

Let's wait 5 minutes for everyone



A word cloud of "Welcome" in various languages and scripts, including: Welkom, 歡迎, Hoşgeldiniz, أهلا بك, Herzlich willkommen, Dobrodošli, добре дошли, Willkommen, Bem-vindo, Välkommen, Velkommen, ようこそ, Bienvenue, Vítejte, Üdvözlök, Velkominn, Tervetuloa, Добро пожаловать, Benvenuto, Bienvenidos, καλώς ήρθατε, स्वागत हे, and Witamy.



JHCTECH 集和诚

物联万物
联机万物

IoT Computer
Connecting the Data

JHCTECH
Welcome

JHCTECH



KGEC-6500



KGEC-6200

Live

Speaker:



Gary
Customer Solution Manager
JHCTECH Shenzhen Office

Product Launch Announcement

Time	Agenda
16:00 ~ 16:05	Opening Chi Chi Wang, Marketing Manager, Shenzhen Office
16:05 ~ 16:30	Introduction of New Products High-Performance Industrial Edge Controller KGEC-6500 Compact AMR Controller KGEC-6200 Gary Shu, Customer Solution Manager, Shenzhen Office
16:30 ~ 16:40	Q&A



01

Introduction of JHCTECH New Products

Gary Shu, Customer Solution Manager, Shenzhen Office



High-Performance Industrial Edge Controller KGEC-6500



01 KGEC Roadmap

**02 KGEC-6500
Product Features**

03 Ordering Info

04 Target Market

05 Product Schedule

CONTENTS

01> KGEC Series ROADMAP

KGEC-6200



KGEC-6300



<New product>

KGEC-6500

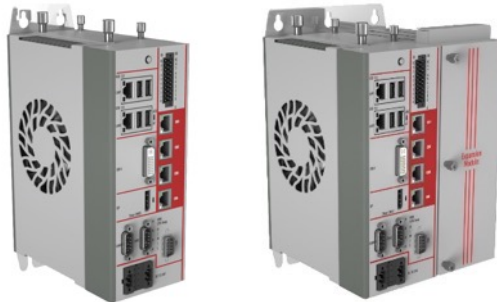


Intel® Elkhart lake

Intel® Skylake S/Kabylake S

Intel® Whiskey lake U

Intel® Comet lake S



KGEC-6301



KGEC-6310

02> KGEC-6500

Product Features



KGEC-6300

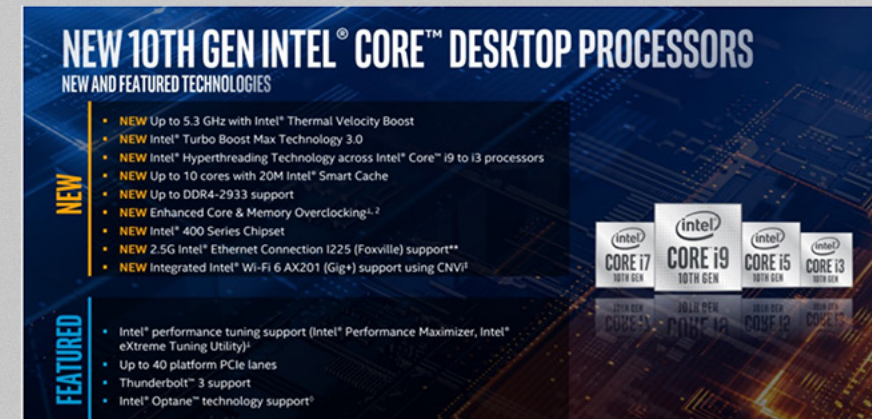
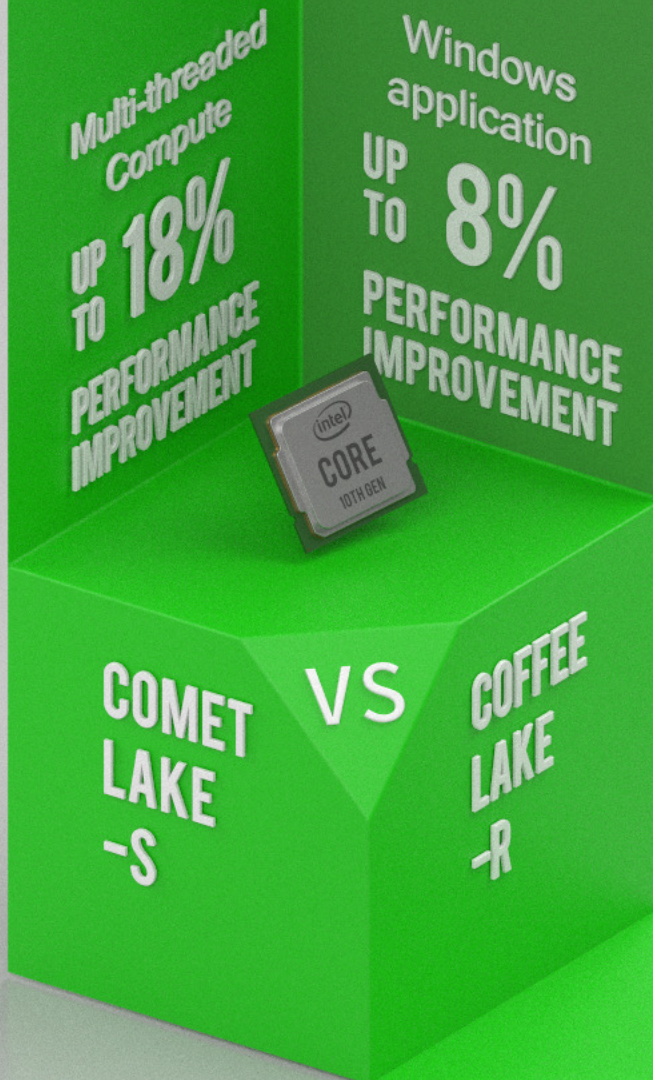


KGEC-6500

Model	KGEC-6300	KGEC-6500
CPU	Intel® Skylake-S/Kabylake-S CPU, up to 65W	Intel® Comet Lake-S CPU, up to 65W
chipset	Intel H110	Intel H420E
RAM	DDR4 SODIMM single channel	DDR4 SODIMM dual channel
Network port	2*Gigabit Ethernet port	
Display	1*DP, 1*DVI-I, dual independent interface	1*HDMI , 1*DVI-I, dual independent interface
USB	4*USB3.0(Type A) ; 2*USB2.0(built-in)	4*USB3.2(Type A), 3*USB2.0(built-in: one Type A, one 2*5pin header)
serial port	2*RS232/422/485(DB9)	2*RS232/422/485(DB9) , 1*RS232
Storage	1*mSATA	1*2.5" SATA3.0 port , 1*mSATA
Power Supply	DC 12~24V wide voltage power supply, with reverse connection, overcurrent, and overvoltage protection	
Installation	Wall mount (default), Din Rail mount (optional)	
Weight	S001: 2.52KG After adding the extension: 3.52KG	S001: 1.85KG After adding the extension: 2.20KG
Expansion	1*PCIeX4 slot (X1 signal) or 1*PCI single expansion slot, 1*PCIeX4 slot (X1 signal)+1*PCI dual expansion slot	1*PCIeX4 slot (X4 signal) single expansion slot

KGEC-6500 Product Highlights

- 1 High-performance Processor
- 2 Real-time Ethernet Protocol
- 3 Real-time Operating System
- 4 Remote Signal Display
- 5 Open Development Platform
- 6 PCIeX4 Expansion
- 7 High Assemblability
- 8 Diversified Installations

