

ARK-1124/EIS-D210W Computer

Fanless PC with 4x USB 3.0, AC mode/Wifi

Packing List

Before installation, please ensure the following items have been shipped:

- 1 x ARK-1124 unit
- 1 x Registration and 2 years warranty card
- 1 x China RoHS
- 1 x 12V Power Adaptor
- 1 x Utility CD
- 1 x Simplified Chinese manual

Technical Support and Assistance

1. Visit the Advantech web site at www.advantech.com/support where you can find the latest information about the product.
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 you call:
 - Product name and serial number
 - Description of your peripheral attachments
 - Description of your software (operating system, version, application software, etc.)
 - A complete description of the problem
 - The exact wording of any error messages

Warnings, Cautions and Notes

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



Caution! Cautions are included to help you avoid damaging hardware or losing data.



There is a danger of a new battery exploding if it is 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 optional additional information.



Product Specification

ARK-1124U/EIS-D210W

| | | | |
|-------------------|----------------------------|---|---------------------------------|
| Processor System | CPU | Intel Celeron N3350 Dual Core SoC | Intel Atom™ E3940 Quad Core SoC |
| | Frequency | 1.1GHz, turbo burst 2.4 GHz | 1.6 GHz, turbo burst 1.8GHz |
| | L2 Cache | 2 MB | |
| | BIOS | AMI EFI | |
| Memory ※ | Technology | DDR3L 1866 MHz | |
| | Max. Capacity | 8 GB | |
| | Socket | 1 x 204-pin SO-DIMM | |
| Graphics | Chipset | Intel Atom™ integrated, Gen 9th low power | |
| | Graphic Engine | 4K Codec Decode& Encode for H.264, MPEG2, MVC, VC-1, WMV9, H.265 / HEVC, VP8, JPEG / MJPEG | |
| | VGA | Up to 2560 x 1600 @ 60Hz | |
| Ethernet | LAN1 | 10/100/1000 Mbps Intel i210-IT GbE, support Wake On Lan | |
| | LAN2 | 10/100/1000 Mbps Intel i210-IT GbE, support Wake On Lan | |
| Audio | Interface | Realtek ALC888S, High Definition Audio. Line-out,,Line-in | |
| IO Interface | Serial Ports | 2 x RS-232/422/485 port with auto flow control | |
| | USB Interface | 4 x USB 3.0 | |
| Other | Watchdog timer | 255 levels timer interval, setup by software | |
| | TPM | Infineon SLB9665XQ 2.0 (Optional, T-PN MOQ 30) | |
| Expansion | Mini PCIe | 1 x full-size mPCIe for WLAN/WWAN with SIM holder | |
| | Others | 1 x M.2 E-key for WIFI | |
| Storage ※ | HDD/SSD | Supports 1 x SATA III Drive Bay (Compatible with 9.5mm height HDD) | |
| Software Support | Microsoft Windows | Windows 10 Enterprise, Windows 10 IoT Core | |
| | Linux | Support by project | |
| Power Requirement | Power Type | AT/ATX | |
| | Power Input Voltage | 12V _{DC} (Optional 12~24V power module, T-PN MOQ 30, Dual Layer) | |
| | Minimum Power Input | 12 V, 1.5 A | |
| | Power Adapter | AC to DC, DC12 V/3 A, 60 W with lockable DC Jack | |
| Power Consumption | Typical | 5W | |
| | Max. | 33.7W | |
| Mechanical | Construction | Aluminum housing | |
| | Mounting | DIN-Rail/Wall/VESA Mounting Kits (Optional) | |
| | Dimensions (W x H x D) | 133 x 44 x 94.2mm (5.24" x 1.73" x 3.71") | |
| | Weight | TBC | |
| Environment | Operating Temperature | With extended temperature peripherals: -20 ~ 60 °C (-4 ~ 140 °F) with 0.7m/s air flow With 2.5-inch hard disk 0 ~ 40 °C (32 ~ 104 °F) with 0.7m/s air flow | |
| | Storage Temperature | -40 ~ 85 °C (-40 ~ 185 °F) | |
| | Relative Humidity | 95% @ 40 °C (non-condensing) | |
| | Vibration During Operation | With SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis | |
| | | With HDD: 0.5Grms, IEC 60068-2-64, random, 5~500Hz, 3 axes, 1hr/axis With HDD: 10G, IEC 60068-2-27, half sine, 11 ms duration | |
| | Shock During Operation | With SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration | |
| | EMC | CE/FCC Class B, CCC, BSMI | |
| | Safety Certifications | UL, CB, CCC, BSMI | |
| Wifi Operation | WLAN: | | |
| | | 2.4GHz: 2412 ~ 2472MHz | |
| | | 5.0GHz: 5180 ~ 5240MHz | |
| | | 5260 ~ 5320MHz | |
| | | 5500 ~ 5720MHz | |
| | | 5745 ~ 5825MHz | |
| | BT: | 2402~2480MHz | |

