

# IBOX-105-6C2L



- 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



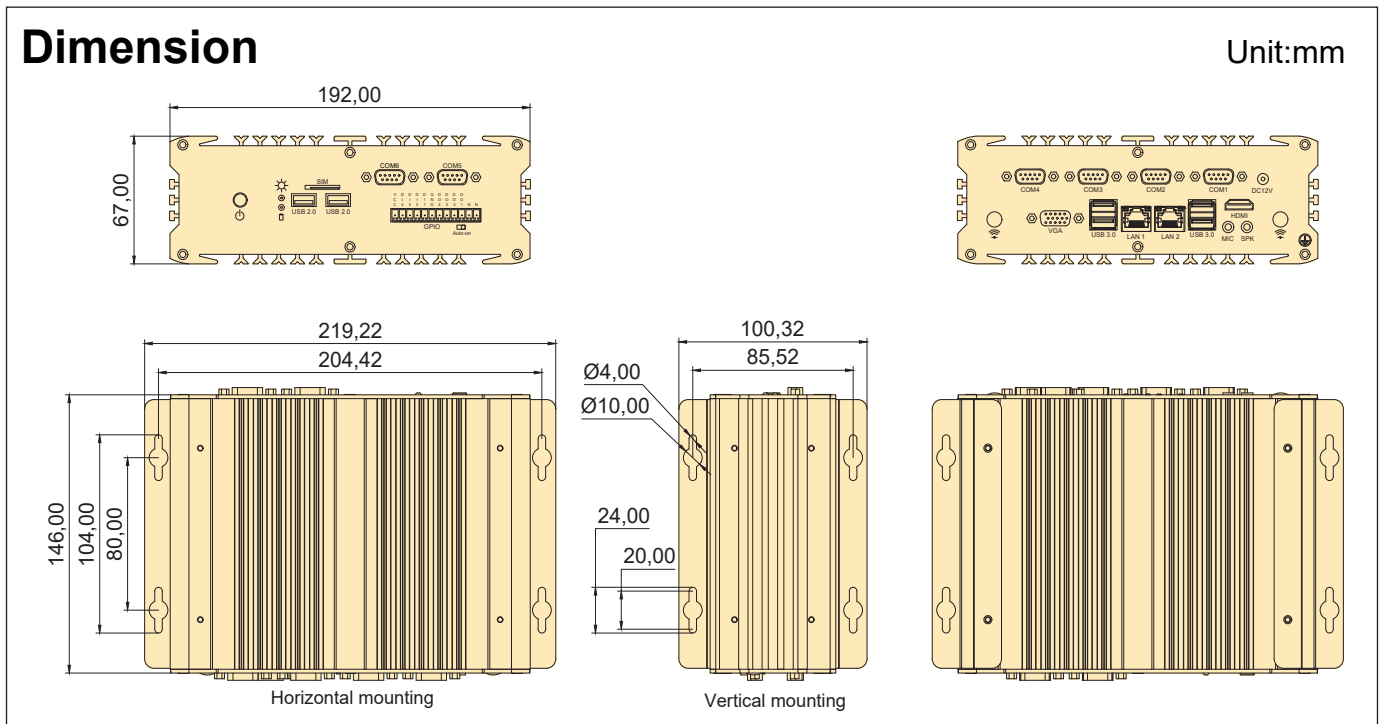
The actual appearance is subject to the final configuration.