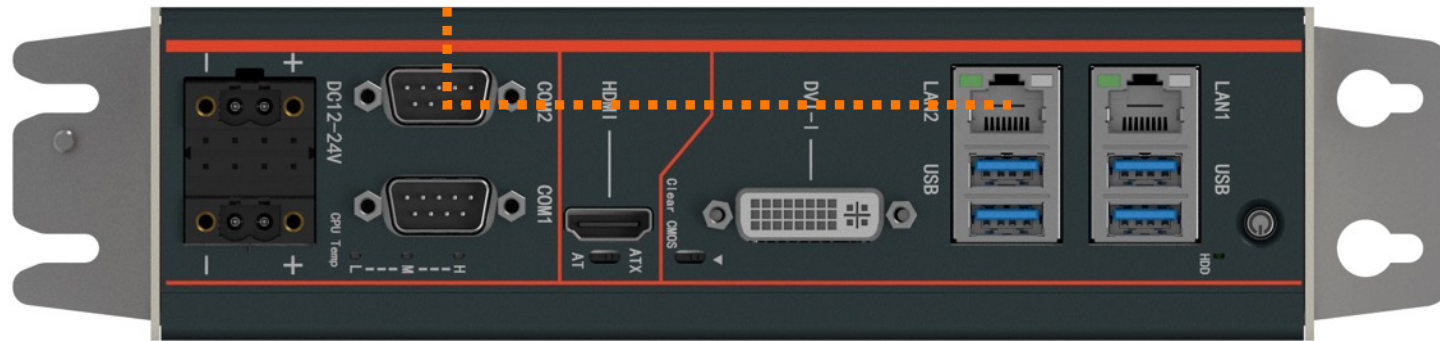


Compared with the previous generation of Coffee lake-R, the maximum multi-threading performance is improved by **18%**, and the running performance of Windows applications is improved by **8%**.

★ **High CPU performance and flexible selection**

★ Real-time Ethernet Protocol

I226V network, supports industrial real-time Ethernet protocols
(EtherCAT, Profibus, Autbus, etc.)



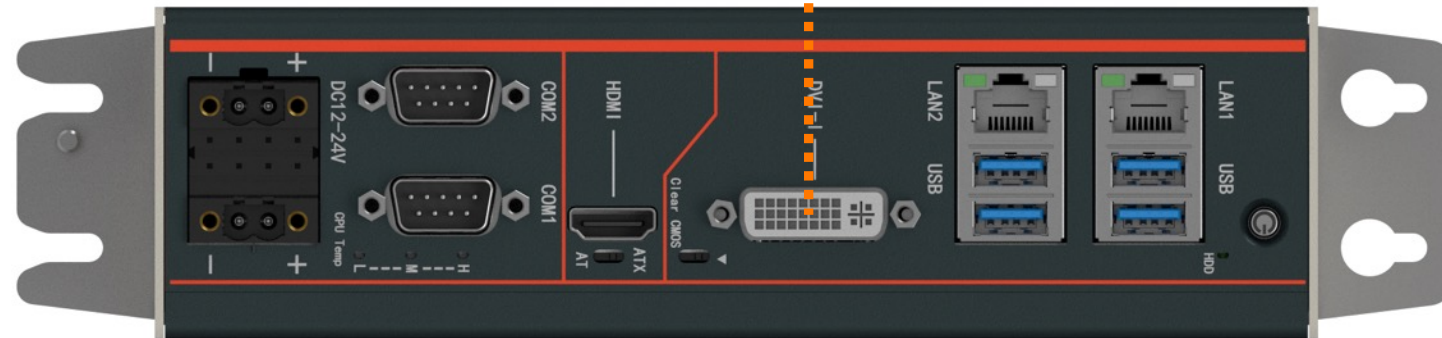
★ Real-time Operating System

BIOS tuning, suitable for high real-time operating systems

Windows(Intime, EC-Win or RTX)、Linux(Ubuntu Preempt-RT and Xenomai) and Intewell

★ Remote signal display

DVI-I interface display signal
can be transmitted 30m



★ Open Development Platform

Support third-party controller development platforms (Codesys, MaVIEW and AXEL Logiclab, etc.)



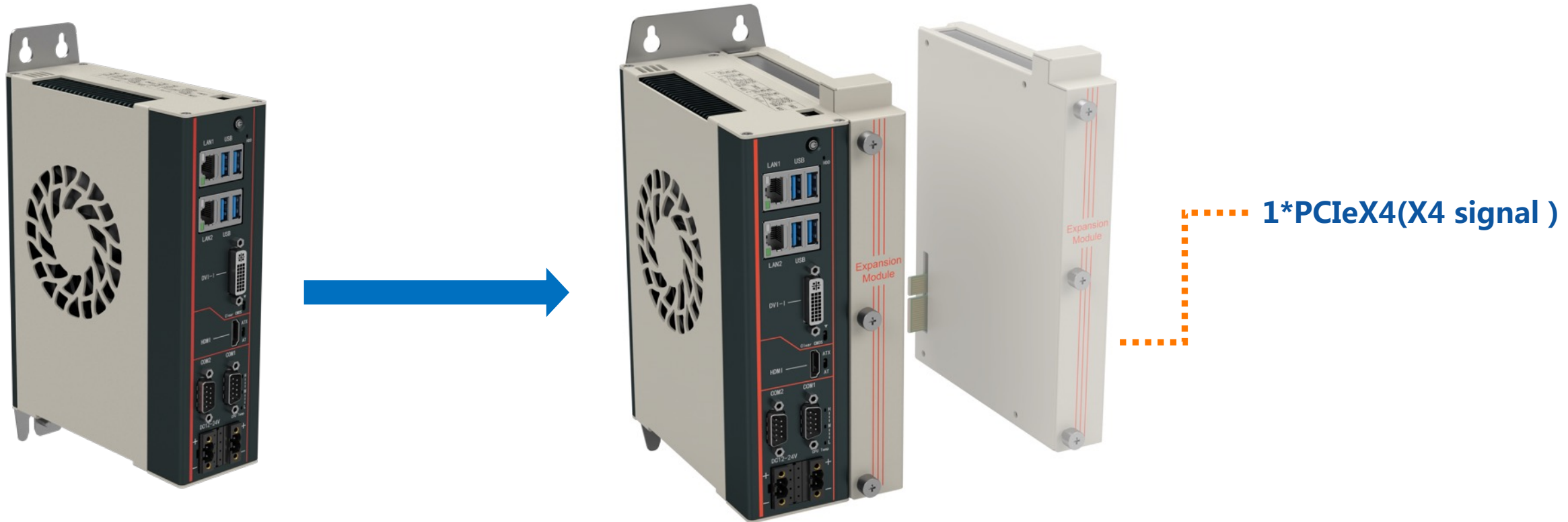
MaVIEW
编译调试器



★ PCIeX4 Expansion

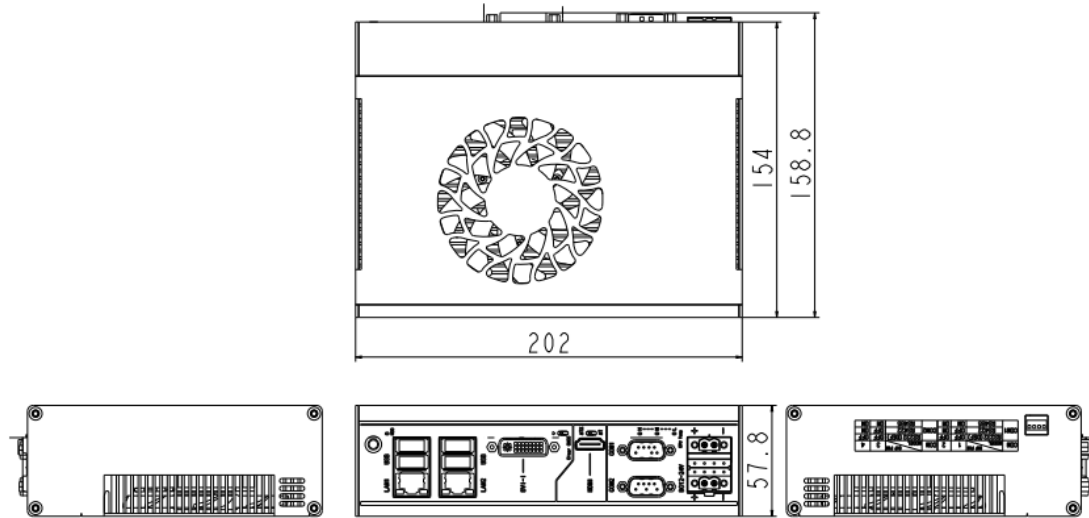
Modular and expandable (1*PCIEX4)