※ Optional Peripherals.

ARK-1124U/EIS-D210W: Power Input 12V ; Dimension 133 x 46.4 x 94.2mm ; Adapter : FSP060-DIBAN2 (100-240V 50-60Hz 1.5A O/P:12VDC 5A)

ARK-1124DU/EIS-D210DW : Power Input 12V ; Dimension 133 x 83.6 x 94.2mm ; Option adapter : FSP060-DIBAN2(100-240V 50-60Hz 1.5A O/P:12VDC 5A)

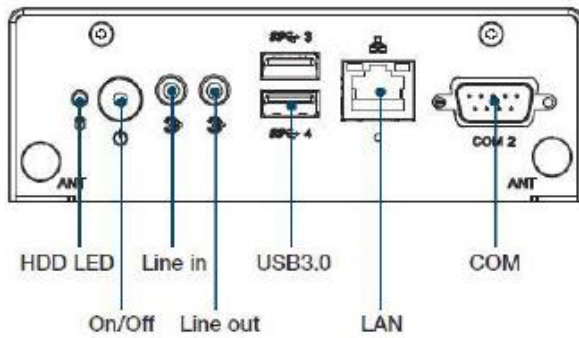
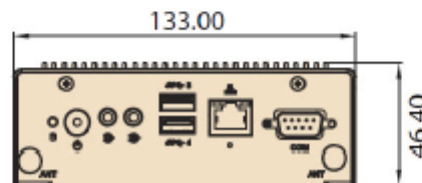
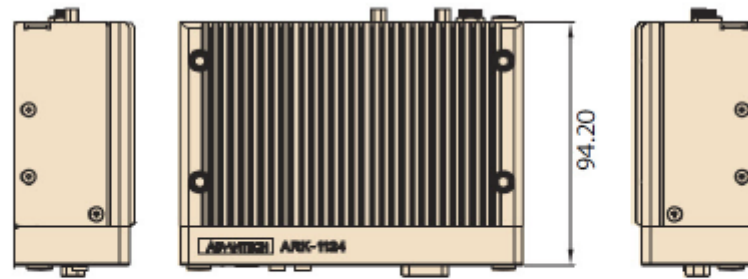
ARK-1124FU/EIS-D210FW : Power Input 12-24V ; Dimension 133 x 83.6 x 94.2mm

