

IBOX-105-4L2C2P



- Full aluminum alloy anti-interference structure
- Modular parts design with strong scalability
- Fully enclosed with fanless cooling system
- Cable-free design for better vibration resistance
- Scientific and reasonable interface layout
- Double board design with diverse interfaces
- Multiple mounting options available



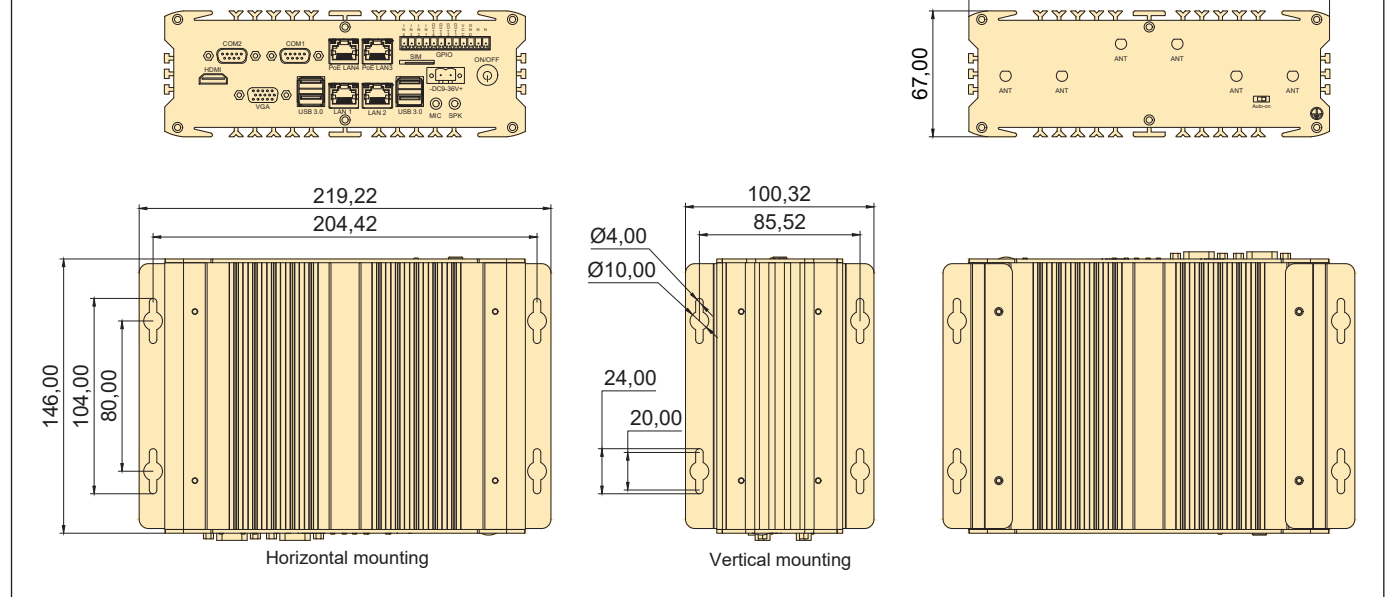
The actual appearance is subject to the final configuration.

