

IBOX-007PRO



- Support easily Swappable HDD Design, max 4* 2.5 inch SSD
- 12th Gen. Intel® Core™ i9/ i7/ i5 /i3 processor, Max. 65W TDPs
- Fully enclosed aluminum alloy anti-interference structure with fanless cooling system
- Modular parts and cable-free design with strong scalability for better vibration resistance
- Scientific and reasonable interface layout
- Modular design with diverse interfaces



Specifications

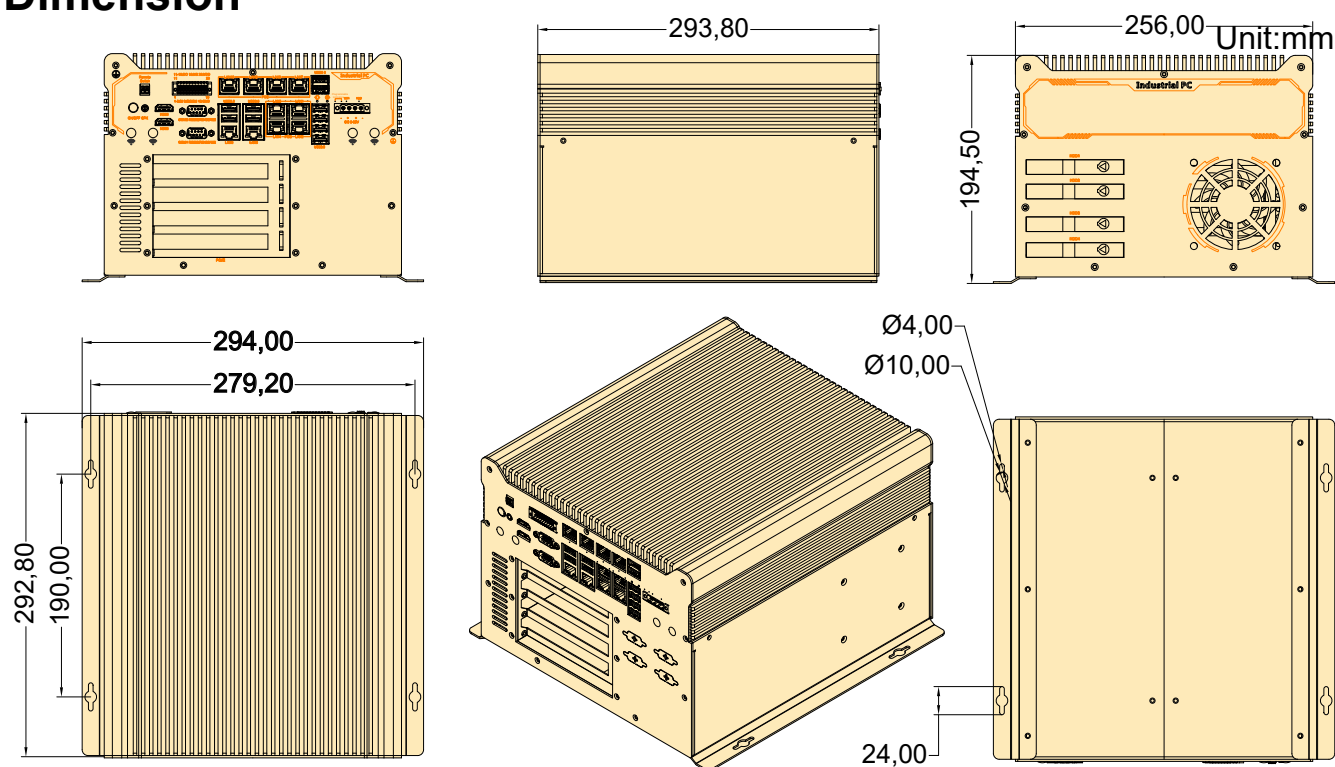
The actual appearance is subject to the final configuration.