Can support 4-port 25W POE network card and other motion control cards

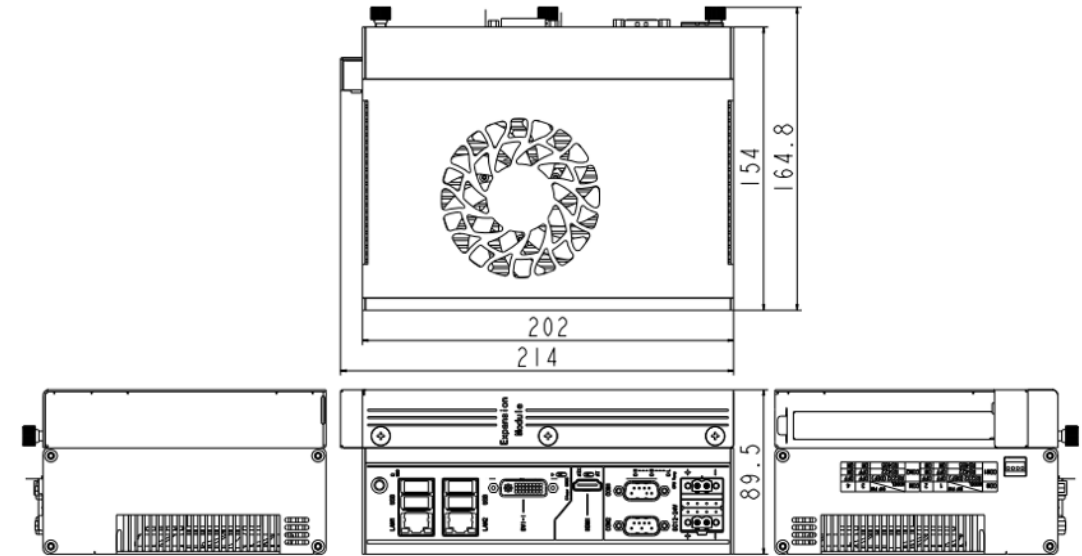


★ High Assemblability

Dual combination molds for high assemblability and light weight



KGEC-6500/S001 without expansion



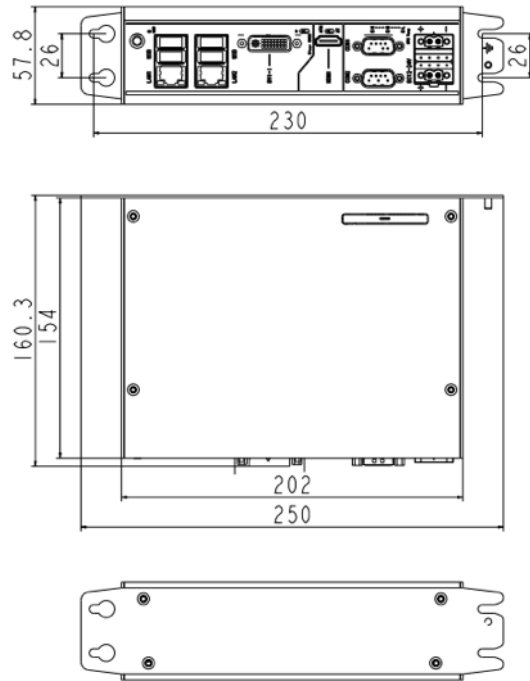
KGEC-6500/S001 with expansion

	KGEC-6500/S001 without expansion	KGEC-6500/S001 with expansion
Weight/KG	1.85	2.20
Dimensions (W*H*D)/mm	202*154*57.8	202*154*89.5

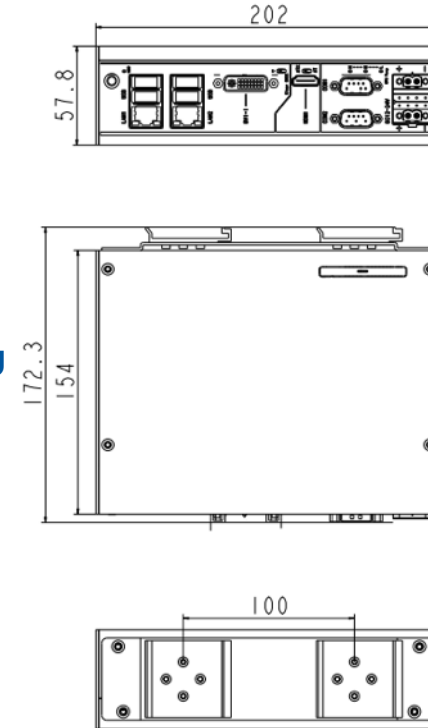
★ Diversified installation

Various installation methods (wall-mounting and Din-Rail)

Wall-mounting

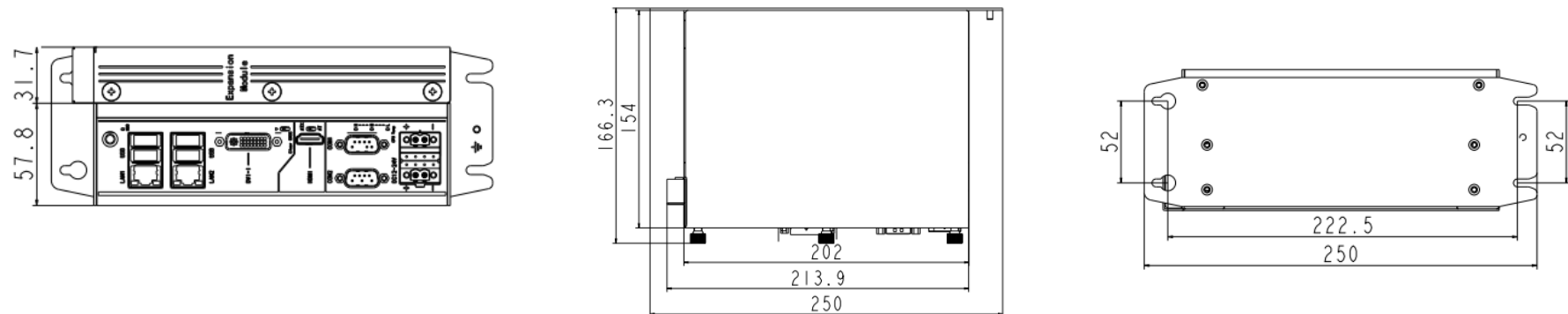


Din-Rail mounting




unit : mm

**Wall- mounting
with expansion
kit**



03 > Ordering Info

Product	Model	CPU	Description
	KGEC-6500/S001	Intel® Comet lake-S LGA1200 CPU	2*DDR4, 1*DVI-I, 1*HDMI, 2*LAN, 4*USB3.2, 3*USB2.0, 2*RS232/422/485, 1*RS232, 1*Mini PCIe Full Size, 1*mSATA Full Size, 1*2.5" SATA bay, DC 12~24V
	1 Expansion Module		ECX-273 single expansion daughter card, 1*PCIeX4 slot (Gen3, X4 signal)
	PA-120DC19		AC/DC Adapter, DC 19V/6.32A 120W
	PA-220DC24		AC/DC Adapter, DC 24V/9.17A 220W



