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Automation and Machine Vision Industrial Computer Catalog

- Integrated I/O, PoE Gigabit LAN, Light source control
- Make the system less complex and cost down



One-stop IPC, Panel PC and HMI Design and Manufacturing

Nodka is a top-tier industrial computer manufacturer specializing in the design and manufacture of panel PCs, HMI, industrial PCs and automation computers tailored for the industrial automation, robotics, machine vision, smart manufacturing, self-service, edge IoT and many other industrial computer markets. Nodka was established in Shanghai in 2001 and has since grown to include offices in the Netherlands, the United States and Taiwan, serving products and services to over 5,000 customers in 30+ countries. We offer OEM/ODM services, customizable and compatible solutions that ensure seamless integration with existing and future technologies, backed by our global support.

25+

Years in Business

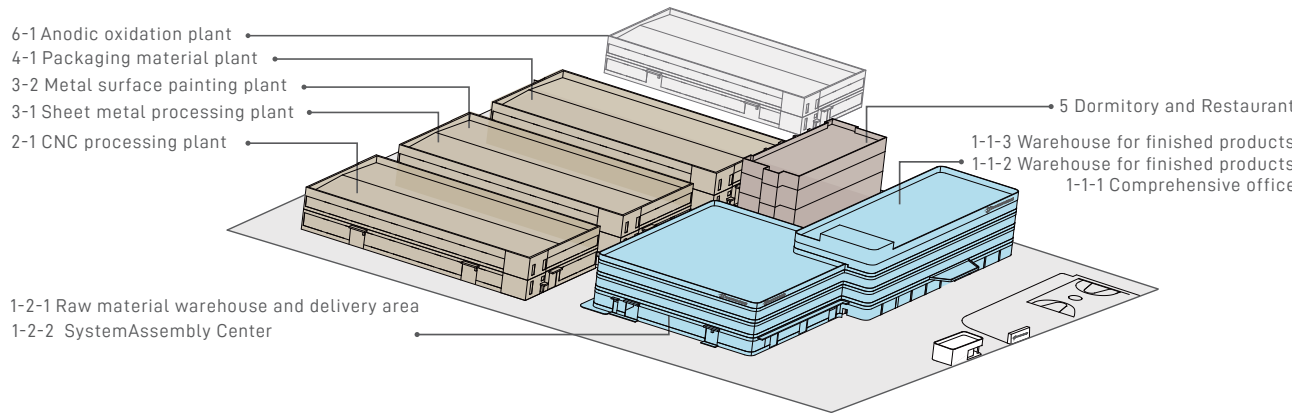
50000+

m²
Factory Area

5000+

Happy Customers

Guangde manufacturing center layout



SMT Center
Pick-and-Place Machine, DIP, PCBA conformal coating, AOI, one stop service for SMT manufacturing.

System Assembly Center
Scalable, flexible and one-stop production model to meet mass production, small batch orders requirement.

Anodizing plant
With capabilities in different surface treatment technology, quick response for customer-specific requests.

Metal Surface treatment
Spray coating, Printing, Anodizing, Laser carving technology.

CNC processing plant
24/7 production mode, equipped with multi-axis and efficient machining capabilities.

Metal shell processing
50 units equipment involve Laser cutting, Stamping, Bending, 3/4 axis Machine

Contents

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NP-6111 SERIES



Feature

LAN
2×Intel® Gigabit ports
Support EtherCAT and jumbo frames.

USB
4×USB;
1×USB2.0 Type A onboard for dongle

COM
2×RS232/RS485, RS485 support auto flow control,
ESD protection for RS232.

miniPCle
1×miniPCle slot for Wifi, 3G/4G

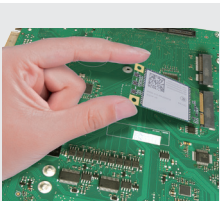
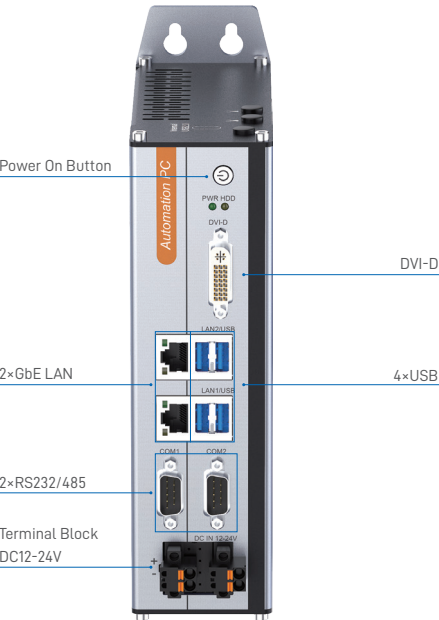
Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power,
over voltage and reverse polarity protection,
with phoenix terminal contact.

Option different I/O ports and accept customized
Option different I/O board and ports
Easy to change customized logo.

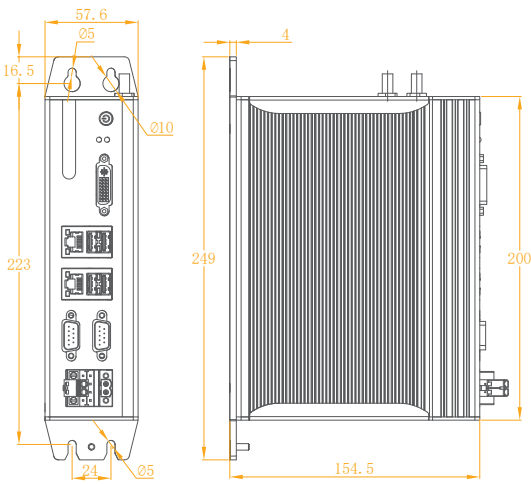
Extremely space-saving and flexible
book style, wall mounted, din rail mounted
extremely space-saving design.