Optional iDoor Expansion

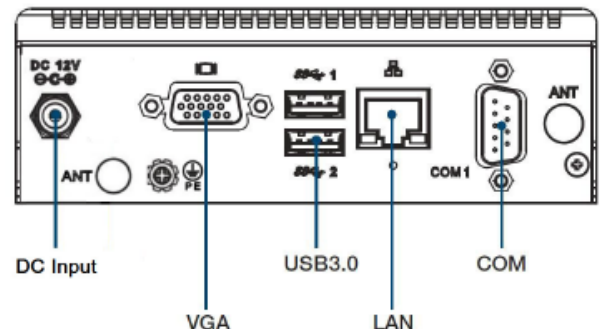
| Part Number | Description |
|-----------------|---|
| MOS-2230-Z1201E | CANBus module, 2-Ch, USB Interface |
| MOS-2220-X1101E | Parallel LPT module, 1-Ch, USB Interface |
| MOS-2110Z-1201E | USB module, 2-Ch, PCIe Interface |
| MOS-2120-Z1101E | Giga LAN Ethernet module, 1-Ch, PCIe Interface |
| MOS-1120Y-0201E | Isolated RS-232, 2-Ch, DB9, PCIe Interface |
| MOS-1121Y-0201E | Isolated RS-422/485, 2-Ch, DB9, PCIe Interface |
| MOS-1120Y-1401E | Non-Isolated RS-232, DB37, 4-Ch, PCIe Interface |
| MOS-1121Y-1401E | Non-Isolated RS-422/485, DB37, 4-Ch, PCIe Interface |
| MOS-1130Y-0201E | Isolated CANBus, 2-Ch, DB9, PCIe Interface |
| MOS-1110Y-0101E | Isolated 16 DI/8 DO, 1-Ch, DB37, PCIe Interface |
| MOS-2220-Z1101E | High Speed COM module, 1-Ch, USB Interface |

Dimension

133[5.24] x 46.4 [1.83] x 94.2 [3.71] Unit: mm [Inch]



ARK-1124U Front View



ARK-1124U Rear View

Safety Instructions

1. Please read these safety instructions carefully.
2. Please keep this User's Manual for later reference.
3. Please disconnect this equipment from AC outlet before cleaning. Use a damp cloth. Don't use liquid or sprayed detergent for cleaning. Use moisture sheet or clothe for cleaning.
4. For pluggable equipment, the socket-outlet shall near the equipment and shall be easily accessible.
5. Please keep this equipment from humidity.
6. Lay this equipment on a reliable surface when install. A drop or fall could cause injury.
7. The openings on the enclosure are for air convection hence protecting the equipment from overheating. **DO NOT COVER THE OPENINGS.**
8. Make sure the voltage of the power source when connecting the equipment to the power outlet.
9. Place the power cord such a way that people cannot step on it. Do not place anything over the power cord.
10. All cautions and warnings on the equipment should be noted.
11. If the equipment is not used for long time, disconnect the equipment from mains to avoid being damaged by transient over-voltage.
12. Never pour any liquid into ventilation openings; this could cause fire or electrical shock.

13. Never open the equipment. For safety reasons, only qualified service personnel should open the equipment.
14. If one of the following situations arises, get the equipment checked by service personnel:
 - The power cord or plug is damaged.
 - Liquid has penetrated into the equipment.
 - The equipment has been exposed to moisture.
 - The equipment does not work well, or you cannot get it to work according to the user's manual.
 - The equipment has been dropped and damaged.
 - The equipment has obvious signs of breakage.
15. Do not leave this equipment in an environment where the storage temperature may go below -40°C (-40°F) or above 85°C (185°F). This could damage the equipment. the equipment should be in a controlled environment.
16. Caution: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer, discard used batteries according to the manufacturer's instructions.
17. The sound pressure level at the operator's position according to IEC 704-1:1982 is no more than 70 dB (A).
18. **RESTRICTED ACCESS AREA:** The equipment should only be installed in a Restricted Access Area.
19. **DISCLAIMER:** This set of instructions is given according to IEC 704-1. Advan-tech disclaims all responsibility for the accuracy of any statements contained herein.

Declaration of Conformity

FCC Class B

Note: 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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution!



FCC Caution:

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Operations in the 5.15-5.25GHz band are restricted to indoor usage only.
- This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.

Radiation Exposure Statement:

The product comply with the FCC portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

- Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

www.advantech.com

Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

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