Model	IBOX-007PRO		
Supported OS	Win 10, Win11, Linux (Ubuntu, Dbian, Kali, CentOS, etc.); Win 10 IoT		
Chipset	Model	Intel® Q670 Chipset, Intel® Alder Lake-S, TDP 6W	
CPU	Socket	Intel® Desktop Processors Socket LGA1700	
	Series & TDP	12th Gen. Intel® Core™ i3 processor, Max. 65W TDPs	12th Gen. Intel® Core™ i9/ i7/ i5 processor, Max. 35W TDPs
	Graphic	Intel® UHD Graphics 730, 24 Execution Units	Intel® HD Graphics 770, 32 Execution Units
	vPRO Tech	Non-Supported	Supported
RAM	SO-DIMM	2* Dual-CH DDR4 3200 MHz SO-DIMM Socket, Capacity up to 64GB;	
Storage Device	M.2	1* M.2 2242/2280 PCIe x4 NVMe SSD (M-key, 2280/2242, From CPU) 1* M.2 3052/2280 PCIe x4/SATA/USB3.0/USB2.0 (M-key, Default PCIe x4, Support PCIe x4 NVMe SSD, 3052/2280, From PCH)	
	SATA	4 * SATA3.0 7P Port, support max 4* swappable SSD design, support RAID 0/1/5/10	
I/O Interface	COM	2* COM DB9/M (COM1/2, RS232/RS485/RS422, sel by BIOS); 2* RS232 Header (COM3/4, expanded by I/O Daughter Card)	
	Ethernet	1* Intel® I219 GBE Ethernet Controller, LAN5, RJ45 1* Intel® I210 GBE Ethernet Controller, LAN6, RJ45 8* Intel® I210 GBE Ethernet Controller, RJ45, LAN1-4, LAN7-10, support PoE (LAN7-LAN10 are expanded by I/O Daughter Card)	
	USB	4* USB3.0; 4* USB2.0; 1* Internal USB2.0; 2* USB3.0 (These two USB3.0 are expanded by I/O Daughter Card)	
	Video	2 * HDMI (TYPE-A), Support 3840*2160@60Hz;	
	Audio	1 * Line-Out + MIC 2in1 Jack; 1 * Front Audio Header (Line-out + MIC)	
	SIM	1* Internal SIM card slot connected to Mini-PCIe	
	Power Supply	9-36V DC; 1* Terminal Block (4-Pin, 5.08mm)	
	Other	1* 8-bit GPIO header (4-Inputs/4-Outputs, 0-5V Input Range, on motherboard); 1* 16-bit GPIO on Terminal Block (8-Inputs/8-Outputs, 5-48V Input Range, 10*2Pin, 2.54mm, Expanded by I/O Daughter Card) 1* Remote Switch on Terminal Block (2*1Pin, 3.5mm, Expanded by I/O Daughter Card)	
Extended Capabilities	Additional Internal Interface	1* Mini-PCIe with SIM Card Slot (PCIe+USB2.0, support WiFi or 4G); 1* PCIe16 Gen4 +PCIex4 Gen3[1]+ 0* PCI or 1* PCIe16 Gen4+1* PCIe2 Gen3 with x4 socket + 2* PCI, expanded by Expansion Daughter Card[2]	
Environment	Operating Temperature	-20 ~ 55 °C w/ 0.7m/s Airflow	
	Relative Humidity	40 °C @ 95%, Non-Condensing	
Physical Characteristics	Dimensions	290.35* 79.6* 234 mm (W* H* D)	
	Net Weight	7 KG	
Regulation	EMC	CE/FCC Class B, CCC	
	Safety	CE-LVD, RoHS, CCC	

[1]: PCIe4 Gen3 by default, PCIe4 Gen4 by optional

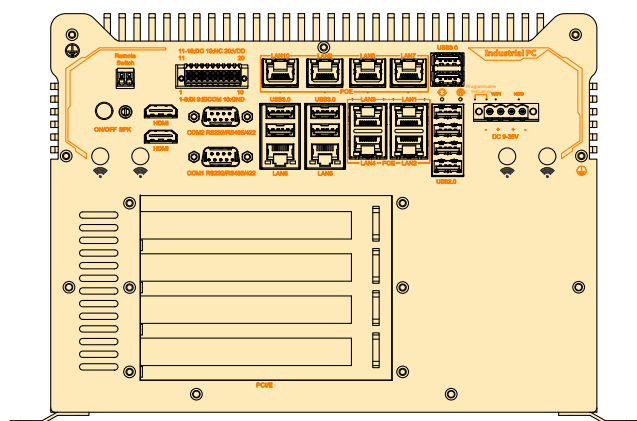
[2]: PCIe4_1 can support PCIe x2 or PCIe x4 signal. When PCIe4 slot support PCIe x4 signal, PCI 1-2 can't be used. (BOM and BIOS Optional)

Dimension

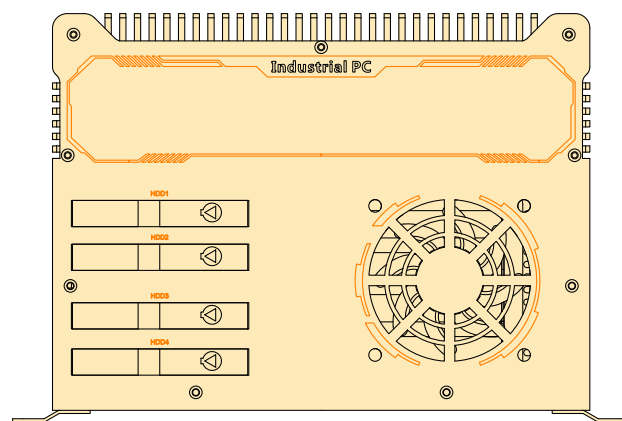


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Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



