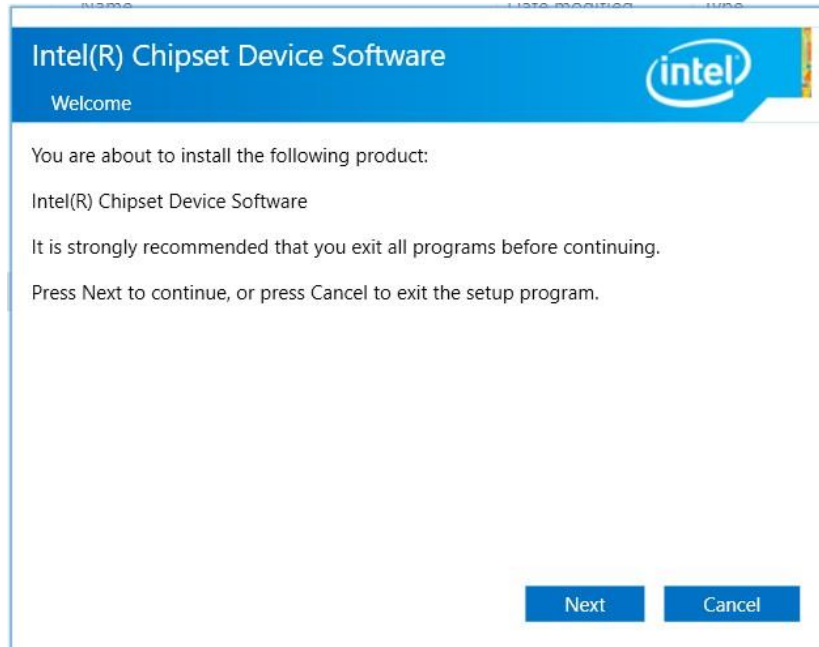
2. Select **Accept** to agree with the terms of license agreement.
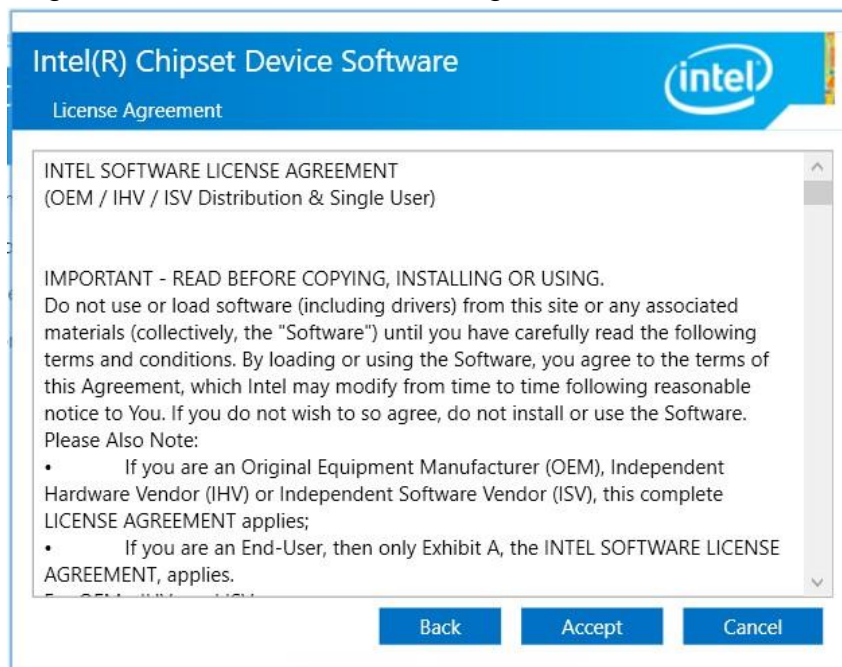
3. Check the ReadMe file information, select **Install** to continue.
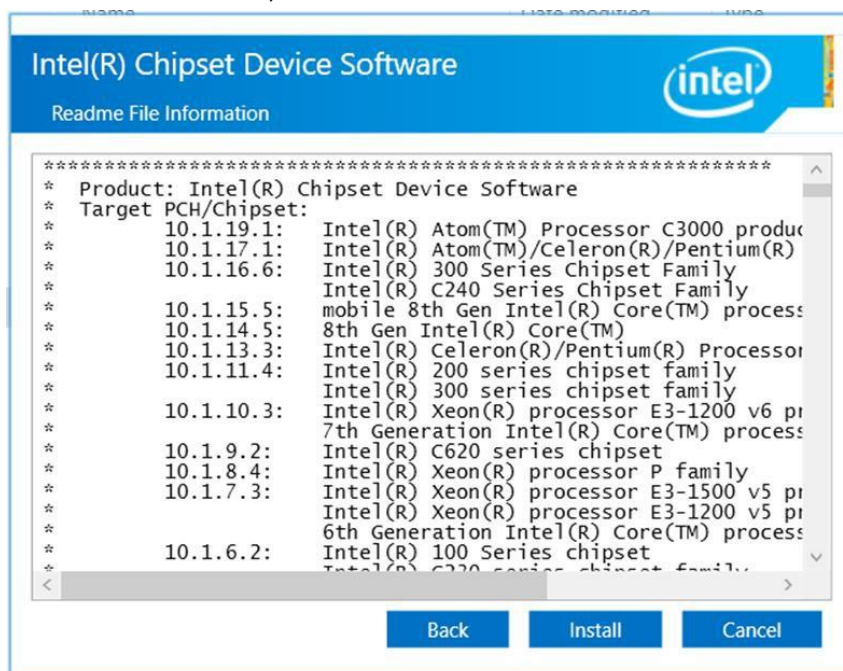


4. Wait for the driver to be installed. When installation completed, select **Finish** to exit installation window.

6.2 Graphics Driver

Follow instructions below to install Graphic driver.

1. Open the Driver CD (included in the package) and select **Graphics** driver. When installation window will pop up, select **Next**.
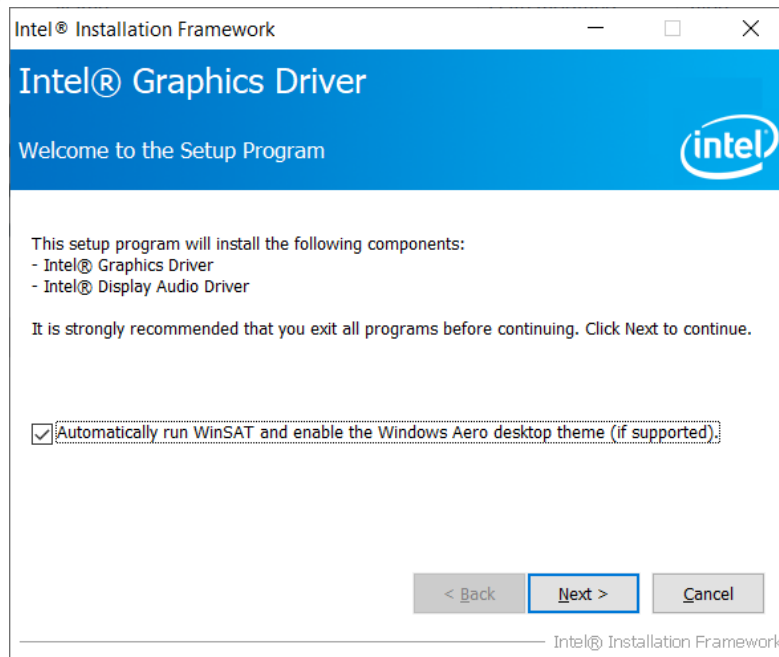

