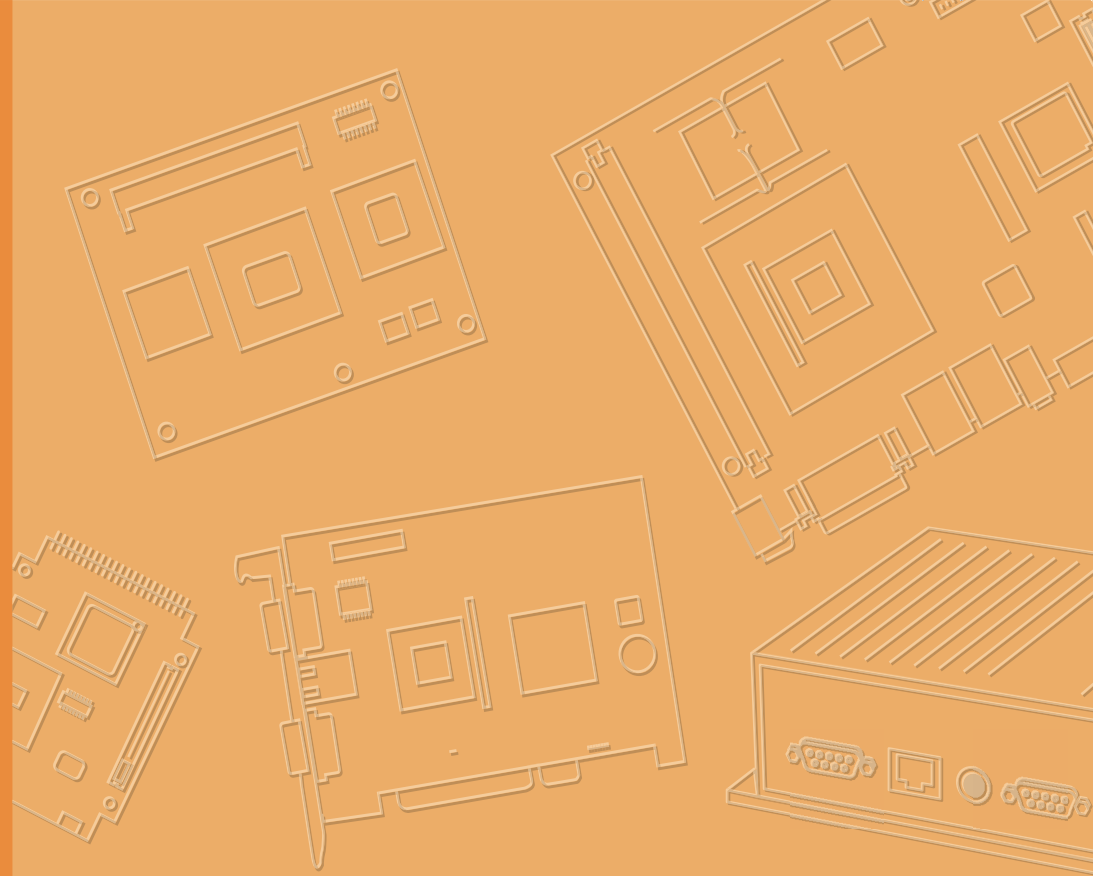


User Manual



USM-260

Intelegient Box PC

ADVANTECH

Enabling an Intelligent Planet

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Acknowledgements

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Product Warranty (2 years)

Advantech warrants the original purchaser that all of its products will be free from defects in materials and workmanship for two years from the date of purchase.

This warranty does not apply to any products that have been repaired or altered by persons other than repair personnel authorized by Advantech, or products that have been subject to misuse, abuse, accident, or improper installation. Under the terms of this warranty, Advantech assumes no liability as a consequence of such events.

Because of Advantech's high quality-control standards and rigorous testing, most customers never need to use our repair service. If an Advantech product is defective, it will be repaired or replaced free of charge during the warranty period. For out-of-warranty repairs, customers will be billed the cost of replacement materials, service time, and freight. Please consult your dealer for more details.

If you suspect your product is defective, follow the steps outlined below.

1. Collect all the information about the problem encountered. (For example, CPU speed, Advantech products used, other hardware and software used, etc.) Note anything abnormal and list any onscreen messages that are displayed when the problem occurs.
2. Call your dealer and describe the problem. Please have your manual, product, and any relevant information to hand.
3. If your product is diagnosed as defective, obtain a return merchandise authorization (RMA) number from your dealer. This allows us to process your return more quickly.
4. Carefully pack the defective product, a completed Repair and Replacement Order Card, and a proof of purchase date (such as a photocopy of your sales receipt) into a shippable container. Products returned without a proof of purchase date are not eligible for warranty service.
5. Write the RMA number clearly on the outside and ship the package prepaid to your dealer.