Specifications

Model	IBOX-105-4L2C2P			
Supported OS	Win 7, Win 8, Win 10, Win11, Linux (Ubuntu, Debian, Kali, CentOS, etc.); WES 7; Win 10 IoT			
CPU	Series/ Model	4th~5th Gen. Intel® Core™ Processor	6th~8th Gen. Intel® Core™ Processor Intel® Celeron® 3865U/ 5205U	11th Gen. Intel® Core™ Processor Intel® Celeron® 6305E
	TDP	Up to 15W	Up to 15W	Up to 28W
RAM	Type & Qty	1* SO-DIMM Socket	2* SO-DIMM Socket	2* SO-DIMM Socket
	Frequency	DDR3L-1333/1600 MHz	DDR4-2133/2400 MHz	DDR4-3200 MHz
	Capacity	Up to 8GB	Up to 32GB	Up to 64GB
Storage Device	SATA	1* 2.5" SATA3.0 Bay on board (6Gb/s)		
	MSATA	1* mSATA3.0 slot on board (6Gb/s)		
I/O Interface	COM	2* Isolated COM with TVS protection (COM1-2, DB9 connectors, support RS232/485, switchable by BIOS) 2* COM headers on board (COM3-4, support RS232, shared with GPIO);		
	Ethernet with PoE	2* 1.0 GbE PoE LAN, Intel i211, support IEEE802.3af (RJ45/ M12 connector optional)		
	Ethernet without PoE	2* 1.0 GbE LAN, Intel i211/i210, RJ45 only (Only Intel i3-5020U is working with intel i210 GbE LAN)		2* 2.5 GbE LAN, Intel i225, RJ45
	USB	2* USB3.0; 2* USB2.0; 1* Internal USB 2.0; 2* USB2.0 header	4* USB3.0; 1* Internal USB 2.0; 2* USB2.0 header	2* USB3.0; 2* USB2.0; 1* Internal USB2.0; 2* USB2.0 header
	Video	1* HDMI, Support 4096x2304@24Hz; 1* VGA, Support 1920x1200@60Hz;	1* HDMI, Support 4096x2304@24Hz; 1* VGA, Support 1920x1200@60Hz;	1* HDMI, Support 4096x2304@60Hz; 1* VGA, Support 1920x1200@60Hz;
	Audio	1* MIC, 1* SPK; With 5.1 channels HD Audio Codec Realtek ALC662	1* MIC, 1* SPK; With 5.1 channels HD Audio Codec Realtek ALC662	1* MIC, 1* SPK; With 7.1 channels HD Audio Codec Realtek ALC897
	SIM	1* External SIM card slot connected to M.2 B-key slot;	1* External SIM card slot connected to M.2 B-key slot; Support optional 2nd SIM card slot connected to Mini-PCIe	
	Power Supply	9-36V DC; 1* Terminal Block (2-Pin, 5.08mm)		
	Other	1* 8-bit GPIO (4-Inputs/4-Outputs, 0-5V Input Range) and 1* Remote Switch on Terminal Block (12-Pin, 3.81mm). 1* Auto-On Switch		
	Extended Capabilities	Additional Internal Interface	1* M.2 2230 E-key Slot (PCIe+USB2.0); 1* M.2 3052 B-key with SIM card slot (USB 3.0)	1* Full Size Mini-PCIe (PCIe+USB2.0); 1* M.2 2230 E-key Slot (PCIe+USB2.0); 1* M.2 3052 B-key with SIM card slot (USB 3.0)
Environment	Operating Temperature	-10 ~ 55 °C w/ 0.7m/s Airflow		
	Storage Temperature	-40 ~ 85 °C (-40~185 °F)		
	Relative Humidity	40 °C @ 95%, Non-Condensing		
Physical Characteristics	Dimensions	192* 72* 143 mm (W* H* D)		
	Net Weight	2.5 KG (The actual weight is subject to the final configuration)		
Regulation	EMC	CE/FCC Class B, CCC		
	Safety	CE-LVD, RoHS, CCC		

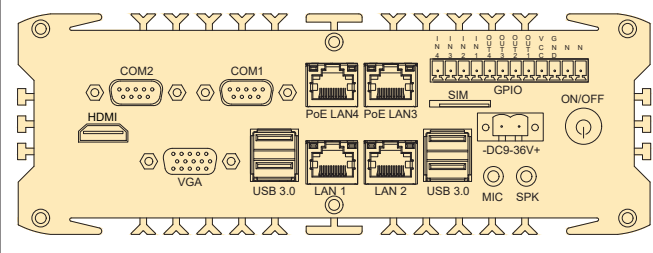
Dimension

Unit:mm

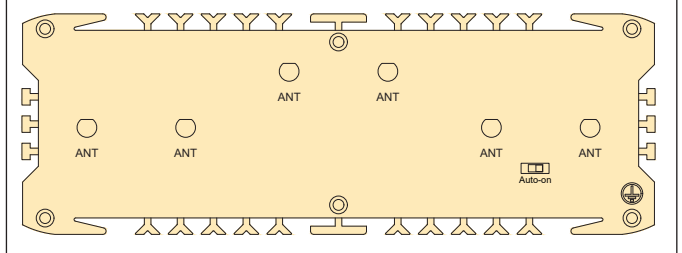


The actual appearance and dimensions are subject to the final configuration

Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

SO-DIMM Socket	2.5" SATA3.0 Bay	mSATA3.0 Slot	M.2 3052 B-key Slot	M.2 2230 E-key Slot	Full Size Mini-PCle	RS232/485	COM Headers	GbE POE LAN	GbE LAN
1 or 2	1	1	1	1	0 or 1	2	2	2	2

!! Note: The Mini-PCle is not available when the device is equipped with 4th~5th Gen. Intel® Core™ & Celeron® processor

USB 3.0	Internal USB 2.0	USB 2.0 Header	HDMI	VGA	MicIn	LineOut	8-bit GPIO	External SIM Card Slot	Power Supply
4	1	2	1	1	1	1	1	1	DC 9-36V

Packing list

Default Items	Qty
IBOX-105-4L2C2P Unit	1
AC-to-DC Adapter	1
Wall mounting bracket	2
Power cable 3-pin 150cm	1