04

Target Market

Focus on Bus Motion Control Market



- CNC machining center



- Fire and explosion-proof robot



- Laser cutter



- Laser engraving and milling machine



- Digital Printing



- Construction machinery



- Industrial multi-axis robotic arm

05 > KGEC-6500 Product Schedule



EV Phase Late October 2022

PV Phase December 2022

Compact AMR Controller

KGEC-6200



- 01 KGEC Roadmap**
- 02 KGEC-6200
Product Features**
- 03 Ordering Info**
- 04 Market Orientation**
- 05 Product Schedule**

CONTENTS

01> KGEC Series ROADMAP

<New product>

KGEC-6200



KGEC-6300



KGEC-6500

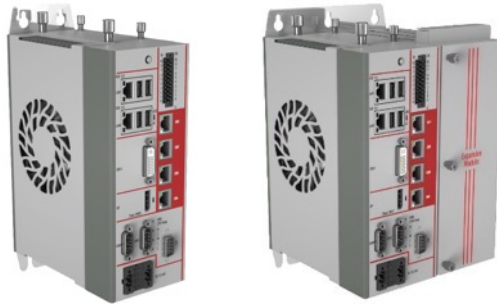


Intel® Elkhart lake

Intel® Skylake S/Kabylake S

Intel® Whiskey lake U

Intel® Comet lake S



KGEC-6301

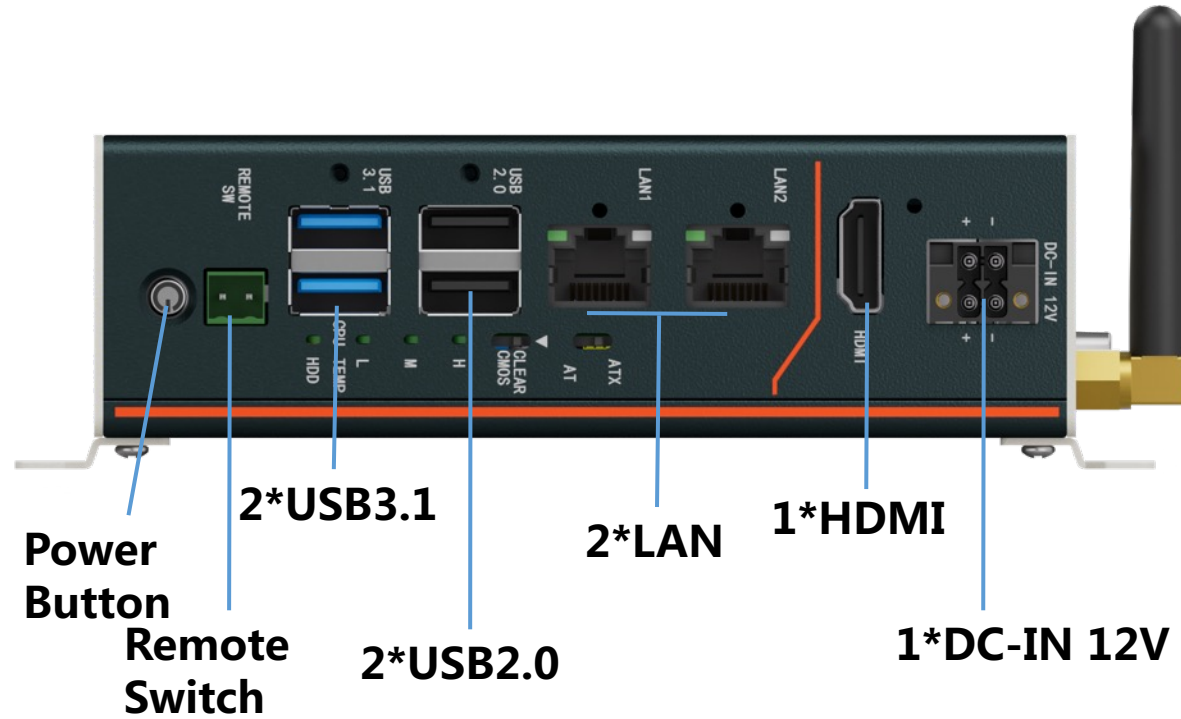


KGEC-6310

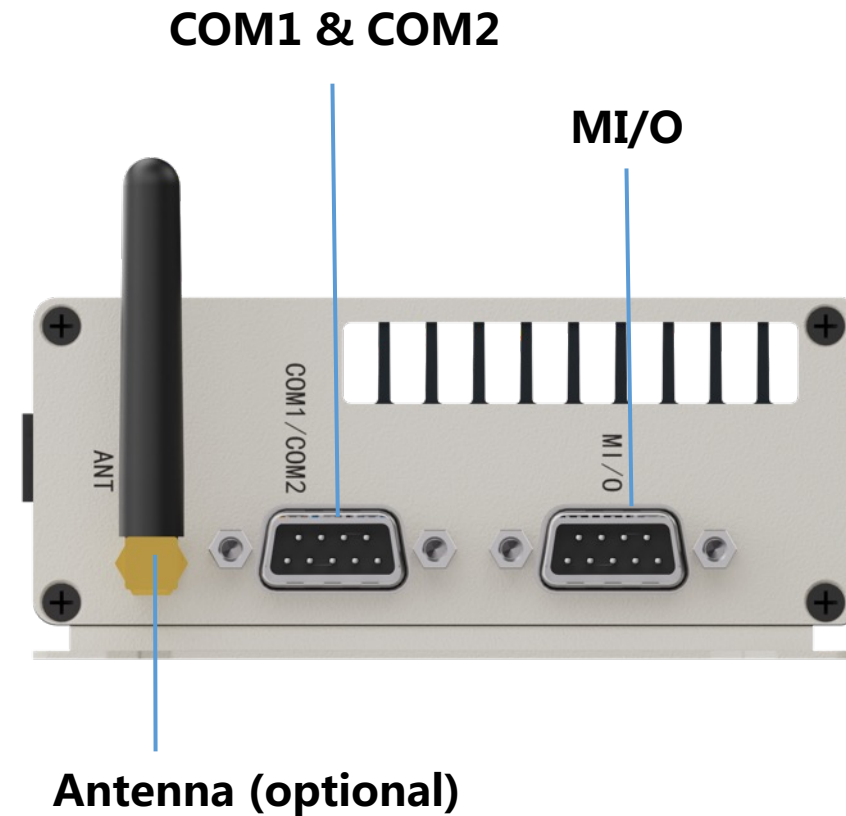
02> KGEC-6200 Product Features



CPU	Intel® Elkhart lake Soc CPU (Celeron J6412/Celeron N6210)
RAM	DDR4 SODIMM single channel
Network port	2* Gigabit Ethernet port
Display	1*HDMI , single display
USB	2*USB3.1(Type A), 4*USB2.0(2*Type A , 2*5pin header)
Serial Port	1*RS232/422/485 + 1*RS232 (same DB9)
Interface	1*8-bit DIO , 1*MI/O(DB9)
Storage	1*mSATA Full Size
Power Supply	Default DC IN 12V , optional DC 9-36V wide voltage power supply
Installation	Wall mount (default), Din Rail mount, table mount (optional)
Expansion	1*Mini PCIe Full Size
Weight	750g