Warnings, Cautions, and Notes

Warning! Warnings indicate conditions that if not observed, can cause personal injury!



Caution! Cautions are included to help prevent hardware damage or data losses. For example,



“New batteries are at risk of exploding if incorrectly installed. Do not attempt to recharge, force open, or heat the battery. Replace the battery only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.”

Note! Notes provide additional optional information.



Document Feedback

To assist us in improving this manual, we welcome any comments and constructive criticisms. Please send all feedback in writing to support@advantech.com

Technical Support and Assistance

1. Visit the Advantech website at <http://support.advantech.com> to obtain the latest product information.
2. Contact your distributor, sales representative, or Advantech's customer service center for technical support if you need additional assistance. Please have the following information ready before calling:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - Comprehensive description of the problem
 - The exact wording of any error messages

Packing List

Before setting up the system, check that the items listed below are included in the shipment and in good condition.

- USM-260
 - Warranty card
 - Adaptor
 - User manual

If any of these items are missing or damaged, please contact your distributor or sales representative immediately.

Safety Instructions

1. Read these safety instructions carefully.
2. Retain this user manual for future reference.
3. Disconnect this equipment from all AC outlets before cleaning. Use only a damp cloth to clean. Do not use liquid or spray detergents.
4. For pluggable equipment, the power outlet socket must be located near the equipment and easily accessible.
5. Protect this equipment from humidity.
6. Place this equipment on a reliable surface during installation. Dropping or letting the device fall may cause damage.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. Do not cover the openings.
8. Ensure the voltage is correct before connecting the equipment to a power outlet.
9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If unused for a long time, disconnect the equipment from the power source to avoid damage from transient overvoltage.
12. Never pour liquid into an opening. This may cause fire or electrical shock.
13. Never open the equipment. For safety reasons, the equipment should be opened only by qualified service personnel.
14. If one of the following situations occurs, have the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated the equipment.
 - The equipment has been exposed to moisture.
 - The equipment is malfunctioning, or does not operate according to the user manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.
15. Do not store this equipment in an environment where the temperature fluctuates below $-20\text{ }^{\circ}\text{C}$ ($-4\text{ }^{\circ}\text{F}$) or above $60\text{ }^{\circ}\text{C}$ ($140\text{ }^{\circ}\text{F}$) as this may cause damage. The equipment should be stored in a controlled environment.
16. Batteries are at risk of exploding if incorrectly installed. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.
17. If protective is used as a safeguard, the instructions shall require connection of the equipment protective earthing conductor to the installation protective earthing conductor (for example, by means of a power cord connected to a socket-outlet with earthing connection).

The sound pressure level at the operator position does not exceed 70 dB (A) in accordance with IEC 704-1:1982.

DISCLAIMER: These instructions are provided according to IEC 704-1. Advantech disclaims all responsibility for the accuracy of any statements contained herein.

Safety Precaution - Static Electricity

Follow these simple precautions to protect yourself from harm and the products from damage.

- To avoid electrical shock, always disconnect the power from your PC chassis before you work on it. Don't touch any components on the CPU card or other cards while the PC is on.
- Disconnect power before making any configuration changes. The sudden rush of power as you connect a jumper or install a card may damage sensitive electronic components.

Contents

| | | |
|------------------|--|----------|
| Chapter 1 | General Information | 1 |
| 1.1 | Introduction | 2 |
| 1.2 | Specifications | 2 |
| | 1.2.1 General Specifications | 2 |
| | 1.2.2 Environmental Specifications | 2 |
| 1.3 | Dimensions | 3 |
| Chapter 2 | System Setup | 5 |
| 2.1 | Quick Tour of the Device..... | 6 |
| | Figure 2.1 Front view of UBX-310F | 6 |
| | Figure 2.2 Rear view of UBX-310F | 6 |
| 2.2 | Installation Procedures..... | 6 |
| | 2.2.1 Connecting the Power Cord..... | 6 |
| | 2.2.2 Connecting the Mouse and Keyboard..... | 6 |
| | 2.2.3 Activating the Power Source..... | 6 |
| 2.3 | Running the BIOS Setup Program | 7 |
| 2.4 | Installing System Software | 7 |

Chapter 1

General Information

This chapter provides basic information regarding USM-260.

- Introduction
- Specifications
- Dimensions

1.1 Introduction

USM-260 is an intelligent multi-functional box PC equipped with the 6th generation Intel desktop processor. The system's compact design and multiple IO interface support to integrate in diverse peripherals and various application solutions that targeted at a wide range of applications (eg. Self-service system, POS system, Digital Signage Player, Edge Computing, AI and so on) in semi-industrial, retail and hospital markets.