Options for default items

Optional Items	Qty
Power cable 3-pin 150cm, USA type	-
Power cable 3-pin 150cm, EU type	-
Power cable 3-pin 150cm, UK type	-
VESA mount kits	-
DIN Rail mount kits	-
External Fan Kit For 11th Gen. Solution	-

Processors Info & Available List

CPU	Code Name	Total Cores	Total Threads	Max Turbo Frequency	Base Frequency	Cache	TDP	Memory Types	Integrated Graphics
Intel® Core™ I5-4300U	Haswell	2	4	2.90 GHz	1.90 GHz	3 MB Intel® Smart Cache	15W	DDR3	Intel® HD Graphics 4400
Intel® Core™ I7-4600U	Haswell	2	4	3.30 GHz	2.10 GHz	4 MB Intel® Smart Cache	15W	DDR3	Intel® HD Graphics 4400
Intel® Core™ I3-5020U	Broadwell	2	4	-	2.20 GHz	3 MB	15W	DDR3	Intel® HD Graphics 5500
Intel® Celeron® 3865U	Kaby Lake	2	2	-	1.80 GHz	2 MB Intel® Smart Cache	15W	DDR4	Intel® HD Graphics 610
Intel® Celeron® 5205U	Comet Lake	2	2	-	1.90 GHz	2 MB	15W	DDR4	Intel UHD Graphics
Intel® Core™ I5-6360U	Skylake	2	4	3.10 GHz	2.00 GHz	4 MB Intel® Smart Cache	15W	DDR4	Intel® Iris® Graphics 540
Intel® Core™ I7-6650U	Skylake	2	4	3.40 GHz	2.20 GHz	4 MB Intel® Smart Cache	15W	DDR4	Intel® Iris® Graphics 540
Intel® Core™ I5-7200U	Kaby Lake	2	4	3.10 GHz	2.50 GHz	3 MB Intel® Smart Cache	15W	DDR4	Intel® HD Graphics 620
Intel® Core™ I5-7360U	Kaby Lake	2	4	3.60 GHz	2.30 GHz	4 MB	15W	DDR4	Intel® Iris Plus Graphics 640
Intel® Core™ I7-7600U	Kaby Lake	2	4	3.90 GHz	2.80 GHz	4 MB Intel® Smart Cache	15W	DDR4	Intel® HD Graphics 620
Intel® Core™ I3-8145U	Whiskey Lake	2	4	3.90 GHz	2.10 GHz	4 MB Intel® Smart Cache	15W	DDR4	Intel® UHD Graphics 620
Intel® Core™ I5-8265U	Whiskey Lake	4	8	3.90 GHz	1.60 GHz	6 MB Intel® Smart Cache	15W	DDR4	Intel® UHD Graphics 620
Intel® Core™ I7-8565U	Whiskey Lake	4	8	4.60 GHz	1.80 GHz	8 MB Intel® Smart Cache	15W	DDR4	Intel® UHD Graphics 620
Intel® Celeron® 6305E	Rocket Lake	2	2	-	1.80 GHz	4 MB Intel® Smart Cache	15W	DDR4	Intel UHD Graphics
Intel® Core™ I5-1135G7	Tiger Lake	4	8	4.20 GHz	2.40 GHz	8 MB Intel® Smart Cache	12-28W	DDR4	Intel® Iris Xe Graphics; 80Eus
Intel® Core™ I7-1165G7	Tiger Lake	4	8	4.70 GHz	2.80 GHz	12 MB Intel® Smart Cache	12-28W	DDR4	Intel® Iris Xe Graphics; 96Eus

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

Optional accessories or internal modules for unit

Optional Items	Max Qty	Description
Isolated 8-bit GPIO, 9-24V	1	Phoenix Terminal connector, connected by non-standard M.2 interface
Isolated 8-bit GPIO with current loading, 9-26V	1	Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface
Isolated 15-bit GPIO, 0-5V	1	Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface
Isolated 15-bit GPIO with 7-in & 8-out, 12-24V	1	Digital signal, Phoenix Terminal connector, connected by non-standard M.2 interface
Isolated RS-232	2	DB9 or Phoenix Terminal connector, connected by header
Non-Isolated RS-232	2	DB9 or Phoenix Terminal connector, connected by header
RS-422 With Surge Protection	2	DB9 or Phoenix Terminal connector, connected by header, with additional RS232 TO RS422 Module
RS-485 With Surge Protection	2	DB9 or Phoenix Terminal connector, connected by header
4G Module	1	Connected by M.2 or Mini-PCIe interface
5G Module	1	Connected by M.2 interface
WiFi Module without AP mode	1	Connected by M.2 interface or Mini-PCIe interface
WiFi Module with AP mode	1	Connected by Mini-PCIe interface
Dual channel CAN-Bus Module	1	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.