2. Select **Accept** to agree with the terms of license agreement.
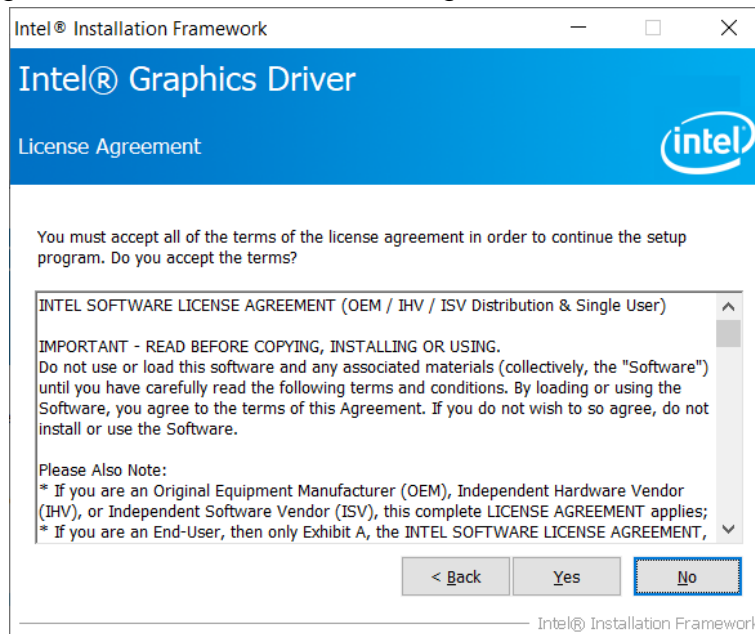
3. Check the ReadMe file information, select **Next** to continue.
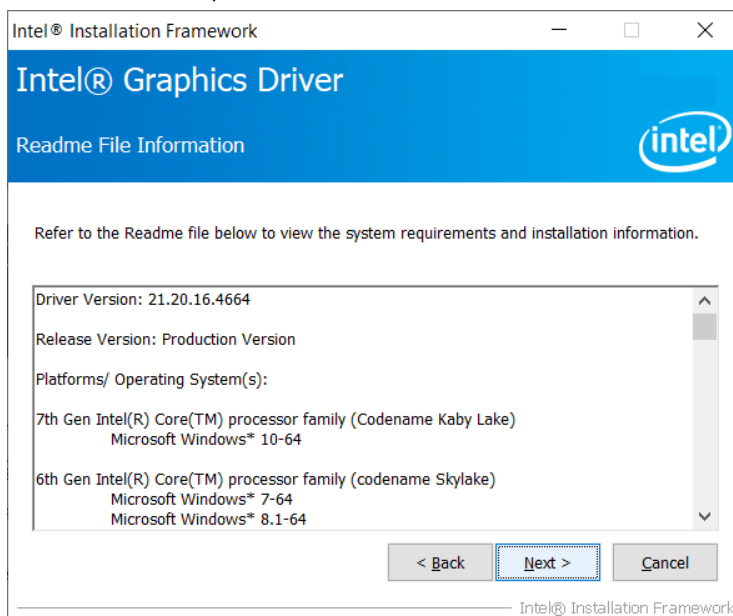
4. Wait for the driver to be installed.
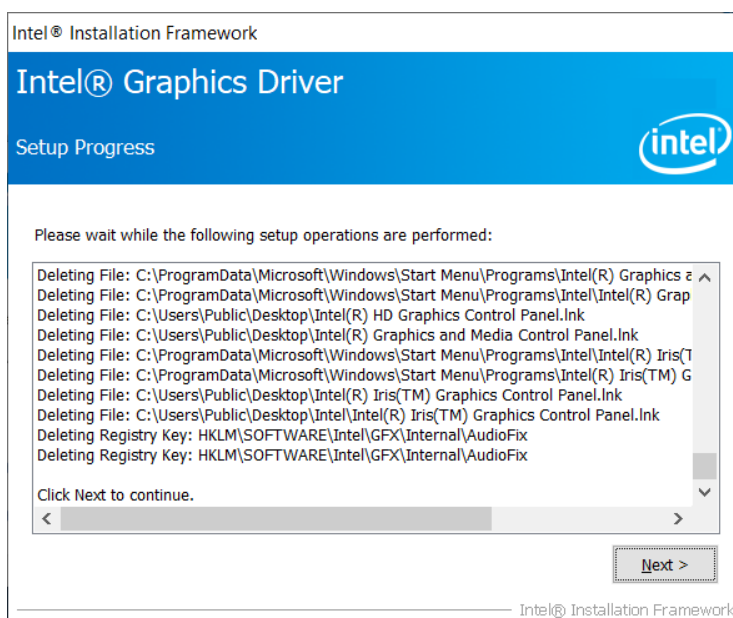
5. When installation is completed, select "**Yes, I want to restart this computer now**", and click **Finish**.
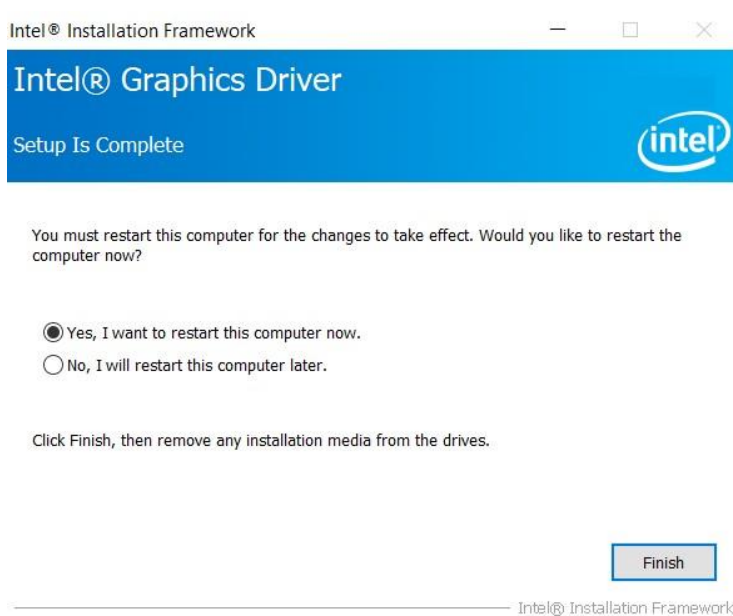
6.3 Audio Driver

Follow instructions below to install Audio Driver.