1.2 Specifications

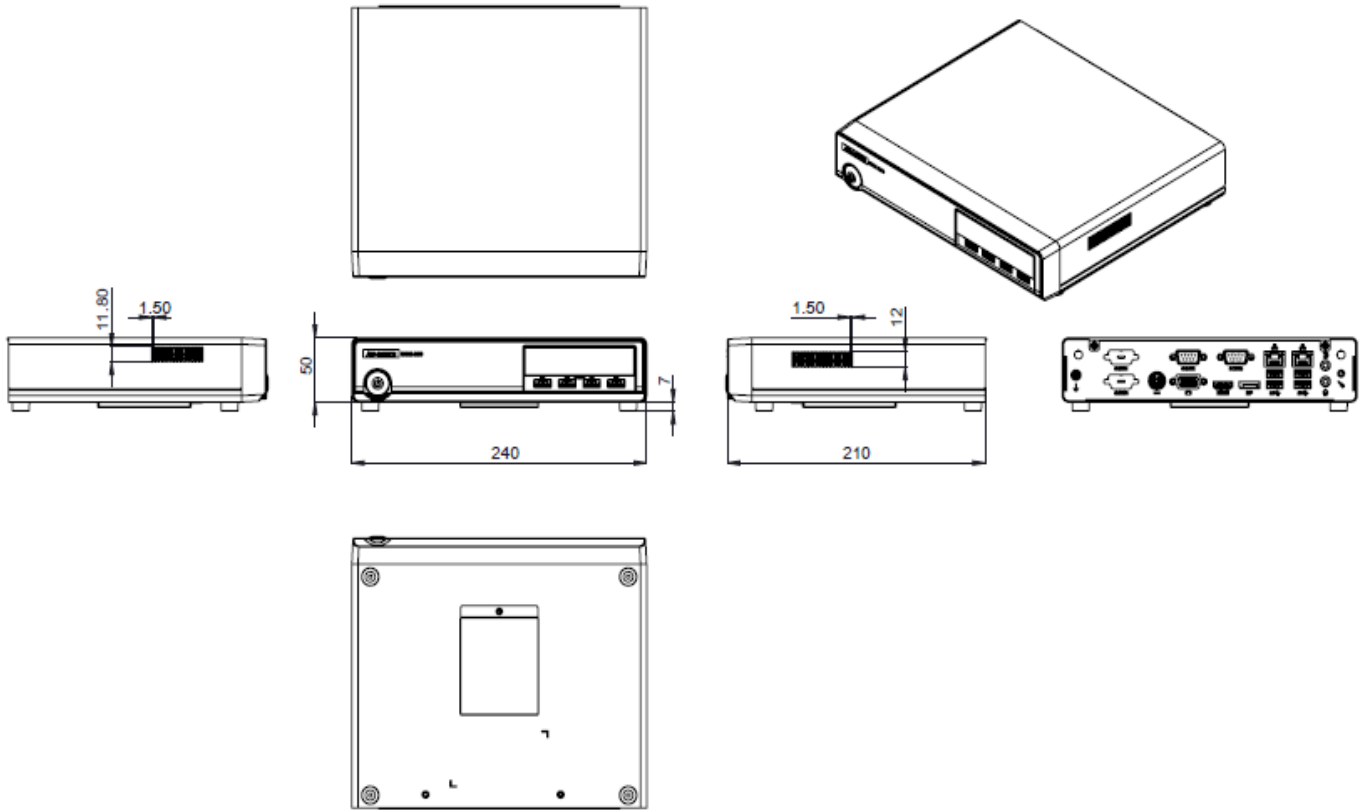
1.2.1 General Specifications

- **Dimensions (W x H x D):** 240 x 57 x 210 mm
- **Weight:**2.3 kg
- **Power supply:** +19 VDC @ 90 W (Maximum)
- **Storage:** Supports 2 x internal Mini SATA slot 2xSATA3.0
- **CPU:** Intel® Celeron G3900TE/Pentium G4400TE/i3-6100TE/i5-6500TE/i7-6700TE
- **RAM:**DDR4-2133 MHz SO-DIMM memory Up to 32GB
- **Serial ports:**2 x COM ports (Optional up to 4xCOM)
- **USB:** Supports up to 8 x USB interfaces,4xUSB3.0,4xUSB2.0 optional
- **Battery:** 3 V @ 195 mA lithium battery

1.2.2 Environmental Specifications

- **Operating Temperature:** 0 ~ 40 °C (32 ~ 104 °F)
- **Storage Temperature:** -20 ~ 60 °C
- **Relative humidity:** 10 ~ 95% @ 40 °C (non-condensing)
- **Shock:** 10 G peak acceleration (11 ms duration)
- **Vibration:** 5 ~ 500 Hz 0.5 Grms, random
- **Certification:** CCC/FCC/CE/BSMI/UL/CB

1.3 Dimensions



Chapter 2

System Setup

This chapter details the system setup process for UBX-310F.