Perfect cooling system design
Fully enclosed structure, fanless, cable-free design
Working temperature: -20°C~60°C

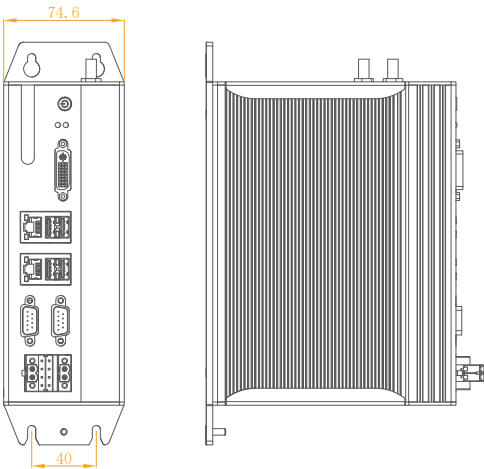
I/O Port



Dimensions



BASIC (Unit: mm)



EXPANSION (Unit: mm)

Specifications

Model Name		NP-6111
System	CPU	Intel® Celeron® J1900 / J6412 Intel® Corei3-N305/N97 8 Cores, 8 Threads, 6M Cache, up to 3.8GHz
	CPU Specifications	2.0GHz, 4cores, 4threads, 2MB L2cache / 1.5GHz, 4cores, 2MB L2cache 2.0~2.6GHz, 4cores, 4threads, 1.5MB L2cache / 1.91GHz, 4threads, 2MB L2cache
	TDP	J1900:10W N305:15W N97:12W
	BIOS	AMI UEFI
	Memory	J1900: 1×SO-DIMM DDR3L-1333MHz, (Max.8GB) / J6412: 1×SO-DIMM DDR4-2400MHz(Max.16GB)
	Storage	1×mSATA bay
I/O	USB	4×USB, 1×USB2.0 Type A on the board for USB dongle
	COM	2×RS232/RS485, RS485 support auto flow control, ESD protection for RS232
	Ethernet	2×Intel GbE LAN controller
Display	DVI-D	Support up to 1920×1080@GHZ
Expansions	Expansions	1×Full-size PCIe Mini slot with SIM card holder(with USB signal)
Other	Watch Dog	1~255 levels programmable
OS	Windows	Windows 10 IoT
	Linux	Ubuntu, CentOS, Debian
Power	Voltage Input	DC12~24V ±10%, overcurrent, overvoltage and polarity inverse protection, (Must be DC24V when using Light Control)
	Power Consumption	45~120W
Chassis	Structure	Aluminum-magnesium alloy box, Fanless, Wall-mounted or DIN-Rail
	Dimensions(L×W×H)	Basic:200mm×154.5mm×57.6mm/Expansion:200mm×154.5mm×74.6mm
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)
	Relative Humidity	5~95%(Non-condensing)
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27
EMC		CE/FCC Class A

Machine Vision application

NP-6111-JH2

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 4×PWM light control support external trigger input
- 8×DI NPN/PNP
- 8×DO, Transistor output, I_{max}:0.5A per channel



Smart Gateway application

NP-6111-JH4

Extension Interface

- 8×RS485, RS485 support auto flow control, there are two status leds for data sending and receiving in each channel, 120 ohm terminal resistor can be turned on or off by the switch.
- 8×DI NPN/PNP,
- 4×Relay DO (NO.)



Machine Vision application

NP-6111-JH2B

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP
- 16×DO, Transistor output, I_{max}:0.5A per channel

AGV and Service robots application

NP-6111-CAN2

Extension Interface

- 2×CAN Bus 2.0 A/B



Machine Vision application

NP-6111-JH3

Extension Interface

- 4×USB2.0
- 2×RS232/485, RS485 support auto flow control
- 2×CAN2.0A/B(selectable)
- 8×DI NPN/PNP
- 8×DO, Transistor output, I_{max}:0.5A per channel



Automation Control application

NP-6111-L2

Extension Interface

- 2×Intel® GbE LAN controller

Automation Control application

NP-6111-JH5

Extension Interface

- 1xIntel® GbE PoE LAN
- 8xRS485
- 2xCAN(optional)
- 16xDI/DO
- 8xRelay DO (NO.)



Ordering Infomation

Product Code	Configuration
NP-6111-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 3×USB2.0, DVI-D, DC12~24V Power input
NP-6111-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-JH2-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 3×USB2.0, DVI-D, 2×PoE LAN, 8×DI, 8×DO, 4×PWM output, DC12~24V Power input(Must be DC24V when using Light Control)
NP-6111-JH2-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 8×DI, 8×DO, 4×PWM output, DC12~24V Power input(Must be DC24V when using Light Control)
NP-6111-JH2-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 8×DI, 8×DO, 4×PWM output, DC12~24V Power input(Must be DC24V when using Light Control)
NP-6111-JH2-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 8×DI, 8×DO, 4×PWM output, DC12~24V Power input(Must be DC24V when using Light Control)
NP-6111-JH2B-J1900	CPU:J1900 RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 3×USB2.0, DVI-D, 2×PoE LAN, 16×DI, 16×DO, DC12~24V Power input
NP-6111-JH2B-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 16×DI, 16×DO, DC12~24V Power input
NP-6111-JH2B-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 16×DI, 16×DO, DC12~24V Power input
NP-6111-JH2B-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 2×PoE LAN, 16×DI, 16×DO, DC12~24V Power input
NP-6111-JH3-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 4×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 7×USB2.0, DVI-D, 8×DI, 8×DO, DC12~24V Power input
NP-6111-JH3-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 4×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 6×USB2.0, DVI-D, 8×DI, 8×DO, DC12~24V Power input
NP-6111-JH3-N97	CPU:N97, RAM:NULL, mSATA:NULL, 4×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 6×USB2.0, DVI-D, 8×DI, 8×DO, DC12~24V Power input
NP-6111-JH3-N305	CPU:N305, RAM:NULL, mSATA:NULL, 4×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 6×USB2.0, DVI-D, 8×DI, 8×DO, DC12~24V Power input
NP-6111-JH4-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 8×RS485(Phoenix connectors), 2×LAN, 1×USB3.0, 3×USB2.0, DVI-D, 8×DI, 4× Relay output, DC12~24V Power input
NP-6111-JH4-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 8×RS485(Phoenix connectors), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 8×DI, 4× Relay output, DC12~24V Power input
NP-6111-JH4-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 8×RS485(Phoenix connectors), 2×LAN, 2×USB3.0, 2×USB2.0, DVI-D, 8×DI, 4× Relay output, DC12~24V Power input