1. Open the Driver CD (included in the package) and select **Audio** driver. When installation window will pop up, select **Next** to start the installation.
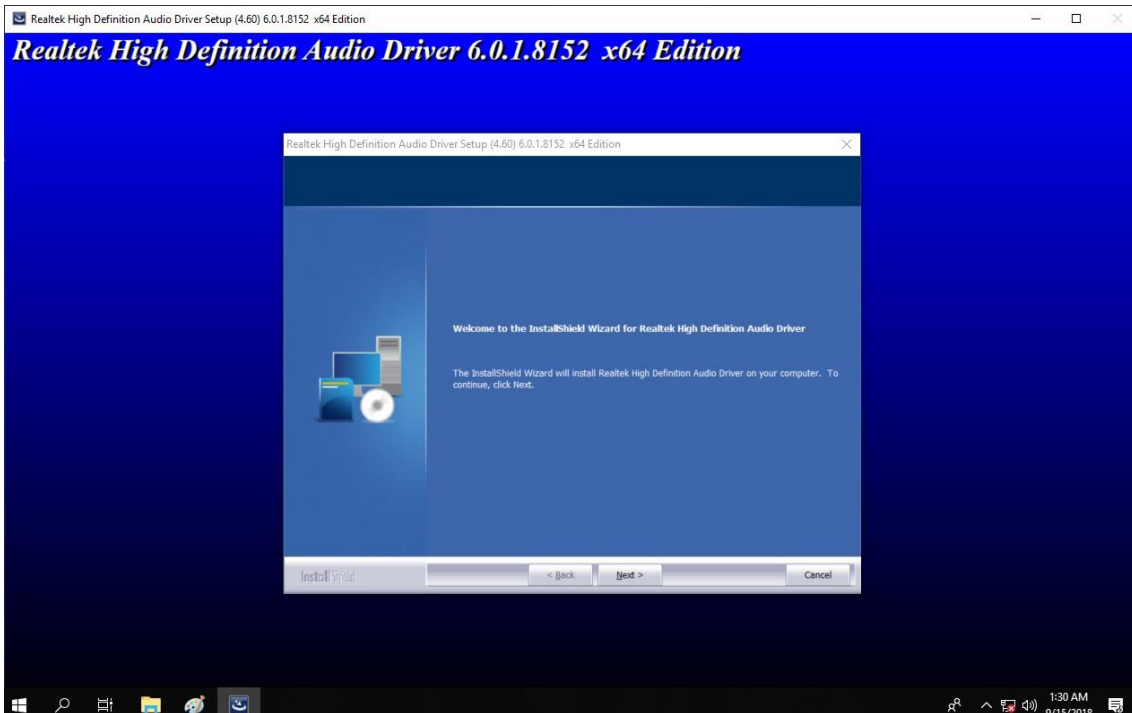
2. When installation is completed, select "**Yes, I want to restart this computer now**", and click **Finish**.
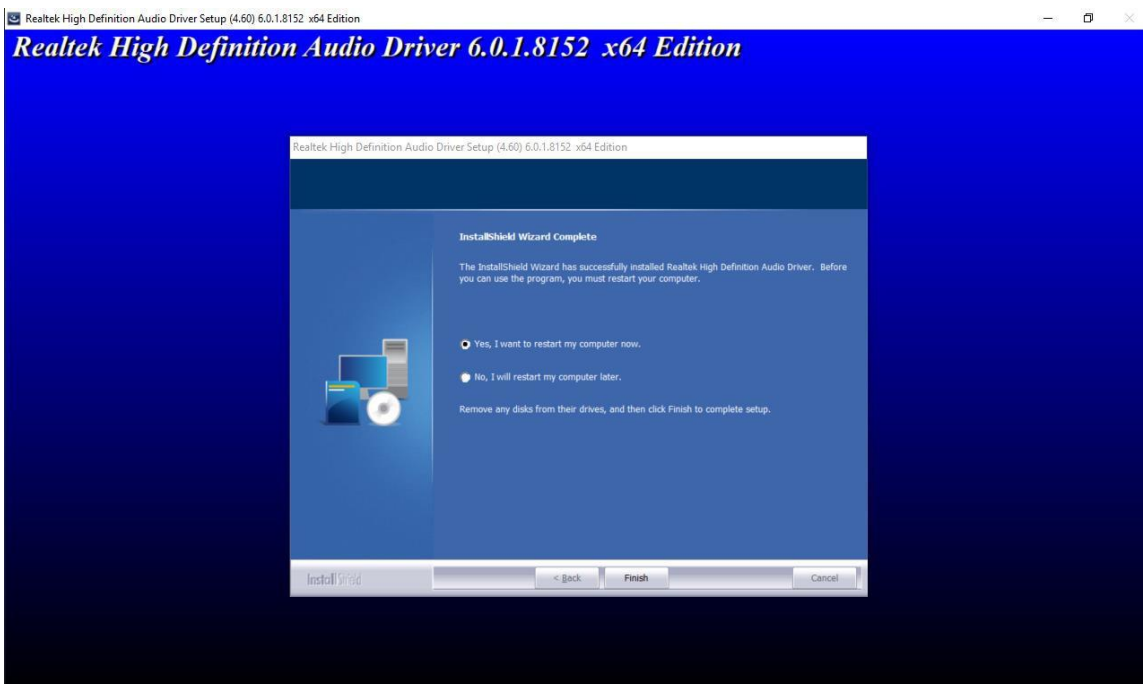
6.4 LAN Driver

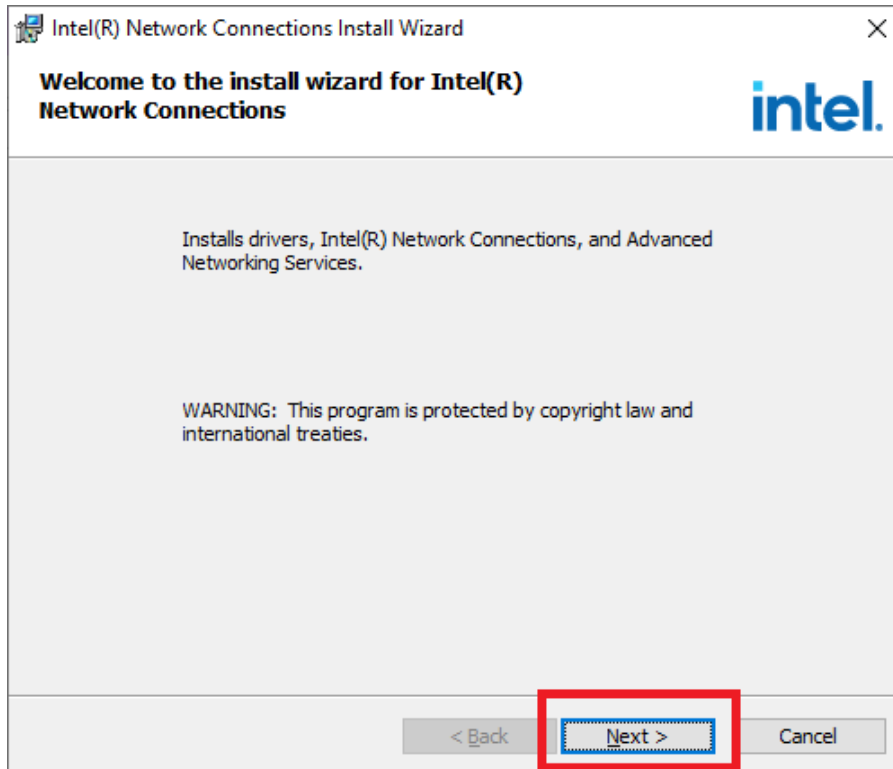Follow instructions below to install **LAN** driver.