- Quick Tour of the Device
- Installation Procedures
- Running the BIOS Setup
- Installing System Software

2.1 Quick Tour of the Device

Before setting up the device, take a moment to familiarize yourself with the functions of the controls, drivers, connectors, and ports located on the front panel, as illustrated in Figure 2.1.

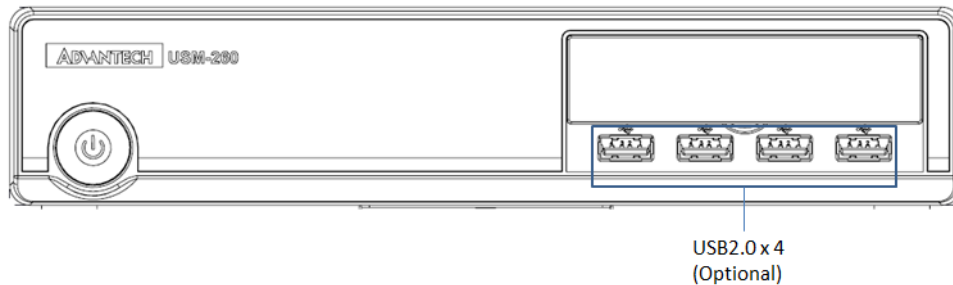


Figure 2.1 Front view

Turn the computer to view the I/O, as shown in Figure 2.2.

(The I/O interfaces include serial ports, USB slots, audio-in jack, etc.)

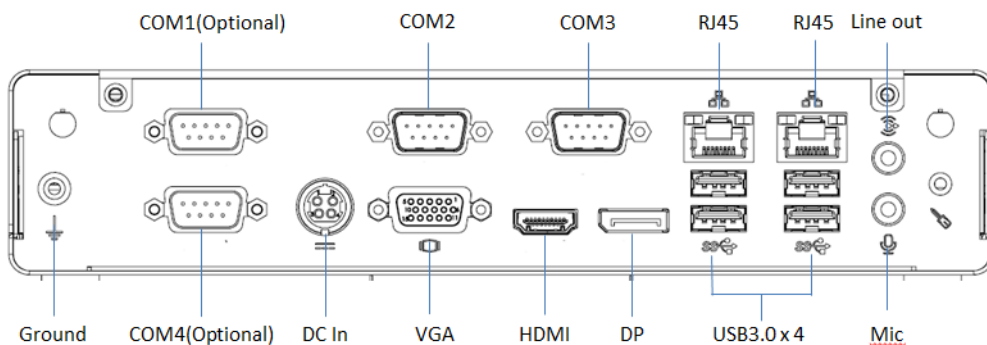


Figure 2.2 Rear view

2.2 Installation Procedures

2.2.1 Connecting the Power Cord

This product only supports DC power (19 VDC, max. 90 W). Be sure to hold the plug end when plugging or unplugging the power cord.

2.2.2 Connecting the Mouse and Keyboard

Connect the mouse and keyboard via the USB ports located in the I/O section at the rear of the computer.

2.2.3 Activating the Power Source

Verify that the power cord is connected to the power input port of the device. Then connect the plug end of the power cord to the wall power outlet.

2.3 Running the BIOS Setup Program

In most cases, the computer will have been setup and configured by the dealer or SI prior to delivery. However, some of the computer's BIOS (Basic Input-Output System) setup programs may need adjustment to set the system configuration data, such as the current date and time, or type of hard drive installed. The setup program is stored in read-only memory (ROM) and can be accessed when activating or resetting the computer, or by pressing "Delete" immediately after powering up the computer.

2.4 Installing System Software

Recent releases of operating systems by major vendors include setup programs that load automatically and guide users through the entire installation process. The steps necessary to install an operating system on the computer hard drive are explained below.

Note! *Some distributors and system integrators may have preinstalled system software before shipping the computer.*



If necessary, insert the OS CD into the diskette until the release button pops up. The system BIOS supports bootup directly from the USB-CDROM drive. Users can insert the OS CD directly into the USB-CDROM drive. Power on the computer, or reset the system by pressing "Ctrl" + "Alt" + "Del" simultaneously.

Select **Boot->Boot Configuration->Operation System Select** to install the correct OS.



After clicking "Save & Exit", the computer will automatically load the operating system from the diskette or USB-CDROM drive.

When presented with the opening screen of a setup/installation program, simply follow the onscreen instructions. The setup program guides users through configuring and installing the hard drive and operating system.

Note! The drivers and utilities of USM-260 are subject to change without notice. *If in doubt, check Advantech's website or contact our application*



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