Product Code	Configuration
NP-6111-JH4-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 8×RS485(Phoenix connectors), 2×LAN, 2×USB3.0, 3×USB2.0, DVI-D, 8×DI, 4× Relay output, DC12~24V Power input
NP-6111-CAN2-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 3×USB2.0, 2×CAN A/B, DVI-D, DC12~24V Power input
NP-6111-CAN2-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 1×USB3.0, 3×USB2.0, 2×CAN A/B, DVI-D, DC12~24V Power input
NP-6111-CAN2-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, 2×CAN A/B, DVI-D, DC12~24V Power input
NP-6111-CAN2-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 2×LAN, 2×USB3.0, 2×USB2.0, 2×CAN A/B, DVI-D, DC12~24V Power input
NP-6111-L2-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 4×LAN, 1×USB3.0, 3×USB2.0, DVI-D, DC12~24V Power input
NP-6111-L2-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 4×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-L2-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 4×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-L2-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 4×LAN, 2×USB3.0, 2×USB2.0, DVI-D, DC12~24V Power input
NP-6111-JH5-J1900	CPU:J1900, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 1×LAN, 1×USB3.0, 3×USB2.0, 2×CAN A/B,DVI-D, 16xDI/DO,DC12~24V Power input
NP-6111-JH5-J6412	CPU:J6412, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN A/B,DVI-D, 16xDI/DO,DC12~24V Power input
NP-6111-JH5-N97	CPU:N97, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN A/B,DVI-D, D16xDI/DO,C12~24V Power input
NP-6111-JH5-N305	CPU:N305, RAM:NULL, mSATA:NULL, 2×COM(RS232/485 selectable), 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN A/B,DVI-D, 16xDI/DO,DC12~24V Power input

Option items

Parts	Description
DDR3L Memory	DDR3L-1333MHz: 4GB, 8GB
DDR4 Memory	DDR4-2400MHz: 4GB, 8GB, 16GB
DDR5 Memory	DDR5-4800MHz: 4GB, 8GB, 16GB
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB
Wifi Set	miniPCIE WIFI Set (7260 series) ,Cylindrical antenna
3G/4GModule	mini PCIE: EC20, EG25, EC25
Mount Option	DIN-Rail, Wall-mounted

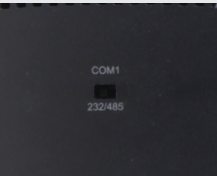
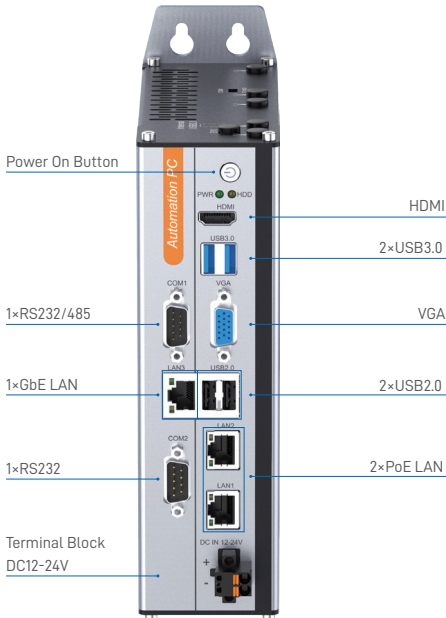
NP-6113 SERIES



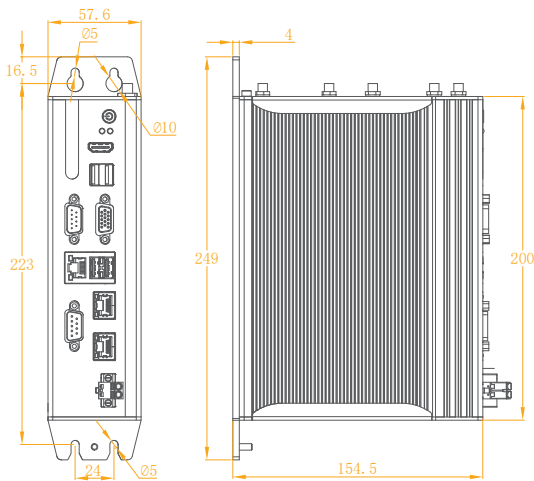
Feature

- LAN**
2×Intel® Gigabit ports
1×RTL8111H Gigabit ports
- USB**
2×USB3.0, 2×USB2.0,
1×USB2.0 Type A onboard for dongle
- COM**
1×RS232/RS485, RS485 support auto flow control,
1×RS232
- miniPCle**
1×miniPCle slot for Wifi, 3G/4G
- Display**
VGA and HDMI display port
- Wide voltage power supply: DC12V~24V**
DC12V power input, optional DC24V, with surge power,
over voltage and reverse polarity protection,
with phoenix terminal contact.
- Option different I/O ports and accept customized**
Option different I/O board and ports
Easy to change customized logo.
- Perfect cooling system design**
Fully enclosed structure, fanless, cable-free design.
Working temperature: -20°C~60°C