KGEC-6200 IO interface at a glance



KGEC-6200

Product Highlights

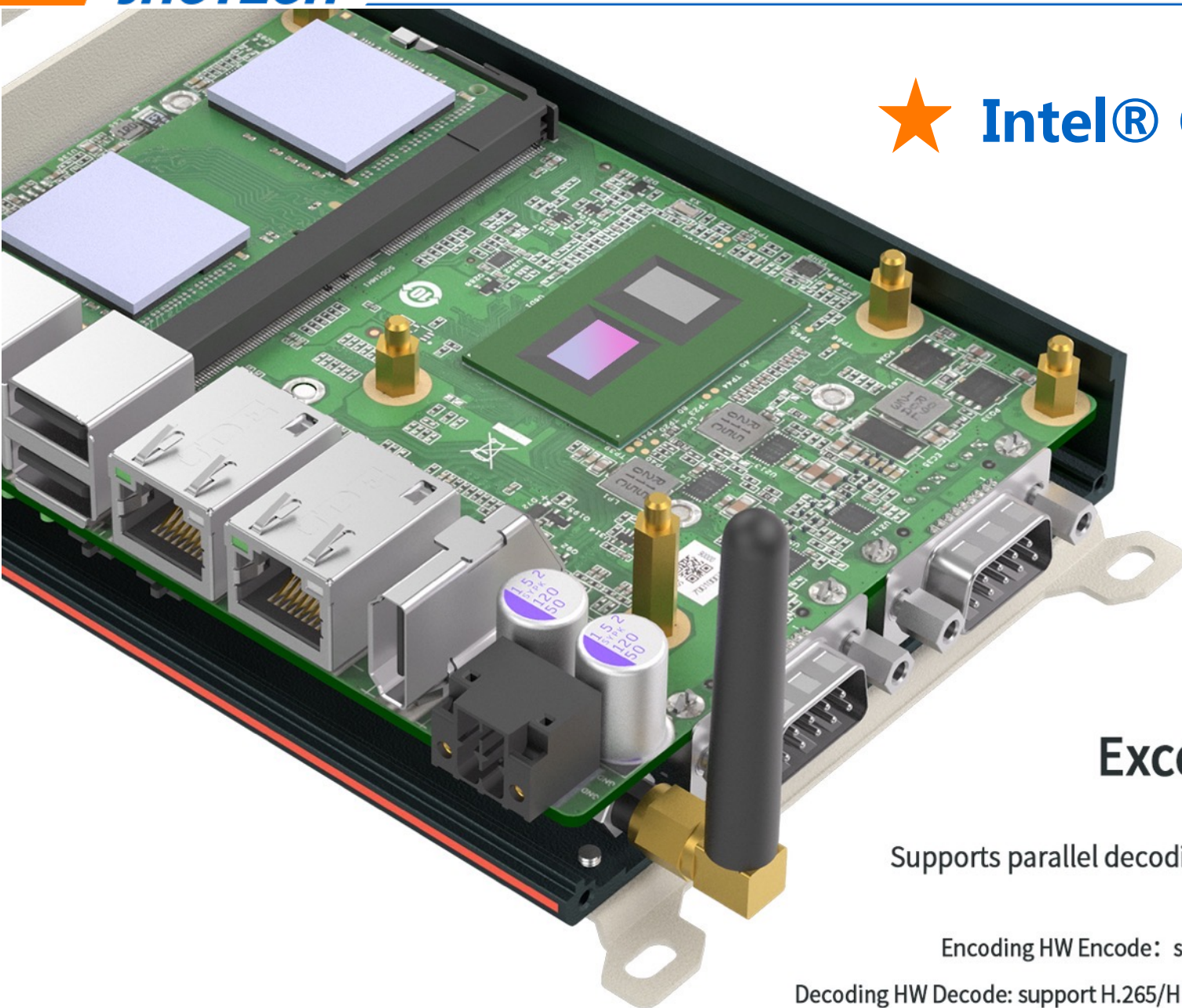
1**High Performance Processor****2****Intel® Gen10 UHD Graphics****3****Real-Time Ethernet Protocol****4****Real-time operating system****5****Support mainstream robot operating systems and third-party controller development platforms****6****Mini size, ultra light weight****7****Fanless passive heat dissipation design****8****Flexible installation****9****Modular Combination****10****Modular design of wide voltage power supply**

★ High-Performance Processor

Processor	Celeron J6412	Celeron J1900	Celeron N6210	Celeron J3455
Process	10nm	22nm	10nm	14nm
Core	4	4	2	4
Thread	4	4	2	4
Main Frequency	2.0~2.6 GHz	2.0~2.42 GHz	1.2~2.6 GHz	1.5~2.3 GHz
Maximum memory size	32GB	8GB	32GB	8GB
Support memory type	DDR4 3200	DDR3L 1333	DDR4 3200	LPDDR4 2400
Maximum memory channel	4	2	4	2
Support display quantity	3	2	3	3
TDP	10 W	10W	6.5W	10W

Compared with the previous generation of products, the single-thread performance **↑ 1.7 times**,
the multi-thread workload **↑ 1.5 times**, and the graphics performance **↑ 2 times!**

★ Intel® Gen10 UHD Graphics



Support 4K Display Output

Drive up to three independent displays simultaneously
Support resolution up to 4kp60 display

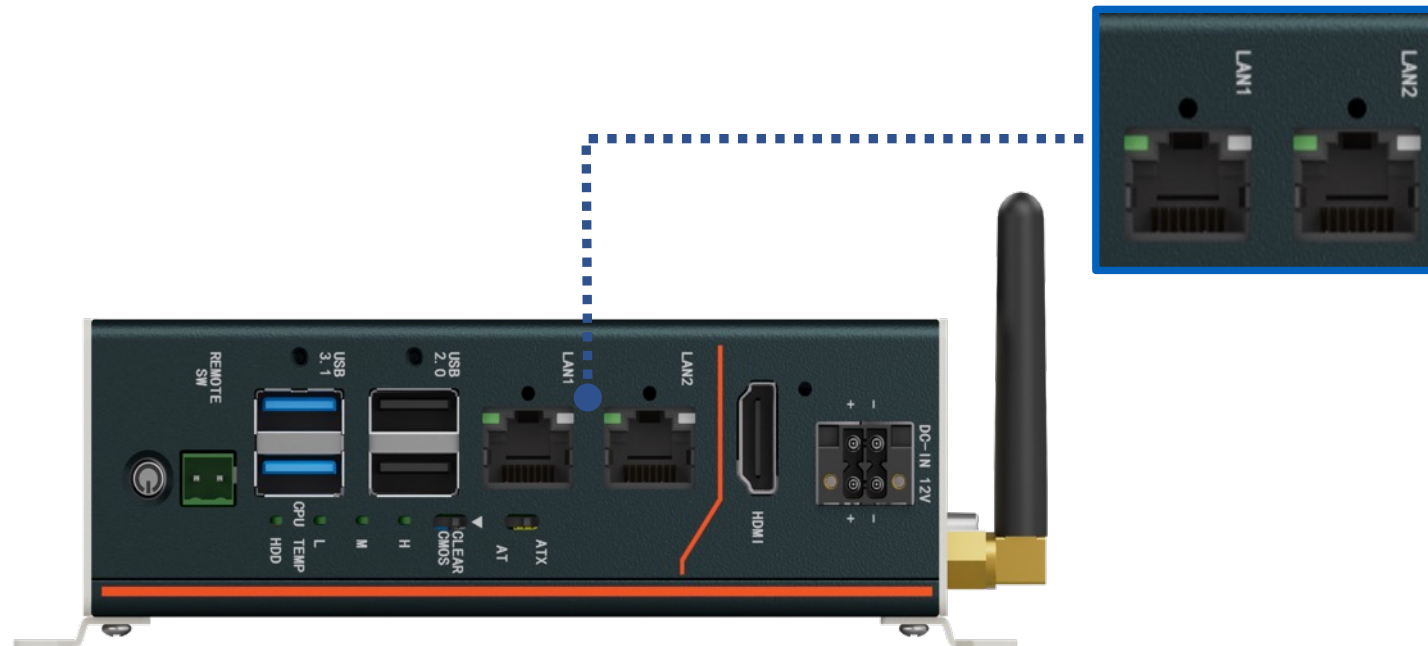
Excellent video codec capability

Supports parallel decoding, and supports the new H.265 encoding by integrating advanced media encoders and decoders

Encoding HW Encode: support H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, JPEG/MJPEG, VP8;

Decoding HW Decode: support H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, VC-1/WMV9, JPEG/MJPEG, VP8, VP9

Dual I226V network, support industrial real-time Ethernet protocols (EtherCAT, Profibus, Autbus, etc.)