1. Open the Driver CD (included in the package) and select **LAN** driver. When installation window will pop up, select **Next** to continue.
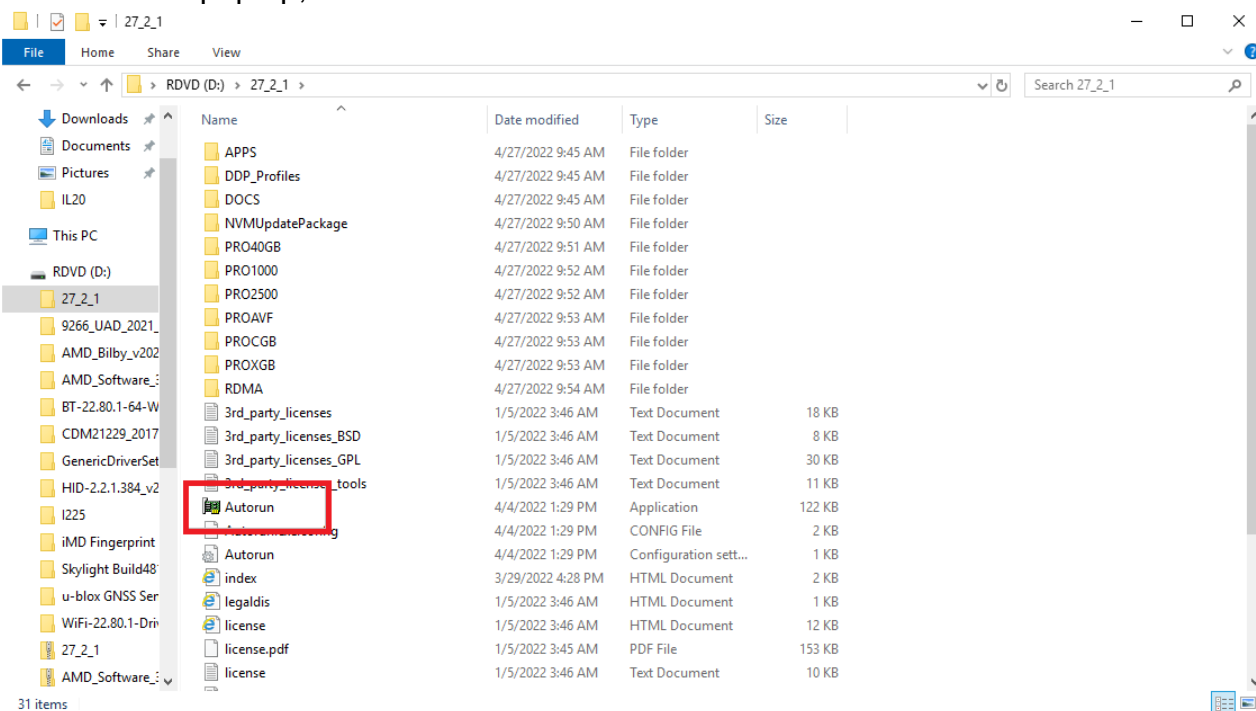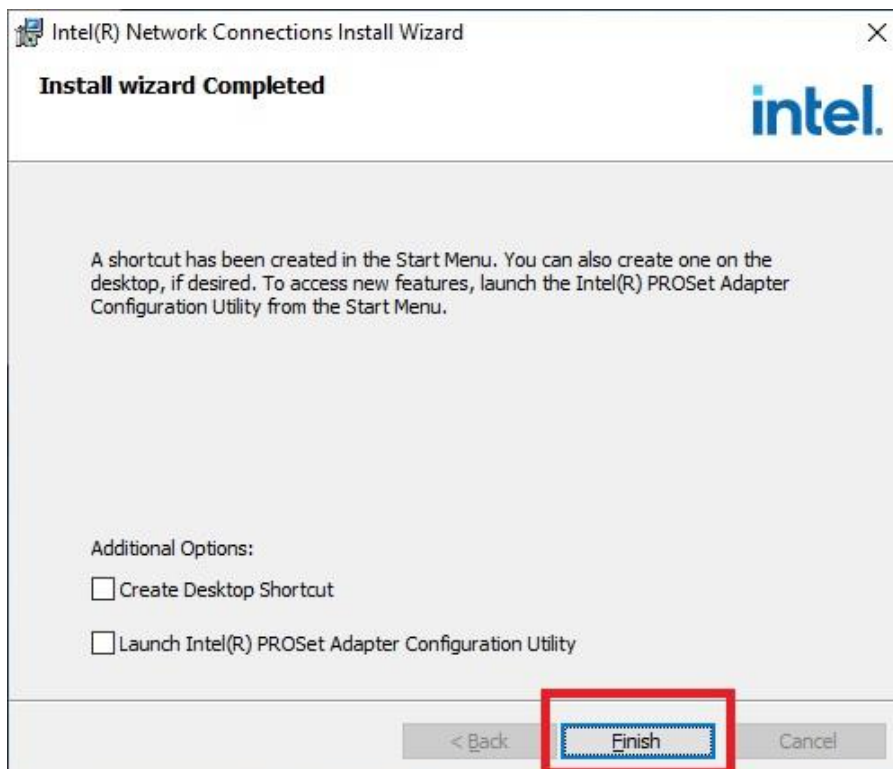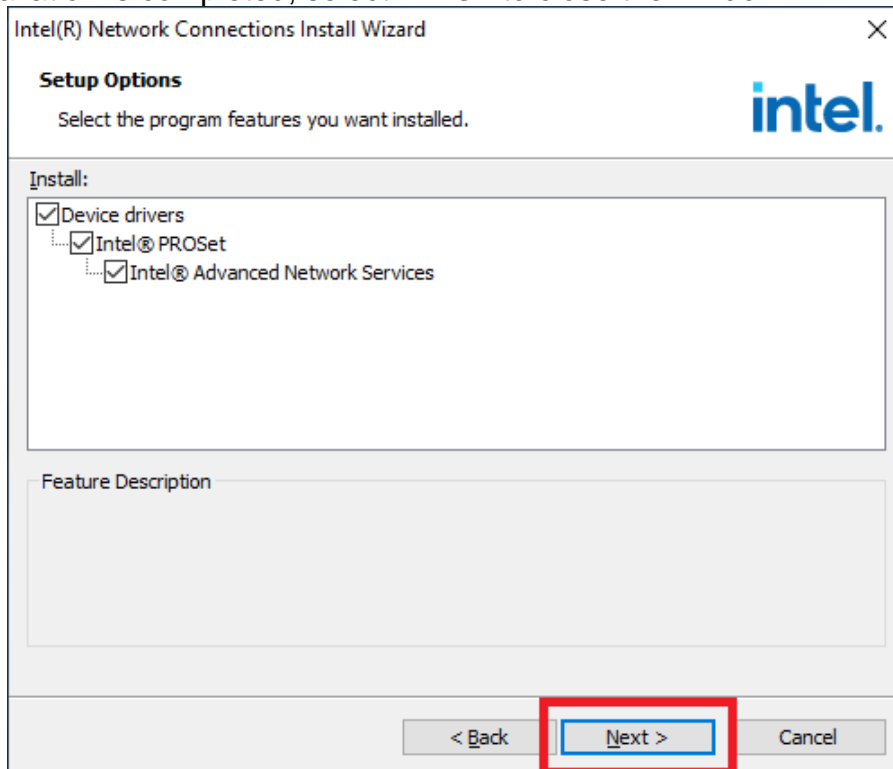