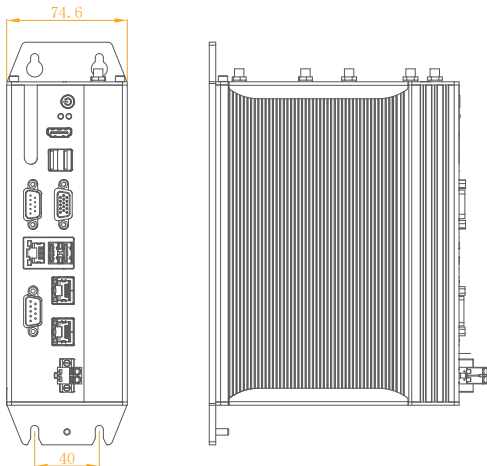
I/O Port



Dimensions



BASIC (Unit: mm)



EXPANSION (Unit: mm)

Specifications

Model Name		NP-6113
System	CPU	Intel® Celeron® J6412, Intel®Core i3-N305/N97
	TDP	J6412:10W/N305:15W/N97:12W
	BIOS	AMI UEFI BIOS
	Memory	J6412:1×SO-DIMM DDR4-2400MHz(Max. 32GB) N305/N97:×SO-DIMM DDR5-4800MHz(Max. 16GB)
	Storage	1×mSATA bay
I/O	USB	2×USB3.0, 2×USB2.0, 1×USB2.0 Type A on the board for USB dongle
	COM	1×RS232/485, selectable to support RS232 or RS485 mode by the switch, 1×RS232
	PoE	2×Intel GbE LAN controller(Max.15W)
	Ethernet	1×Intel (i210-AT) GbE LAN controller
Display	VGA	Support up to 1920×1080 @60Hz
	HDMI	Support up to 3840×2160 @60Hz
Expansions	Expansions	2×Full-size PCle Mini slot with SIM card holder(with USB signal)
Other	Watch Dog	1~255 levels programmable
	Remote ON-OFF	1×Remote ON-OFF
OS	Windows	Windows 10 IoT
	Linux	Ubuntu, CentOS, Debian
Power	Voltage Input	DC12~24V ±10%, overcurrent, overvoltage and polarity inverse protection (Must be DC24V when using Light Control)
	Power Consumption	90~120W
Chassis	Structure	Aluminum-magnesium alloy box, Fanless, Wall-mounted or DIN-Rail
	Dimensions(L×W×H)	Basic: 200mm×154.5mm×57.6mm/Expansion: 200mm×154.5mm×74.6mm
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)
	Storage Temperature	-40°C ~ 80°C (-40°F ~ 176°F) with air flow (SSD)
	Relative Humidity	5~95%(Non-condensing)
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27
EMC		CE/FCC Class A

AGV, Energy storage, Edge computing application

NP-6113-CAN2

Extension Interface

- 2xCAN BUS 2.0 A/B



Machine Vision Industry application

NP-6113-MVS

Extension Interface

- 4×PWM light control
- 8×DI NPN/PNP
- 8×DO, Transistor output, I_{max}:0.5A per channel



AGV, Energy storage, Edge computing application

NP-6113-CAN4

Extension Interface

- 4xCAN BUS 2.0 A/B



Machine Vision Industry application

NP-6113-MVS-L1

Extension Interface

- 1xIntel® GbE LAN controller(Occupies 1xminiPCIe slot)
- 1xRS485, RS485 support auto flow control
- 8xDI NPN/PNP
- 8xDO Transistor output, I_{max}:0.5A per channel
- 4xPWM Light power control with external trigger input , I_{max}: 1A per channel

Machine Vision application

NP-6113-L2

Extension Interface

- 2×Intel® GbE LAN controller



Machine Vision Industry application

NP-6113-MVS-L4

Extension Interface

- 4×Intel® GbE LAN controller
- 1×RS485, RS485 support auto flow control
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel

Machine Vision and Automation Control application
NP-6113-16I160

Extension Interface

- 16×DI NPN/PNP
- 16×DO (NPN/PNP mode by the switch), I_{max}:0.5A per channel,



Ordering Information

Product Code	Description
NP-6113-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN2-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN2-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN2-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 2×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN4-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 4×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN4-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 4×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-CAN4-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 4×CAN2.0 A/B VGA/HDMI display port, DC12~24V Power input
NP-6113-L2-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 3×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-L2-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 3×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-L2-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 3×LAN, 2×USB3.0, 2×USB2.0, VGA/HDMI display port, DC12~24V Power input
NP-6113-MVS-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)
NP-6113-MVS-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)
NP-6113-MVS-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)
NP-6113-MVS-L1-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 2×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)
NP-6113-MVS-L1-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 2×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)
NP-6113-MVS-L1-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 2×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, 4×Light PWM control, VGA/HDMI display port, DC12~24V Power input(must be DC24V input when using Light control)