★ Real-Time Ethernet Protocol and Operating System

BIOS tuning to adapt to the real-time operating system

Windows(Intime, EC-Win or RTX)、Linux(Ubantu Preempt-RT andc Xenomai) and Intewell

★ Support mainstream robot operating systems and third-party controller development platforms



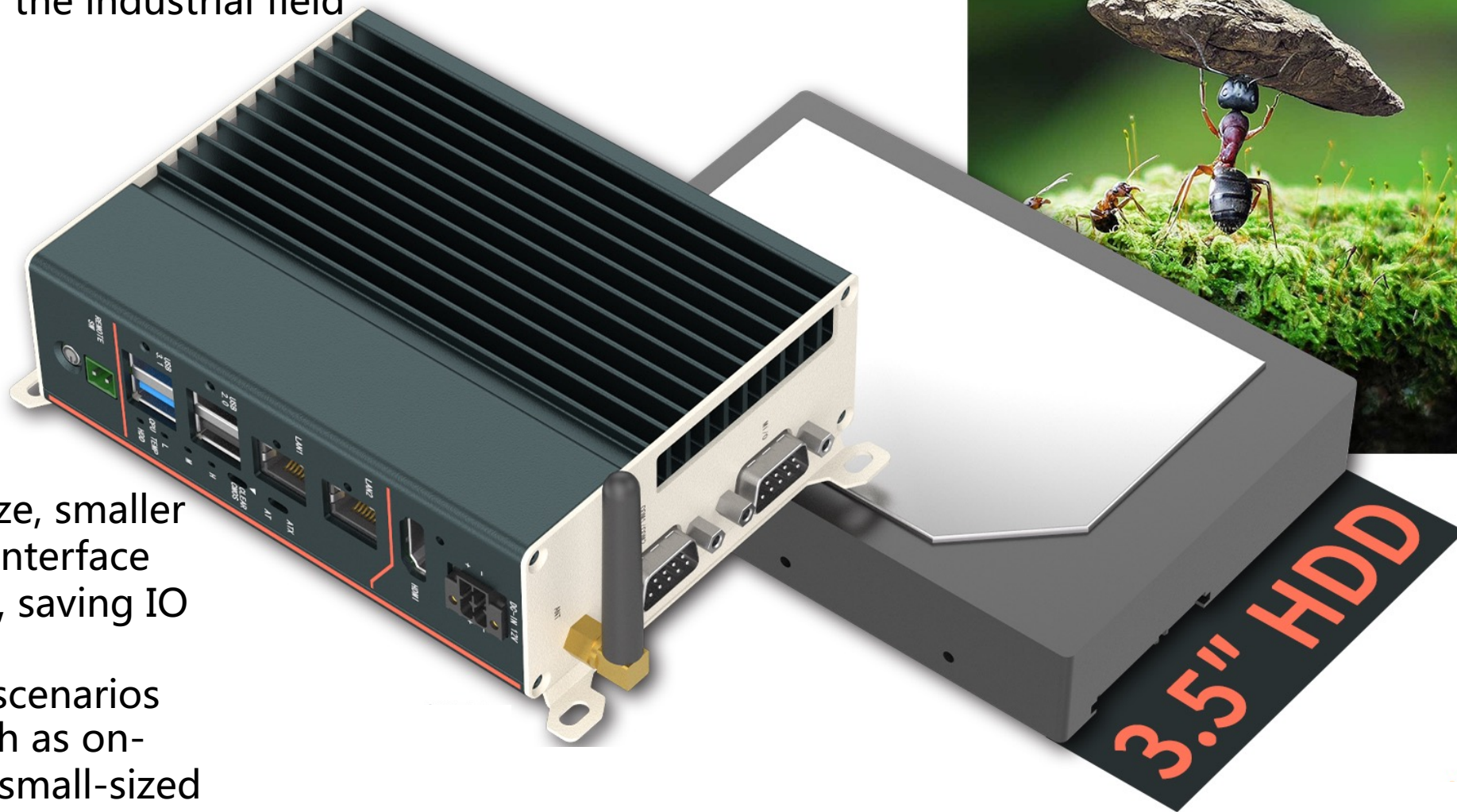
Support Windows, Linux operating system and CODESYS third-party controller development platform

★ Mini-size, ultra-lightweight

Pocket machines in the industrial field

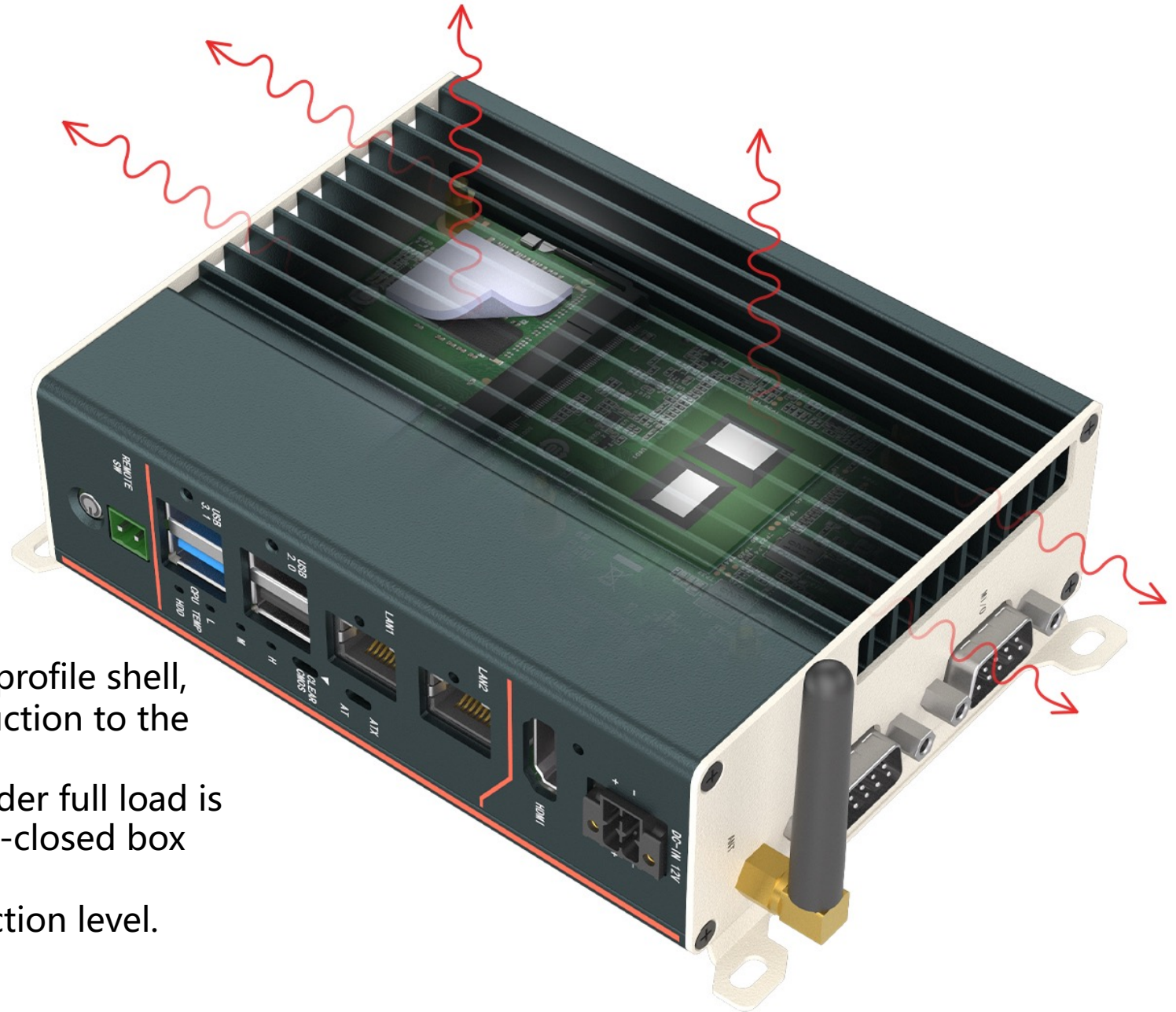
Weight only 750g

130x100x40mm mini size, smaller than 3.5 hard drives, IO interface on the front + right side, saving IO wiring space.
Suitable for application scenarios that require volume, such as on-board AGV/AMR or in a small-sized distribution box