2. Click **Install Drivers and Software**.
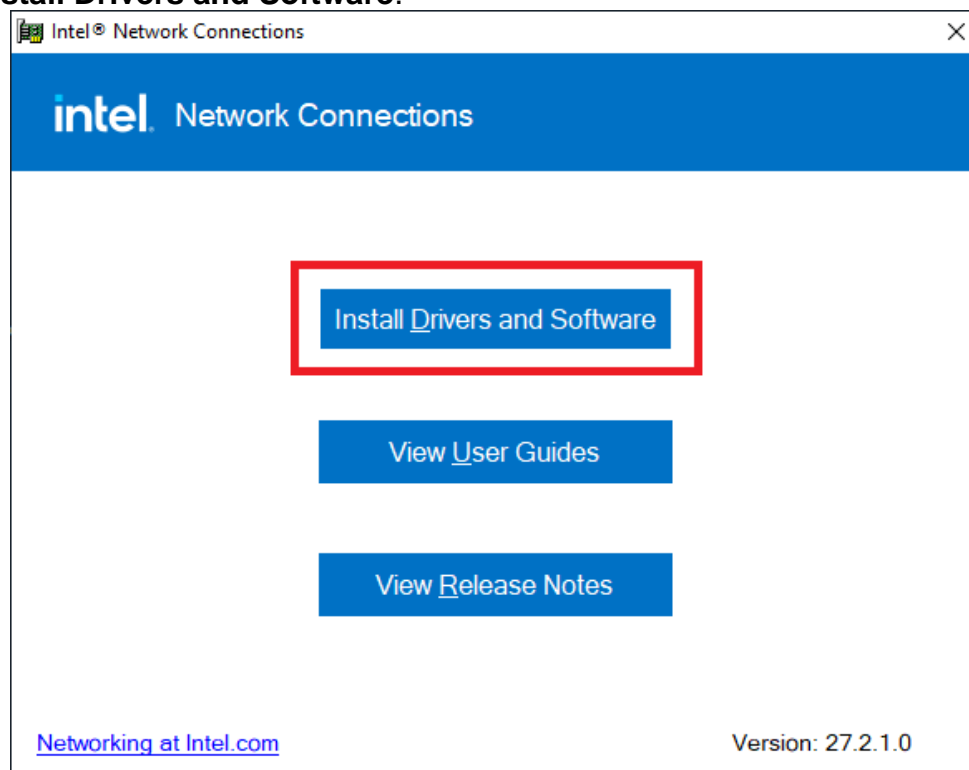
3. Click **Next**.

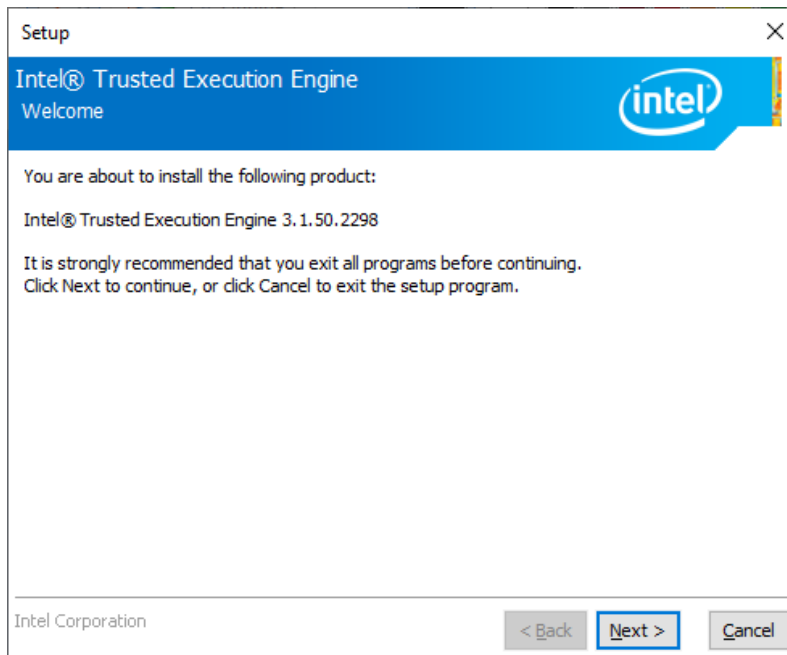4. Choose **I accept the terms in the license agreement**, then click **Next**.

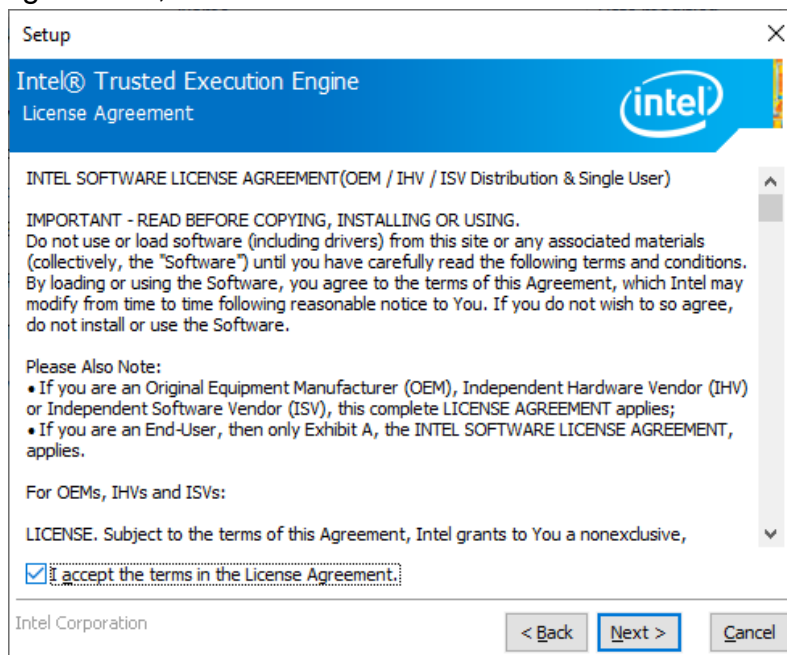5. When installation is completed, select **Finish** to close the window.