Ordering Infomation

Product Code	Description
NP-6113-MVS-L4-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 5×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, VGA/HDMI display port, DC12~24V Power input
NP-6113-MVS-L4-N305	CPU:N305 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 5×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, VGA/HDMI display port, DC12~24V Power input
NP-6113-MVS-L4-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 1×RS485, 2×PoE LAN, 5×LAN, 2×USB3.0, 2×USB2.0, 8×DI, 8×DO, VGA/HDMI display port, DC12~24V Power input
NP-6113-16I160-J6412	CPU:J6412 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 16×DI, 16×DO, VGA/HDMI display port, DC12~24V Power input
NP-6113-16I160-N305	CPU:N305,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 16×DI, 16×DO, VGA/HDMI display port, DC12~24V Power input
NP-6113-16I160-N97	CPU:N97 ,RAM:NULL, mSATA:NULL, 1×RS232/485, 1×RS232, 2×PoE LAN, 1×LAN, 2×USB3.0, 2×USB2.0, 16×DI, 16×DO, VGA/HDMI display port, DC12~24V Power input

Option items

Parts	Description
DDR4 Memory	DDR4-2400MHz: 4GB, 8GB, 16GB, 32GB
DDR5 Memory	64GB, 128GB, 256GB, 512GB, 1TB
Wifi Set	miniPCIE WIFI Set (7260 series)
3G/4G Module	mini PCIE: EC20, EG25, EC25
Mount Option	DIN-Rail, Wall-mounted

NP-6122/6132 SERIES



Feature

- 

LAN
2×Intel® Gigabit ports
Support EtherCAT and jumbo frames
- 

USB
4×USB3.0
1×USB2.0 Type A onboard for dongle
- 

COM
2×RS232/RS485, RS485 support auto flow control
- 

Display
DVI-D and HDMI display port
- 

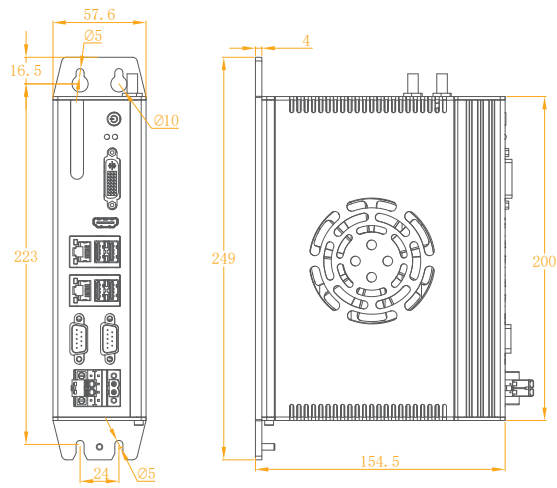
miniPCle
1×miniPCle slot for Wifi, 3G/4G
- 

Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.
- 

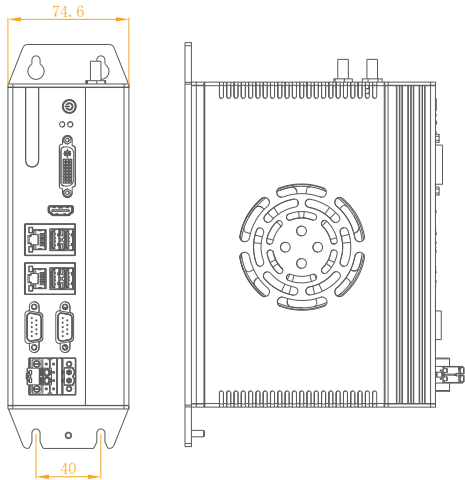
Option different I/O ports and accept customized
Option different I/O board and ports
Easy to change customized logo
- 

Perfect cooling system design
Fully enclosed structure, separately space for fan cooling system, cable-free design
Working temperature: -20°C~60°C

Dimensions



BASIC (Unit: mm)

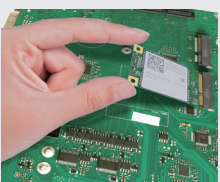
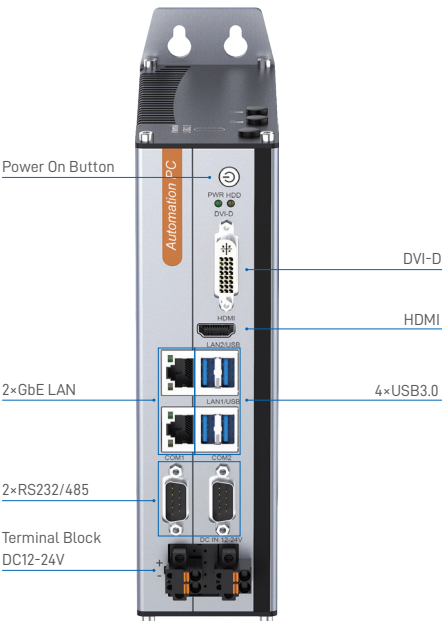


EXPANSION (Unit: mm)

Specifications

Model Name		NP-6122	NP-6132
System	CPU	Intel® Core™ 6/7/8/9th Gen. i7/i5/i3/Pentium® /Celeron® LGA1151 type CPU	Intel® Core™ 10/11th Gen. i9/ i7/i5/i3 LGA1200 type CPU
	TDP	Max. 65W	
	BIOS	AMI UEFI BIOS	
	Memory	2×SO-DIMM DDR4-2400MHz, max up to 32GB	
	Storage	1×mSATA bay, 1×M.2(B Key, Type 2280) bay support SATA	
I/O	USB	4×USB3.0, 1×USB2.0 Type A on the board for USB dongle	
	COM	2×RS232/RS485, RS485 support auto flow control, ESD protection for RS232	
	Ethernet	2×Intel (i210-AT)GbE LAN controller	
Display	DVI-D	Support up to 1920×1080@60Hz	
	HDMI	Support up to 3840×2160@60Hz	
Expansions	Expansions	1× Full-size PCIe Mini slot with SIM card holder(with USB signal)	
Other	Watch Dog	1~255 levels programmable	
OS	Windows	Windows 10 IoT	
	Linux	Ubuntu, CentOS, Debian	
Power	Voltage Input	DC12~24V ±10%, overcurrent, overvoltage and polarity inverse protection, (Must be DC24V when using Light Control	
	Power Consumption	120~250W	
Chassis	Structure	Aluminum-magnesium alloy BOX with fan embedded to assist cooling, Wall-mounted or DIN-Rail fixing style	
	Dimensions(L×W×H)	Basic:200mm×154.5mm×57.6mm/Expansion:200mm×154.5mm×74.6mm	
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)	
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)	
	Relative Humidity	5~95%(Non-condensing)	
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64	
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27	
EMC		CE/FCC Class A	