Fanless Passive Heat Dissipation Design

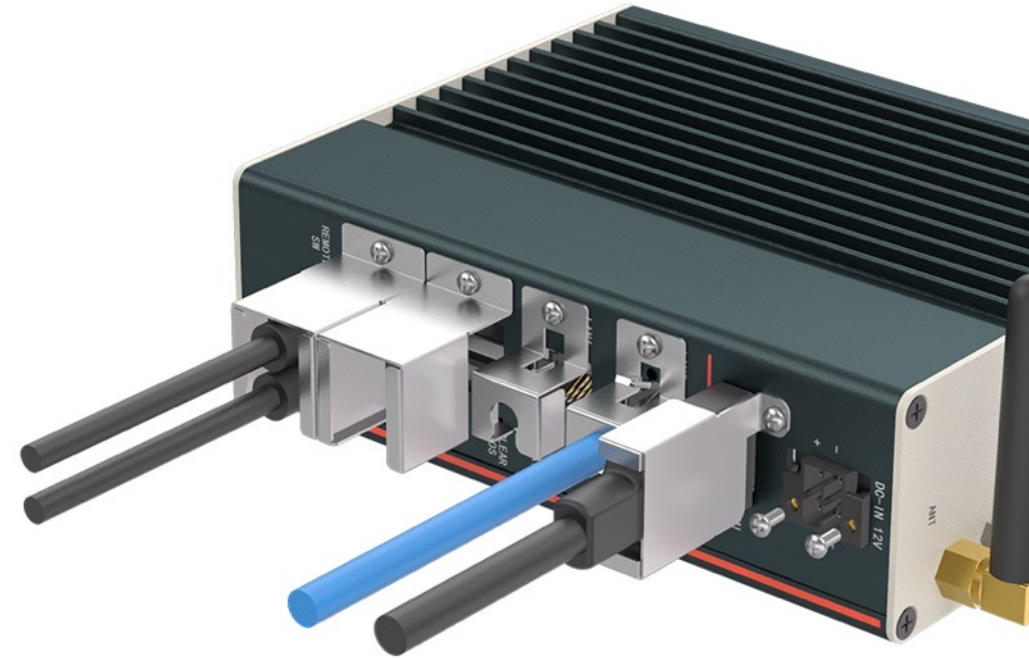


- SoC CPU--red copper sheet--aluminum profile shell, silicone grease-filled contact heat conduction to the aluminum profile heat dissipation shell;
- The working temperature of the CPU under full load is -20~60°C, suitable for working in a semi-closed box or semi-outdoor;
- Fanless closed box structure, IP51 protection level.