6.5 TXE Driver

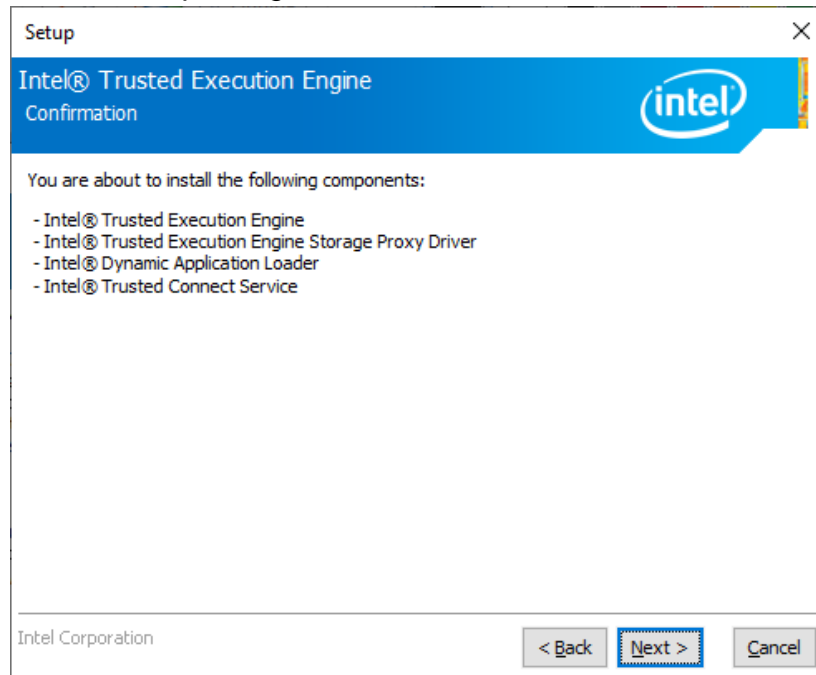Follow instructions below to install **TXE** driver.

1. Open the Driver CD (included in the package) and select **TXE** driver. When installation window will pop up, select **Next** to start the installation.
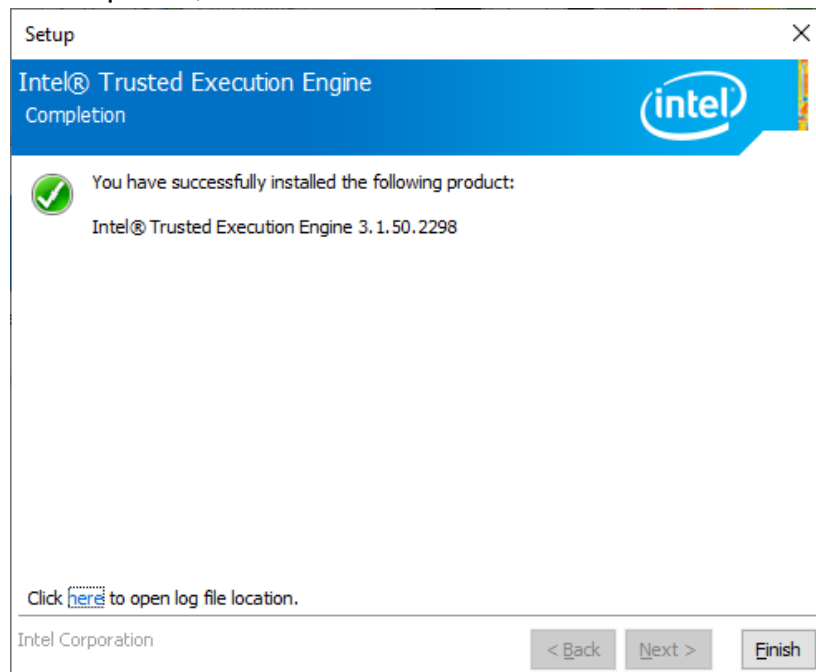

2. Read the license agreement, and then select **Next**.

3. System displays the installed packages, select **Next**.

4. When installation is completed, select **Finish** to close the window.
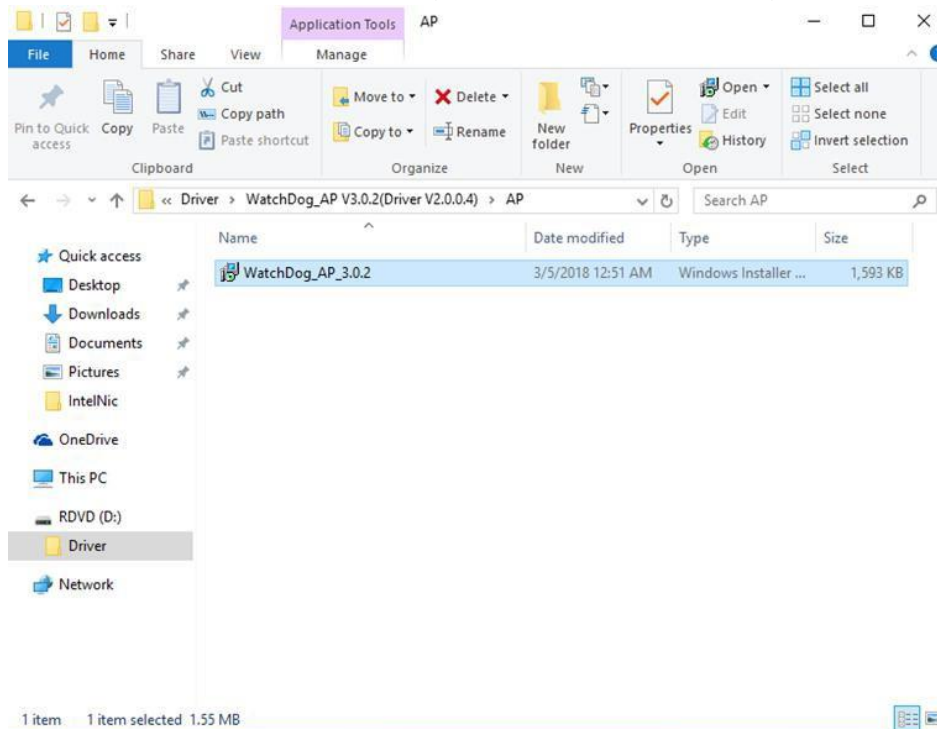
6.6 Watchdog Driver

For more details about Winmate Watchdog, please download Watchdog Guide from Winmate Downloads Center.

Follow instructions below to install **Watchdog** driver.
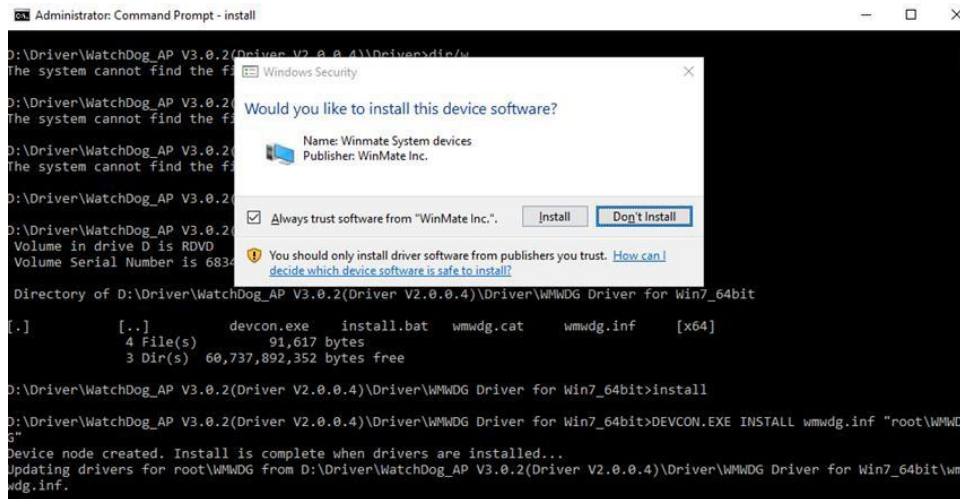
1. Type "cmd" in the run box then the cmd.exe will appear in programs.