I/O Port



miniPCle Expansion Slot



Easy to switch RS232/485

Internal USB20 for USB Dongle



Customized Logo

Machine Vision application
NP-6122-H1 & NP-6132-H1

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel
- 4×PWM Light power control with external trigger input, I_{max}: 1A per channel



Automatic Sorting System Based on Machine Vision
NP-6122-JH2B & NP-6132-JH2B

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP
- 16×DO Transistor output, I_{max}:0.5A per channel



Automatic Sorting System Based on Machine Vision
NP-6122-H1B & NP-6132-H1B

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP
- 16×DO Transistor output, I_{max}:0.5A per channel

AGV and Service robots application
NP-6122-JH3 & NP-6132-JH3

Extension Interface

- 4×USB2.0
- 2×RS232/485, RS485 support auto flow control
- 2×CAN Bus 2.0A/B, 1 x DB9(Female)
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel



Machine Vision application
NP-6122-JH2 & NP-6132-JH2

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel
- 4×PWM Light power control with external trigger input, I_{max}: 1A per channel



Intelligent Gateway Industry application
NP-6122-JH4 & NP-6132-JH4

Extension Interface

- 8×RS485, RS485 support auto flow control, there are two status leds for data sending and receiving in each channel, 120oml terminal resistor can be turned on or off by the switch.
- 8×DI NPN/PNP
- 4×Relay DO(Normally Open)

Guidance and Positioning Based on Machine Vision
NP-6122-8PoE & NP-6132-8PoE

Extension Interface

- 8×Intel® GbE PoE LAN controller, max. 15W per channel



Automatic Sorting System Based on Machine Vision
NP-6122-H1BP & NP-6132-H1BP

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP
- 16×DO Transistor output, I_{max}:0.5A per channel



AGV and Service robots application
NP-6122-CAN2 & NP-6132-CAN2

Extension Interface

- 2×CAN Bus 2.0 A/B

Machine Vision application
NP-6122-H7B & NP-6132-H7B

Extension Interface

- 4×USB3.0
- 8×DI NPN/PNP
- 8×DO, transistorized output, I_{max}: 0.5A
- 4×Light PWM Control, 4 x Light External Trigger, Light independently powered DC24V, I_{max}: 1A per channel