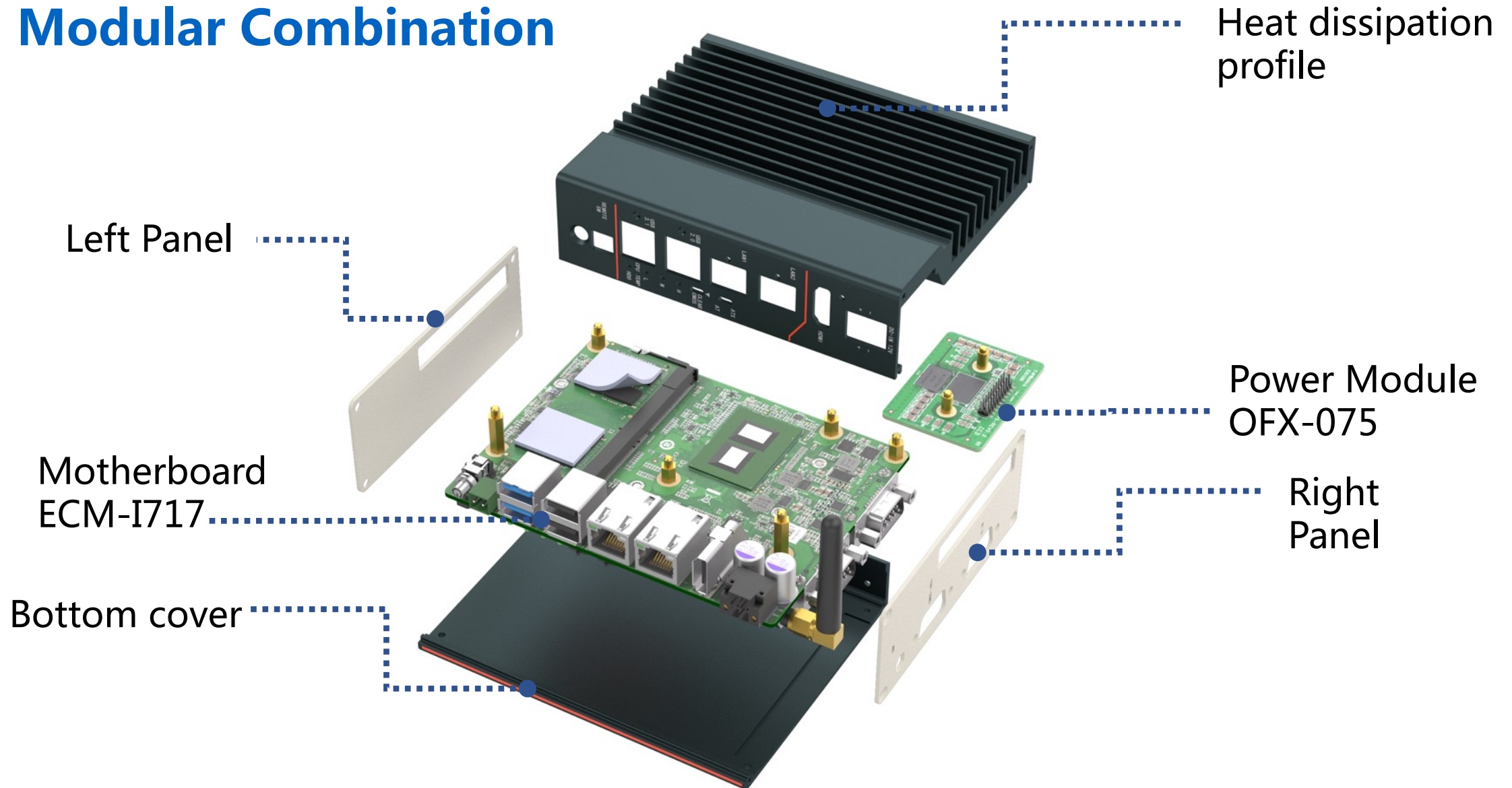
Flexible installation

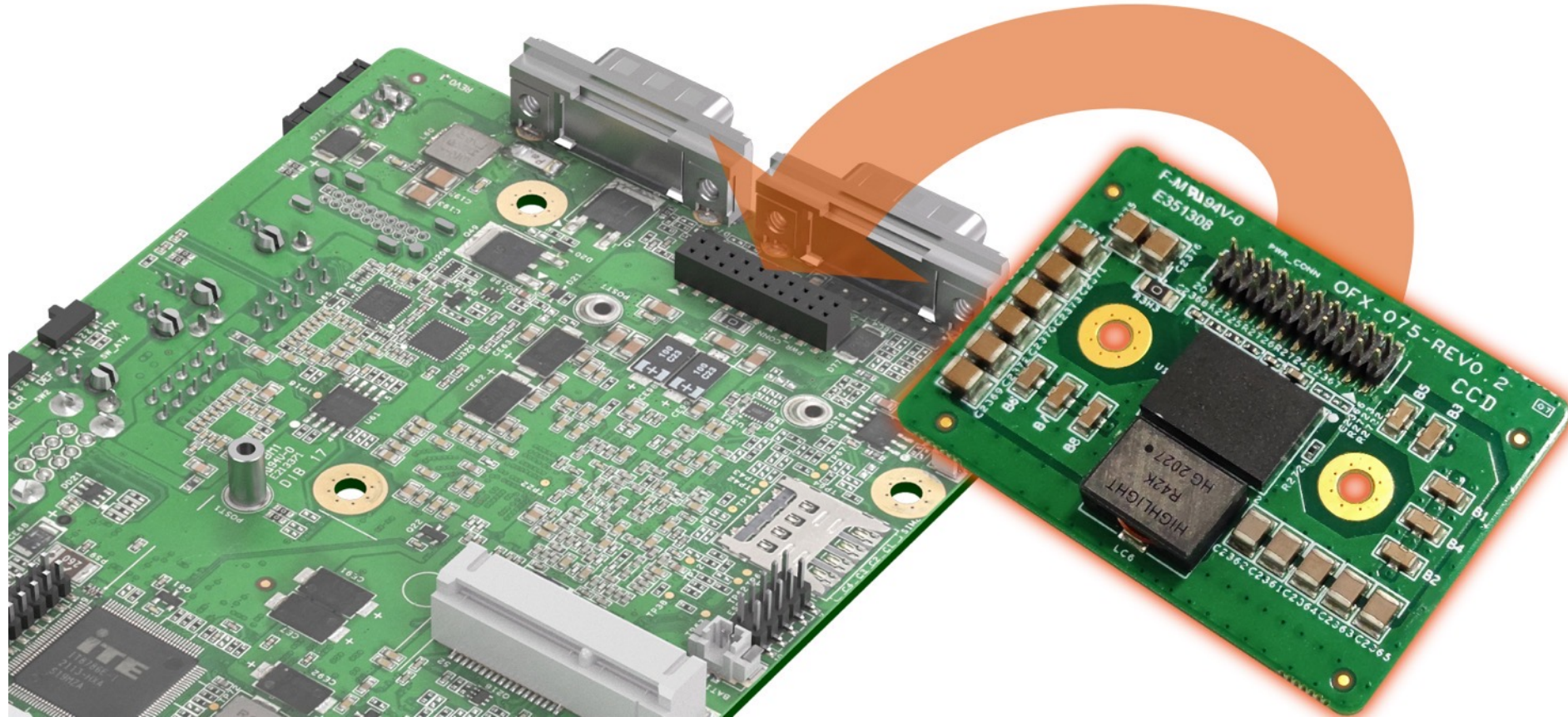
According to the different structural spaces of the application site, choose different installation methods.



After the power supply and IO interface are plugged into the connecting wire, it is reinforced with anti-tripping to prevent the connecting wire from falling off in a mobile environment.

★ Modular Combination





★ Modular design of wide voltage power supply

Modular wide-voltage power supply OFX-075 (DC 9~36V), overvoltage/overcurrent/reverse connection/short circuit protection, suitable for mobile vehicle power supply environment; Also supports economical DC 12V power supply, with flexible power supply selections.

03> Ordering Info



Model	CPU	Description
KGEC-6200/S001	Intel Celeron J6412 CPU	Edge Controller,1*DDR4 SODIMM, 1*HDMI, 2*LAN, 2*USB3.1, 4*USB2.0, 1*RS232/422/485,1*RS232, 1*Mini PCIe,1*mSATA, 1*8-bit DIO, 1*MI/O, DC 12V
KGEC-6200/S002	Intel Celeron N6210 CPU	
KGEC-6200/S001/WP	Intel Celeron J6412 CPU	Edge Controller,1*DDR4 SODIMM, 1*HDMI, 2*LAN, 2*USB3.1, 4*USB2.0, 1*RS232/422/485,1*RS232, 1*Mini PCIe,1*mSATA, 1*8-bit DIO, 1*MI/O, DC 9-36V
KGEC-6200/S002/WP	Intel Celeron N6210 CPU	
PA-60DC12	AC/DC power adapter · DC12V@5A 60W	
Installation	Standard for wall-mounting installation, optional DIN rail installation or desktop installation	



04

Target Market

Focus on **AGV and AMR Market**



Unmanned Sweeper



Unmanned Energy Storage Charging Car



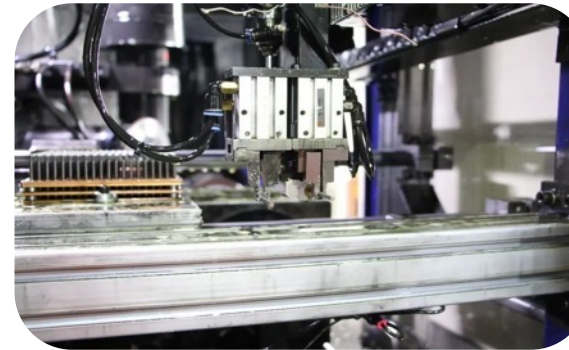
Fire/Security Drones



Logistics Handling AGV



Unmanned Delivery Robot



Machine Tool Motion Controller



Industrial Multi-Axis Robotic Arm

05 > KGEC-6200 Product Schedule



EV Phase **Early December 2022**

PV Phase **February 2023**



02

Q&A

Q1: Does the KGEC-6500 have only one extension?

A1: Yes. It is only with PCIE X4 slot for now. But you can also extend the PCI slot with customized solutions.

Q2: Does the KGEC-6200 support 2.5" SATA SSD or HDD?

A2: No. It only supports mSATA storage.

Special Offer for KGEC-6500/6200

Rules description:

This Order	Next Order	Deducted sample price from next order
For any distributor having attended our today webinar and completed the order for the bare sample machine (KGEC-6500/6200) before Feb 03.	Over USD 5,000	50%
	Over USD 10,000	100%

1. The valid period for sample orders is counted from 1/12-2/3.
2. Screenshots must be joined to the order as proof of attendance at the webinar.
3. Offer limited to one purchase per model.
4. JHCTECH reserves the right of final approval for this commercial offer.



A promotional banner for JHCTECH's KGEC-6500/6200 IoT computers. The background is dark blue with orange dots and curved lines. Two IoT computer units are shown: a larger one on the left and a smaller one on the right. The text "SPECIAL OFFER" is prominently displayed in white. A "BUY NOW" button is at the bottom center.

SPECIAL OFFER

BUY NOW

UPCOMING EVENTS



25-27 January, 2023

**AUTOMOTIVE WORLD
in Tokyo**

5-7 April, 2023

**Japan IT Week Spring
in Tokyo**

14-16 March, 2023

**Embedded World
in Nurnberg**



**Can't wait to see
you soon!**



恭發
喜財

gōng xǐ fā cá

National Holiday Notice

The Shenzhen office will be closed
from Jan 17th to 28th



Stay in Touch



JHC Technology Development Co.,Ltd.



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