2. Right click on the cmd.exe and click on "Run as administrator" to start
3. Open the Driver CD (included in the package) and select Watchdog driver.

4. When Windows Security dialog appear, select **install** to continue the Installation.

5. Wait for installation to complete. When installation is complete, press any key to close.

6. Open the Driver CD (included in the package) and select **Watchdog AP**.

7. Select **Next**.

8. The installed storage location is displayed, select **Next** to continue.

9. Select **Next** to start the installation.

10. When installation is completed, select **Finish** to close the window.

6.7 Digital IO Driver

For more details about Winmate Watchdog, please download Digital IO Guide from Winmate Downloads Center:

Follow instructions below to install **Digital IO** River.
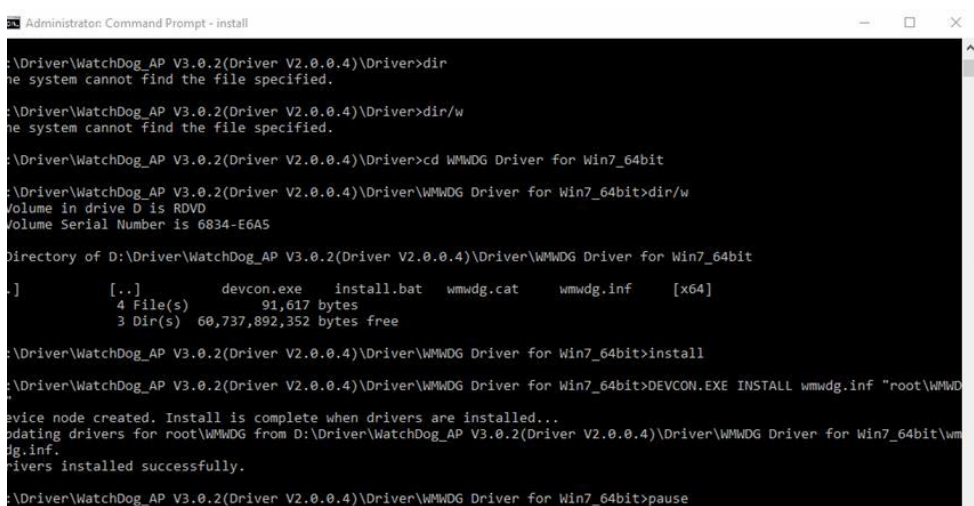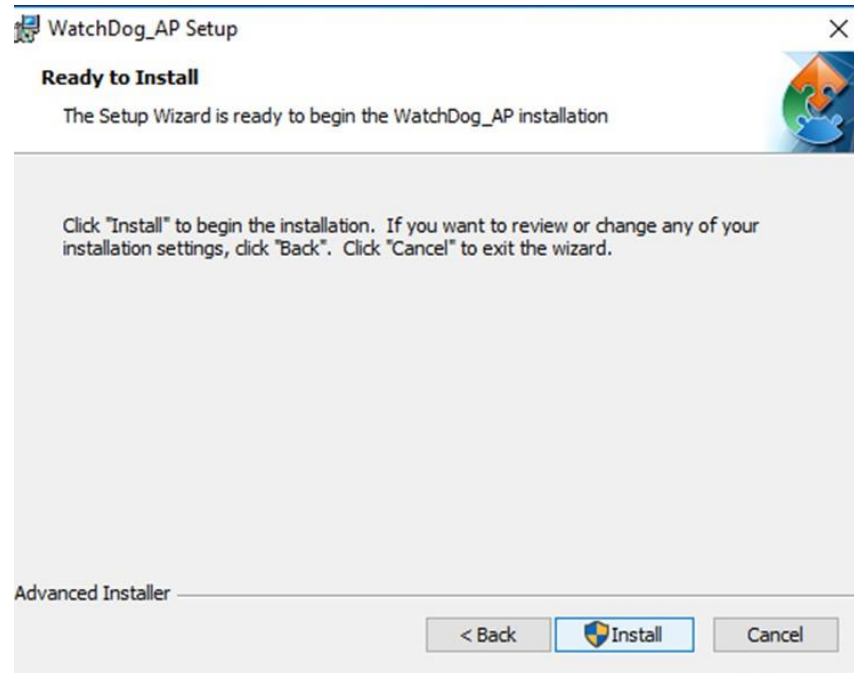1. Type "cmd" in the run box then the cmd.exe will appear in programs.
2. Right click on the cmd.exe and click on "Run as administrator" to start.
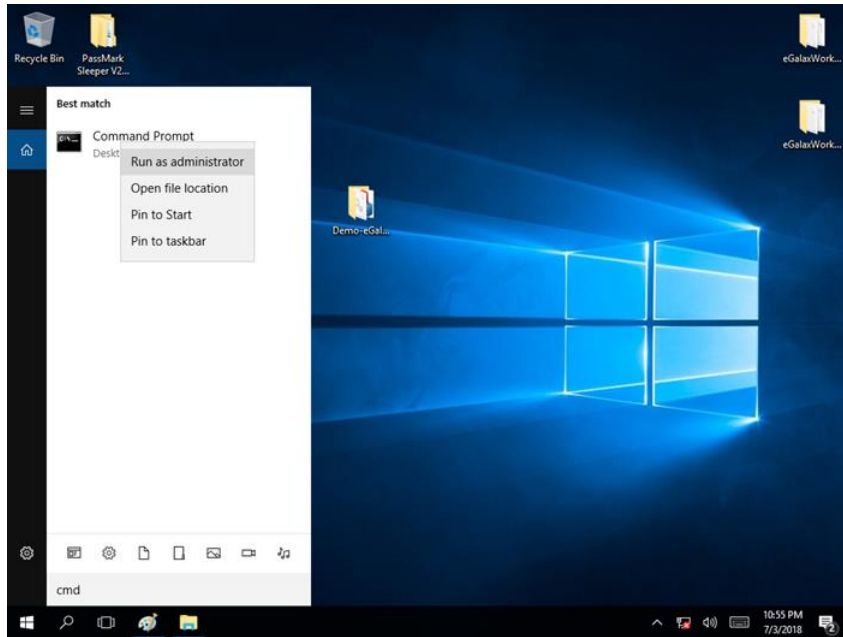
3. Open the Driver CD (included in the package) and select Digital IO driver.
4. When Windows Security dialog appear, select **install** to continue the Installation.
5. Wait for installation to complete. When installation is complete, press any key to close.