I/O Daughter Card Information

Model	MEV EXP-4POE
Input	1* Daughter Card Expand Connector
LAN	4* Intel ® i210 GbE LAN, RJ45, Support PoE, Max 4* 15.4W (each 15.4W max)
COM	2* RS232 (COM3/4, Wafer)
USB	2* USB3.0 (TYPE-A, Rear IO)
Other Ports	1* Power System On Terminal Block, 2*1 Pin, 3.5mm; 1* 16-bit GPIO Terminal Block, 10*2 Pin, 2.54mm, Input Range 5-48V
Power Supply	1 * DC48V POE Power Input ATX 4P Connector

Expansion Daughter Card Information

Model	MEV EXP-2PCIe2PCI
Input	1 * PClex16 Gold Finger and 1 * PClex4 Gold Finger
Expansion Slots	1* PClex16+ PClex4+ 0* PCI (66MHz/33MHz); Or 1* PClex16+ 1* PClex2 with x4 slot+ 2* PCI (66MHz/33MHz); BOM and BIOS Optional
Others	1 * Power On Header
Power Supply	1 * DC 9-36V Power Input ATX 6P Connector; 1 * DC 12V Power Output ATX 6P Connector

Basic Ordering Information

SO-DIMM Socket	M.2 M-key slot	SATA3.0 Connector	Full Size Mini PCIe Slot	RS232/ 422/ 485 DB9 COM Port	GbE LAN	PoE GbE LAN	
2	2	4	2	2	2	4	
USB 3.0	USB 2.0	Internal USB2.0	HDMI	Audio Jack	Internal SIM Card Slot	8-bit GPIO Header	Power Supply
4	4	1	2	1	1	1	DC 9-36V

Processors Info.

CPU	Code Name	Total Cores	Total Threads	Max Turbo Frequency	Base Frequency	Cache	TDP	Memory Types	Integrated Graphics
Intel® Core™ i3-12100T	Alder Lake	4	8	4.10 GHz	2.20 GHz	12 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i5-12500T	Alder Lake	6	12	4.40 GHz	2.00 GHz	18 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i7-12700T	Alder Lake	12	20	4.70 GHz	1.40 GHz	25 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i9-12900T	Alder Lake	16	24	4.90 GHz	1.40 GHz	30 MB Intel® Smart Cache	35 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i3-12100	Alder Lake	4	8	4.30 GHz	3.30 GHz	12 MB Intel® Smart Cache	65 W	DDR4	Intel® HD Graphics 730, 24EUs
Intel® Core™ i5-12500	Alder Lake	6	12	4.60 GHz	3.00 GHz	18 MB Intel® Smart Cache	65 W	DDR4	Intel® HD Graphics 770, 32EUs
Intel® Core™ i7-12700	Alder Lake	12	20	4.90 GHz	2.10 GHz	25 MB Intel® Smart Cache	65 W	DDR4	Intel® HD Graphics 770, 32EUs

All products and company name listed are trademarks or trade names of their respective companies.

!! Note: For more interface configuration or available processors, please consult the sales.

Packing List

Default Items	Qty
IBOX-007PRO Unit	1
AC-to-DC Adapter	1
Power cable 4-pin 150cm	1

Options for Default items

Optional Items	Qty
Power cable 4-pin 150cm, USA type	-
Power cable 4-pin 150cm, EU type	-
Power cable 4-pin 150cm, UK type	-

Optional accessories or internal modules for unit

Optional Items	Max Qty	Description
I/O Daughter Card	1	Connected by IO expand slot, offering 4* PoE LAN+1* 16bit GPIO(5-48V)+1* Remote Switch+ 2* USB3.0
Expansion Daughter Card	1	Connected by PCIe expand slot, offering 1*PCIe x16 + 1*PCIe x4 + 2*PCI, working with PRO-BASE only
4G Module	1	Connected by Mini-PCIe or M.2 interface
WiFi Module without AP mode	1	Connected by Mini-PCIe interface
WiFi Module with AP mode	1	Connected by Mini-PCIe interface
Dual channel CAN-Bus Module	2	Connected by Mini-PCIe or M.2 interface
Four channel CAN-Bus Module	1	Connected by PCIe interface
Dual GbE PoE LAN Module	3	Connected by Mini-PCIe or M.2 interface
AI Acceleration Card	4	26 TOPS, Connected by M.2 interface; 13 TOPS, Connected by Mini-PCIe interface
Ignition Switch Module	1	Phoenix Terminal connector, connected by internal power switch and 4-pin ATX power connector

!! Note: As this product has expansion slots, please consult sales for the specific maximum number of expandable interfaces.