

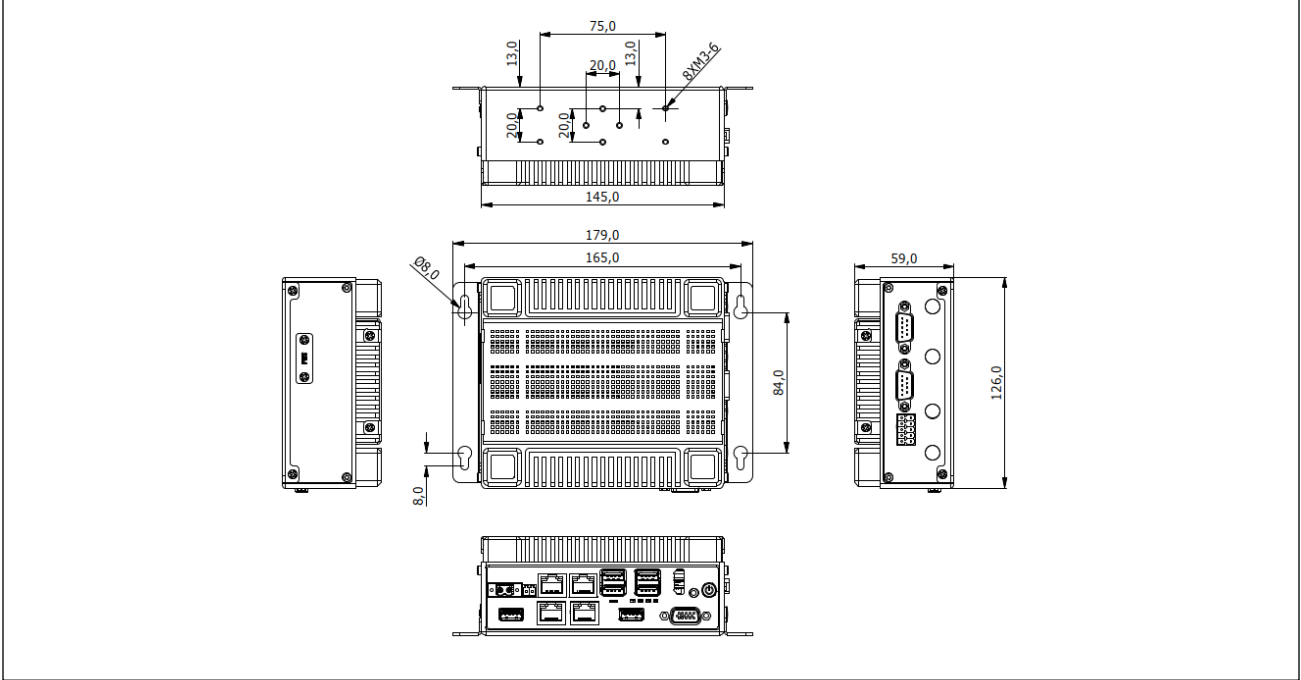
Features

- Supports Intel® J6412,N97 & 4th ~ 12th Gen U-Series Core™ i3/i5/i7 processors
- Flexible CPU options
- VGA+HDMI dual displays
- M.2 2280 SSD + MSATA
- 9~36V Wide Range DC input

Specifications

System	
Model	HG33X
Processor *1	The memory type is determined by the CPU model
Memory *2	1x SODIMM DDR4, MAX 16GB
Ethernet	2 x GbE RJ45 intel i210-AT (Optional 4x LAN)
I/O Port	4 x USB3.0, 2 x USB2.0 (internal pin header) 1 x DB-9 COM1/2 RS-232/485/422 1 x DB-9 COM3/4 RS-232 (Optional 2x CAN) 1 x Audio Line-out/Mic-in 1 x Remote switch Phoenix 1 x AT/ATX Switch 1 x Clear CMOS Button 1 x SIM Card slot 1 x HDMI 1 x VGA 1 x Power Button with LED 8 x GPIO (4xinput, 4xoutput)
Storage *3	1 x M.2 2280 SSD (SATA/NVMe) 1 x mSATA
Expansion slot	Mini-PCle x 1 full size with SIM Card for WIFI/BT 3G/4G M.2 Key B x 1 for 5G
Watchdog timer	255 Levels
Indicator	System LED Storage active LED System temperature LED
OS support	Windows® 10/11, Linux
Mechanical	
Construction	Aluminum Design
Mounting	Wall Mount (default), Din Rail (mounting clip optional)
Dimension	145.0 x 126.0 x 59.0 mm (W x D x H)
Gross weight	TBD
Environmental	
Operating temperature	0°C~50°C
Storage temperature	-20°C~60°C
Storage humidity	10~95%@40°C, non-condensing
Power Supply	
DC input	DC 9~ 36V 2-pin Phoenix Connector

Dimensions ■ Unit: mm



Recommended CPU models

The industrial BOX PC has extended configuration possibilities to meet your requirements, below an overview of the most used and recommended models. Selecting one of the models below will bring the benefit of faster delivery times.
In case your preferred model is not listed below, please contact your representative to discuss the possibilities.