6. Open the Driver CD (included in the package) and select **Digital IO AP**.

6.8 Touch Driver

NOTE:

Touch driver installation:

- For Windows operating system, the touch driver is already available.
- For other operating system, such as Linux, please download and install the touch driver. User may check the Kernel version and contact Winmate to get the suitable touch driver.

Appendix A: Product Specifications

	Model Name			
	W07IB3S-PCO1AC-POE	W07IB3S-PCO1-POE	W07IB3S-PCT1-POE	W07IB3S-PCT1AC-POE
Display				
Size/ Type	7"			
Resolution	1024 x 600			
Brightness	1000 nits		320 nits	
Contrast Ratio	700 : 1		1000 : 1	
Viewing Angle	75,75,75,70		75,75,75,70	
Touch	Projected Capacitive Multi-Touch			
Mechanical Specifications				
Dimensions, mm	189.4 x 145.4 x 36.1			
Cut out, mm	175.5 x 131.5			
Mounting	Panel mount VESA Mount			
Cooling	Fanless design			
Enclosure	Metal housing			
System Specifications				
Processor	Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz)			
System Memory	1 x SO-DIMM, DDR3L 1600 MHz, 4GB / 8GB (Optional)			
Operating System	Windows 10 1809 above version (Optional) Linux Ubuntu 18.04 above version (Optional)			
Storage	1 x M.2 2242 SSD 128GB (up to 512GB, Optional)			
BT	Optional			
WLAN	Optional			
RFID	HF RFID Reader 13.56 MHz (Optional)			
Light Bar	Built-in RGB LED Status Light Bar, on both sides	-	Built-in RGB LED Status Light Bar, on both sides	-
Input / Output				
USB Ports	1 x USB 2.0 (Type A), 1 x USB 3.2 Gen 1x1（5Gbps, Type A)			
COM Port	1 x RS232/422/485 (Default RS232)			
LAN	1 x Giga LAN RJ45 1 x Giga LAN RJ45 with PoE			
Expansion Port	2 x M.2 slot (WiFi and SSD)			
Audio	1 x Speaker			
Power Specifications				
Power Input	12V DC, 10 ~ 60V (Optional)			
PoE	PoE (PD): follows IEEE 802.3at (25 W)			
Adapter	12V 50W			

	Model Name			
	W07IB3S-PCO1AC-POE	W07IB3S-PCO1-POE	W07IB3S-PCT1-POE	W07IB3S-PCT1AC-POE
Environment Considerations				
Operating Temp.	0 ~ 50 °C			
Operating Humidity	10 ~ 90% (non-condensing)			
Storage Temperature	-20 ~ 60 °C			
Certification				
Certification	CE, FCC			

Note:
1. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
2. All specifications are subject to change without prior notice.

	Model Name		
	W10IB3S-PCH2AC-POE	W10IB3S-PCH2-POE	W10IB3S-PCH2LB
Display			
Size/ Type	10.1"		
Resolution	1280 x 1080		
Brightness	350 nits, 1000 nits (Optional)		
Contrast Ratio	800 : 1		
Viewing Angle	85,85,85,85		
Touch	Projected Capacitive Multi-Touch		
Mechanical Specifications			
Dimensions, mm	264.57x173.29x35		
Cut out, mm	250 x 159		
Mounting	Panel mount VESA Mount		
Cooling	Fanless design		
Enclosure	Metal housing		
System Specifications			
Processor	Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz)		
System Memory	1 x SO-DIMM, DDR3L 1600 MHz, 4GB / 8GB (Optional)		
Operating System	Windows 10 1809 above version (Optional) Linux Ubuntu 18.04 above version (Optional)		
Storage	1 x M.2 2242 SSD 128GB (up to 512GB, Optional)		
BT	Optional		
WLAN	Optional		
RFID	HF RFID Reader 13.56 MHz (Optional)		
Light Bar	Built-in RGB LED Status Light Bar, on both sides	-	Built-in All-Around RGB LED Light Bar
Input / Output			
USB Ports	1 x USB 2.0 (Type A), 1 x USB 3.2 Gen 1x1（5Gbps, Type A)		
COM Port	1 x RS232/422/485 (Default RS232)		
LAN	1 x Giga LAN RJ45 1 x Giga LAN RJ45 with PoE		
Expansion Port	2 x M.2 slot (WiFi and SSD)		
Audio	1 x Speaker		
Power Specifications			
Power Input	12V DC, 10 ~ 60V (Optional)		
PoE	PoE (PD): follows IEEE 802.3at (25 W)		
Adapter	12V 50W		
Environment Considerations			
Operating Temp.	0 ~ 50 °C		
Operating Humidity	10 ~ 90% (non-condensing)		

Model Name		
W10IB3S-PCH2AC-POE	W10IB3S-PCH2-POE	W10IB3S-PCH2LB
Storage Temperature	-20 ~ 60 °C	
Certification		
Certification	CE, FCC	

Note:
1. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
2. All specifications are subject to change without prior notice.

	Model Name		
	R12IB3S-PCM2AC-POE	R12IB3S-PCM2-POE	R15IB3S-PCC3-POE
Display			
Size/ Type	12.1"		15"
Resolution	1024 x 768		1024 x 768
Brightness	500 nits		300 nits
Contrast Ratio	1000:1		2000 : 1
Viewing Angle	89,89,89,89		88,88,88,88
Touch	Projected Capacitive Multi-Touch		
Mechanical Specifications			
Dimensions, mm	296 x 227 x 46		363.40 x 277.86 x 44.5
Mounting	Panel mount, VESA Mount		
Cooling	Fanless design		
Enclosure	Metal Housing		
System Specifications			
Processor	Intel® Celeron® N2930 (2M Cache, up to 2.16 GHz)		
System Memory	1 x SO-DIMM, DDR3L 1600 MHz, 4GB / 8GB (Optional)		
Operating System	Windows 10 1809 above version (Optional) Linux Ubuntu 18.04 above version (Optional)		
Storage	1 x M.2 2242 SSD 128GB (up to 512GB, Optional)		
BT	Optional		
WLAN	Optional		
RFID	HF RFID Reader 13.56 MHz (Optional)		
Light Bar	Built-in RGB LED Status Light Bar, on both sides		-
Input / Output			
USB Ports	1 x USB 2.0 (Type A), 1 x USB 3.2 Gen 1x1（5Gbps, Type A)		
COM Port	1 x RS232/422/485 (Default RS232)		
LAN	1 x Giga LAN RJ45 1 x Giga LAN RJ45 with PoE		
SD Slot	2 x M.2 slot (WiFi and SSD)		
Audio	1 x Speaker		
Power Specifications			
Power Input	12V DC, 10 - 60V (Optional)		12V DC, 9 - 36V (Optional)
PoE	PoE (PD): follows IEEE 802.3at (25 W)		
Adapter	12V 50W		
Environment HMI Considerations			
Operating Temp.	0 ~ 50 °C		
Operating Humidity	10 ~ 90% (non-condensing)		
Storage Temperature	-20 ~ 60 °C		

	Model Name		
	R12IB3S-PCM2AC-POE	R12IB3S-PCM2-POE	R15IB3S-PCC3-POE
Certification			
Certification	CE, FCC		

Note:

3.   The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.

4.   All specifications are subject to change without prior notice.

Note