Automation Control application
NP-6122-L2 & NP-6132-L2

Extension Interface

- 2×Intel® Gigabit ports



Machine Vision application
NP-6122-H7B & NP-6132-H7B

Extension Interface

- 4×USB3.0
- 16×DI NPN/PNP
- 16×DO Transistor output, I_{max}:0.5A per channel



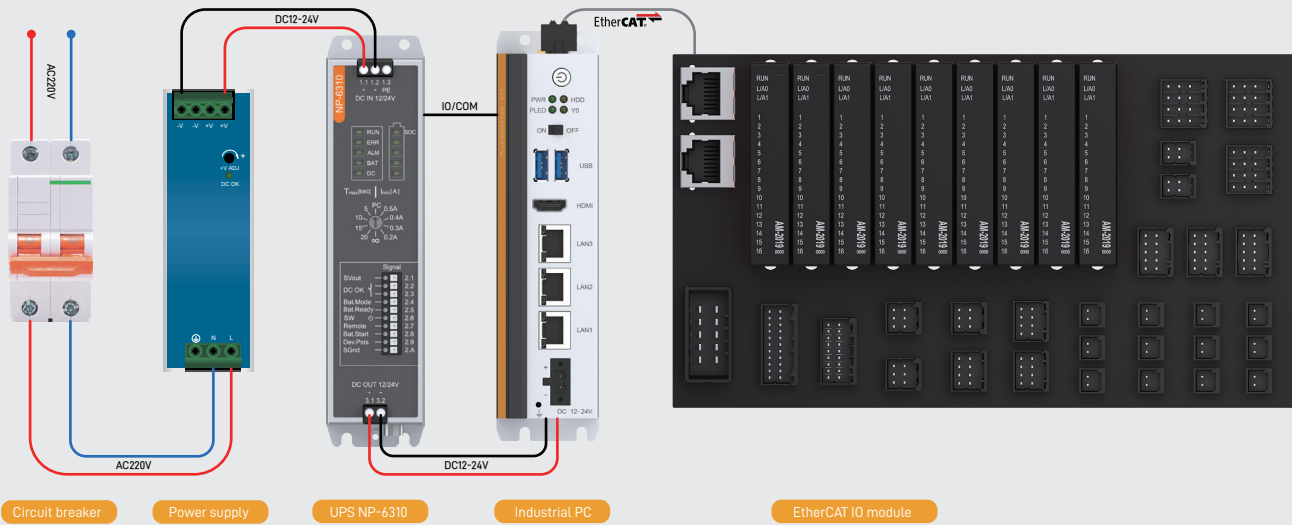
Ordering Infomation

Product Code	Configuration
NP-61X2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, DC12~24V Power input
NP-61X2-H1	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 8×DI, 8×DO, 4×PWM Light control, 4× External trigger input, 4×PoE LAN, DC12~24V Power input(must be DC24V input when using Light control)
NP-61X2-H1B	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 16×DI, 16×DO, 4×PoE LAN, DC12~24V Power input
NP-61X2-JH2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 8×DI, 8×DO, 4×PWM Light control, 4× External trigger input, 2×PoE LAN, DC12~24V Power input(must be DC24V input when using Light control)
NP-61X2-JH2B	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 16×DI, 16×DO, 2×PoE LAN, DC12~24V Power input
NP-61X2-JH3	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 4×RS232/485(selectable), 2×LAN, 4×USB3.0, 4×USB2.0, DVI-D/HDMI, 8×DI, 8×DO, DC12~24V Power input
NP-61X2-JH3-Audio	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 4×RS232/485(selectable), 2×LAN, 4×USB3.0, 4×USB2.0, DVI-D/HDMI, 8×DI, 8×DO, 1×Lineout, DC12~24V Power input
NP-61X2-JH4	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 8×RS485, 2×LAN, 4×USB3.0, DVI-D/HDMI, 8×DI, 4×Relay DO, DC12~24V Power input
NP-61X2-8POE	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 8×PoE LAN, DC12~24V Power input
NP-61X2-CAN2	CPU: NULL, RAM: NULL, mSATA: NULL, M.2 SATA: NULL, 2 x RS232/485 (Selectable), 2 x LAN, 4 x USB3.0, 2 x CAN 2.0 A/B, DVI-D/HDMI display port, DC12~24V Power input
NP-61X2-L2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 4×LAN, 4×USB3.0, DVI-D/HDMI, DC12~24V Power input
NP-61X2-H1BP	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, DVI-D/HDMI, 16×DI, 16×DO, 4×PoE LAN, DC12~24V Power input
NP-61X2-H7	CPU: NULL, RAM: NULL, mSATA: NULL, M.2 SATA: NULL, 2 x RS232/485 (Selectable), 2 x LAN, 8 x USB3.0, DVI-D/HDMI display, 8 x DI, 8 x DO, 4 x Light PWM Control, 4 x Light External Trigger, Light independently powered DC24V, DC12~24V power input
NP-61X2-H7B	CPU: NULL, RAM: NULL, mSATA: NULL, M.2 SATA: NULL, 2 x RS232/485 (Selectable), 2 x LAN, 8 x USB3.0, DVI-D/HDMI display, 16x DI, 16 x DO, , DC12~24V power input

Option items

Parts	Description
CPU:NP-6122	Intel® Pentium®: G3900,G4400 Intel® Core™ Skylake: i3-6100, i3-6100T,i 5-6400, i5-6400T, i5-6500, i5-6500T, i7-6700, i7-6700T Intel® Core™ Kaby Lake: i3-7100, i5-7400, i5-7500, i7-7700, i7-7700T Intel® Core™ Coffee Lake: i3-8100, i5-8400, i5-8500, i7-8700
CPU:NP-6132	Intel® Core™ Comet lake: i3-10100T, i3-10100, i3-10105T, i3-10105, i5-10400T, i5-10400, i5-10500 Intel® Core™ Rocket lake: i5-11400T, i5-11500T, i5-11600T, i5-11400, i5-11500, i5-11600
DDR4 Memory	DDR4~2400MHz: 4GB, 8GB, 16GB
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB
M.2 SATA SSD	128GB, 256GB, 512GB, 1TB, 2TB
Wifi Set	miniPCIE WIFI Set (7260 series) ,Cylindrical antenna
3G/4G Module	mini PCIE: EC20, EG25, EC25
Mount Option	DIN-Rail, Wall-mounted

Industrial PC Solution for Automation Control



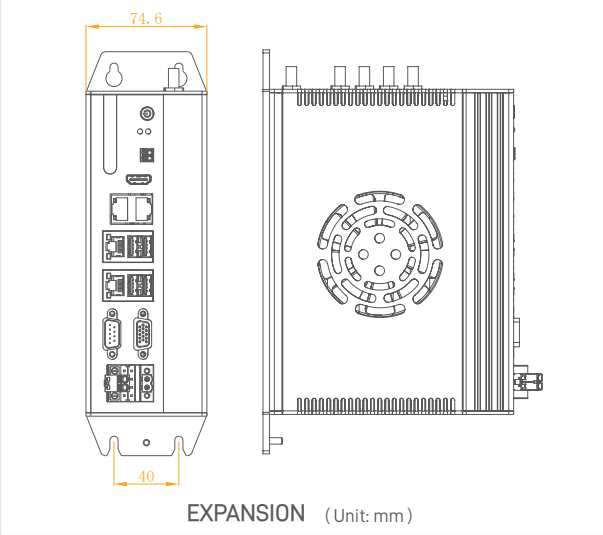
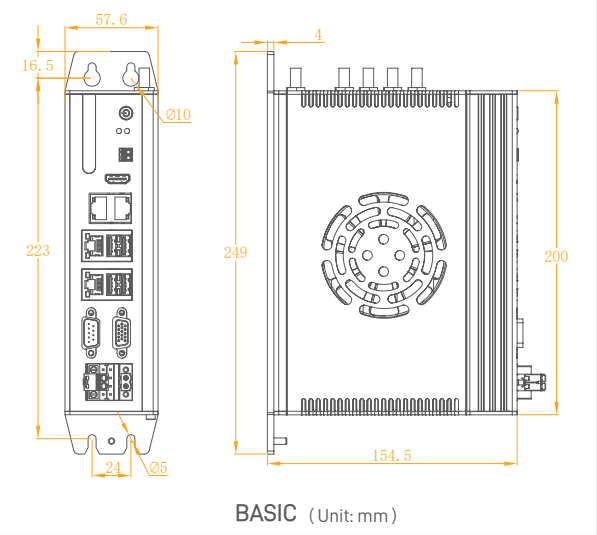
Product Feature :

- 1. NP Series Automation PC-Design for controller application.
- 2. UPS NP-6310 - Keep your system and data safe.
- 3. EtherCAT IO - Greater flexibility and Cut installation times by 95%.