## Specifications

<b>Model</b>	IBOX-105-6C2L			
<b>Supported OS</b>	Win 7, Win 8, Win 10, Win11, Linux (Ubuntu, Debian, Kali, CentOS, etc.); WES 7; Win 10 IoT			
<b>CPU</b>	Series/ Model	4th~5th Gen. Intel® Core™ Processor Intel® Celeron® J1900	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
<b>RAM</b>	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
<b>Storage Device</b>	M.2	Not available	1* M.2 2280 M-key slot, Support SATA/ PCIe4 Gen.3 NVMe SSD	
	SATA	1* 2.5" SATA3.0 Bay on board (6Gb/s); (Intel® Celeron® J1900 supports SATA2.0, 3Gb/s)		
	MSATA	1* mSATA3.0 slot on board (6Gb/s); (Intel® Celeron® J1900 supports mSATA2.0, 3Gb/s)		
<b>I/O Interface</b>	COM	4* RS232 (COM1-4, DB9 connector); 2* RS232/485 (COM5-6, DB9 connector, switchable by jumper)		
	Ethernet	2* 1.0 GbE LAN, Intel i211/i210, RJ45 only (Only Intel® Core™ i3-5020U is working with intel i210 GbE LAN)		2* 2.5 GbE LAN, Intel i225, RJ45
	USB	2* USB3.0; 4* USB2.0; 1* Internal USB2.0; (Intel® Celeron® J1900: 1*USB3.0+5*USB2.0+1* Internal USB2.0)	4* USB3.0; 2* USB2.0; 1* Internal USB 2.0	2* USB3.0; 4* USB2.0; 1* Internal USB2.0;
	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 Mini-PCIe (PCIe+USB2.0)		
	Power Supply	12V DC; 1* DC Jack (5.5* 2.5mm)		
	Others	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; 1* PS/2 header		
<b>Extended Capabilities</b>	Additional Internal Interface	1* Full Size Mini-PCIe with SIM card slot		
<b>Environment</b>	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		
<b>Physical Characteristics</b>	Dimensions	192* 67* 146 mm (W* H* D)		
	Net Weight	2.05 KG		
<b>Regulation</b>	EMC	CE/FCC Class B, CCC		
	Safety	CE-LVD, RoHS, CCC		

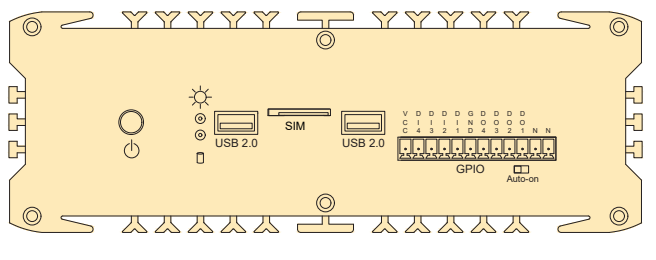
Dimension

Unit:mm

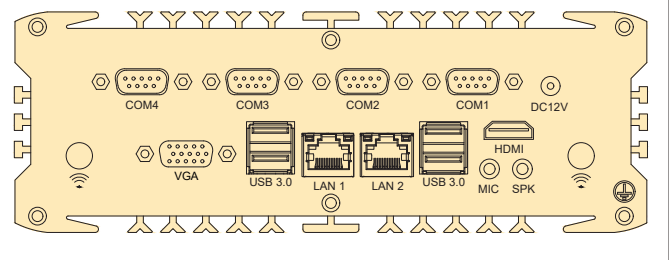


The actual appearance and dimensions are subject to the final configuration

Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

SO-DIMM Socket	2.5" SATA Bay	mSATA Slot	M.2 2280 M-key Slot	Full Size Mini-PCIe	RS232	RS232/485	GbE LAN	USB2.0	USB3.0	Internal USB2.0
1 or 2	1	1	0 or 1	0 or 1	4	2	2	2 or 4 or 5	4 or 2 or 1	1

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

HDMI	VGA	MIC	SPK	PS/2	External SIM Card Slot	8-bit GPIO	Auto On Switch	Power Supply
1	1	1	1	1	1	1	1	DC 12V

Packing list

Default Items	Qty
IBOX-105-6C2L 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® Celeron® J1900	Bay Trail	4	4	-	2.00 GHz	2 MB L2 Cache	10W	DDR3	Intel® HD 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
4G Module	1	Connected by Mini-PCIe 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	1	Connected by Mini-PCIe interface or M.2 Interface
Single GbE PoE LAN Module	1	Connected by Mini-PCIe interface
Dual GbE PoE LAN Module	1	Connected by M.2 Interface

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