*1 CPU Models	*2 Memory type	*3 Storage Type
J6412	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA), 1x mSATA
N97	DDR4-3200MHz SO-DIMM x1, up to 16GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i5-4210U	DDR3L-1600MHz SO-DIMM x1, up to 8GB	1x M.2 2280 SSD (SATA), 1x mSATA
i3-5005U	DDR3L-1600MHz SO-DIMM x1, up to 8GB	1x M.2 2280 SSD (SATA), 1x mSATA
i5-6300U	DDR4-2400MHz SO-DIMM x1, up to 16GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i5-7200U	DDR4-2400MHz SO-DIMM x1, up to 16GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i7-7500U	DDR4-2400MHz SO-DIMM x1, up to 16GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i5-8250U	DDR4-2400MHz SO-DIMM x1, up to 16GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i3-1115G4	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i5-1135G7	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i7-1195G7	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i3-1215U	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i5-1235U	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA
i7-1255U	DDR4-3200MHz SO-DIMM x1, up to 32GB	1x M.2 2280 SSD (SATA/NVMe), 1x mSATA

Packing List

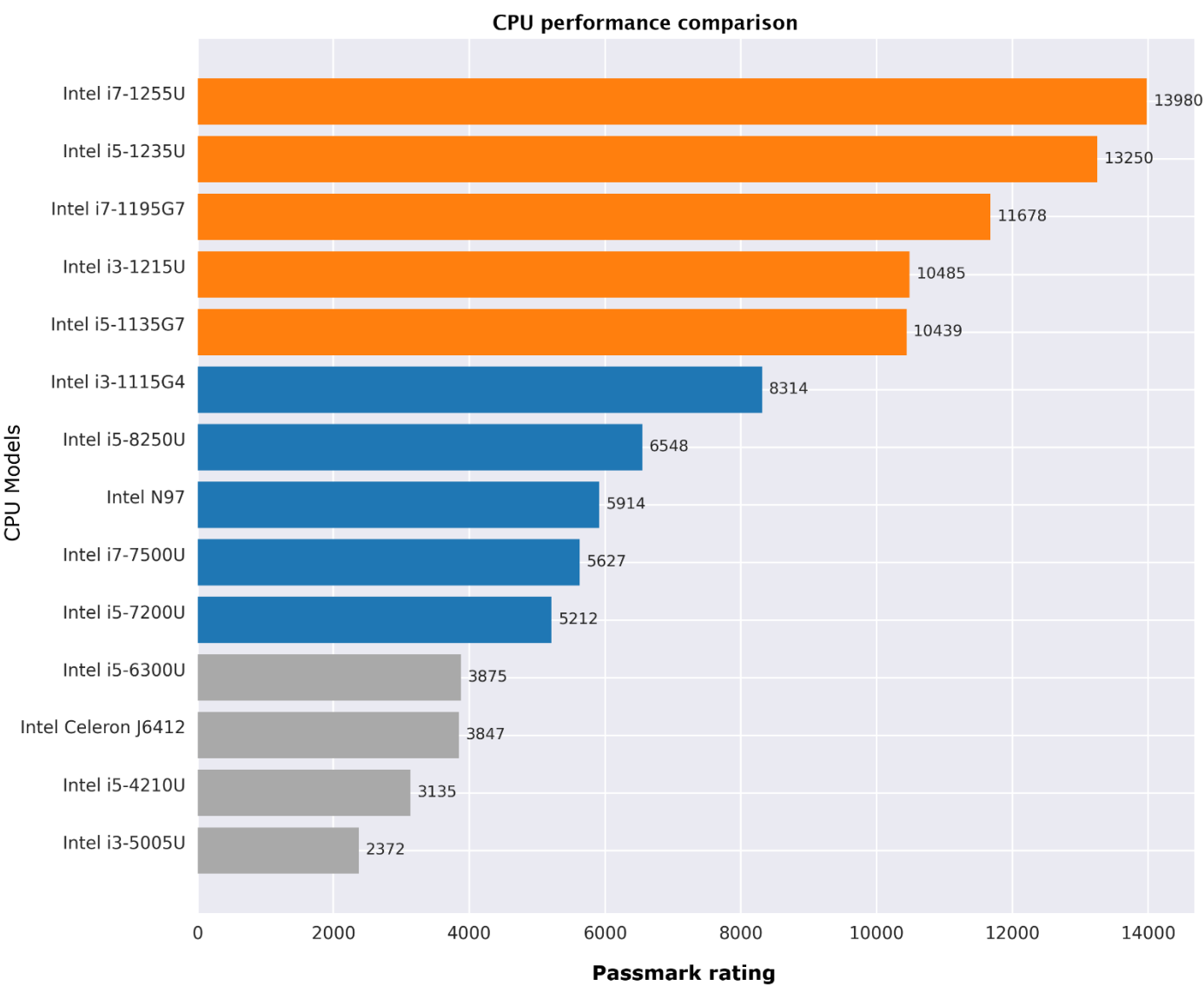
- HG33X
- Power Adapter
- Wall mount Bracket x 2
- Phoenix Connector for Remote switch

Optional Accessories

- WIFI Module
- 4G/5G Module
- SSD, Memory
- Expansion card (CANx2)
- DIN Rail mounting clip

CPU Performance Comparison

(Source: PassMark Benchmark)



Performance Tier	Typical Applications
♥ Entry-Level	Basic data acquisition
● Mainstream	Multitasking, edge computing
● High-Performance	Machine vision, AI inference, image processing

CPU Specification Comparison Tabel

CPU Model	Base /Turbo Frequency (GHz)	Cores	Threads	TDP (W)
J6412	2.0 / 2.6	4	4	10
N97	3.4 / 3.6	4	4	12
i5-4210U	1.7 / 2.7	2	4	15
I3-5005U	2.0	2	4	15
I5-6300U	2.4 / 3.0	2	4	15
I5-7200U	2.5 / 3.1	2	4	15
I7-7500U	2.7 / 3.5	2	4	15
I5-8250U	1.6 / 3.4	4	8	15
I3-1115G4	3.0 / 4.1	2	4	15
I5-1135G7	2.4 / 4.2	4	8	15
I7-1195G7	2.9 / 5.0	4	8	15
I3-1215U	1.2 / 4.4	6	8	15
I5-1235U	1.3 / 4.4	10	12	15
I7-1255U	1.7 / 4.7	10	12	15