NP-6123/6133/6143 SERIES



Dimensions



Specifications

Model Name		NP-6123	NP-6133	NP-6143	NP-6133-125H	NP-6133-255H
System	CPU	Intel® Core™ 6/7/8/9th Gen. i7/i5/i3/ Pentium® /Celeron® LGA1151 type CPU	Intel® Core™ 10/11th Gen. i9/ i7/i5/i3 LGA1200 type CPU	Intel® Core™ 12/13/14th Gen. i9/ i7/i5/i3 LGA1700 type CPU	Intel® Core™ Ultra 125H 14 cores/18 threads, 12GHz(P-core)/700MHz(E-core)	Intel® Core™ Ultra 255H 16 cores/16 threads 2GHz(P-core)/15GHz(E-core)
	TDP	Max. 65W			28W	
	BIOS	AMI UEFI BIOS				
	GPU	-			Intel® Arc™ graphics	Intel® Arc™ 140T GPU
	NPU	-			Intel® AI Boost	
	Peak TOPS	-			33 (GPU18+NPU11)	96 (GPU74+NPU13)
	Memory	2×SO-DIMM DDR4-2400MT/s, max up to 32GB		2×SO-DIMM DDR5 -4800MT/s, max up to 64GB	2×SO-DIMM DDR5 -5600MT/s, max up to 96GB	
	Storage	1×mSATA slot,SATA3.0				
I/O	USB	4×USB3.0, 1×USB2.0 Type A on the board for USB dongle				
	COM	1×RS232/RS485, (COM1), maximum baud rate:115.2kbit/s				
	Ethernet	4×Intel GbE LAN controller				
Display	Remote switch	1×SW				
	VGA	Support up to 1920×1200@60Hz				
Expansions	HDMI	Support up to 3840×2160@30Hz			Support up to 3840×2160@60Hz	
Other	Expansions	2×Full-size PCIe mini slot (only one slot is equipped with a SIM card)				
OS	TPM	fTPM				
	Watch Dog	1~255 levels programmable				
Power	Windows	Windows 10, Windows 11				
	Linux	Ubuntu, Debian, CentOS				
Chassis	Voltage Input	DC12-24V ±10%, overcurrent, overvoltage and polarity inverse protection, (Must be DC24V when using Light Control)				
	Power Consumption	Basic: Max. 120W/Expansion: Max. 200W			Basic: Max. 90W/Expansion: Max. 150W	
Reliability	Structure	Aluminum-magnesium alloy BOX with fan embedded to assist cooling, Wall-mounted or DIN-Rail fixing style				
	Dimensions(L×W×H)	Basic:200mm×154.5mm×57.6mm/Expansion:200mm×154.5mm×74.6mm				
	Work Temperature	-20℃ ~ 60℃ (-4°F~140°F) with air flow (SSD)				
	Storage Temperature	-40℃ ~ 80℃ (-40°F~176°F) with air flow (SSD)				
	Relative Humidity	5~95% @40 ℃ (Non-condensing)				
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64				
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27				
	EMC	CE/FCC Class A				

Feature

LAN
4×Intel® Gigabit ports
Support EtherCAT and jumbo frames

USB
4×USB3.0
1×USB2.0 Type A onboard for dongle

COM
1×RS232/RS485, RS485 support auto flow control

Display
VGA and HDMI display port

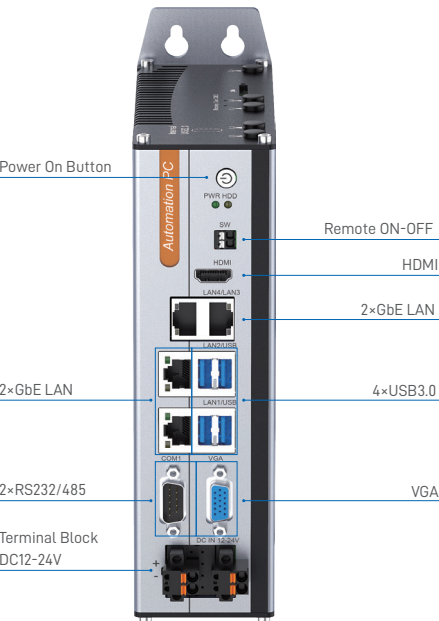
miniPCle
2×miniPCle slot for Wifi, 3G/4G/5G, LAN

Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.

Perfect cooling system design
Fully enclosed structure, separately space for fan cooling system, cable-free design
Working temperature: -20°C~60°C

Option different I/O ports and accept customized
Option different I/O board and ports
Easy to change customized logo

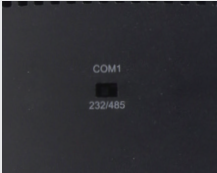
I/O Port



miniPCle Expansion Slot



Internal USB2.0 for USB Dongle



Easy to switch RS232/485



Customized Logo

Machine Vision application
NP-61X3-MVS

Extension Interface

- 1×RS485, RS485 support auto flow control
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel
- 4×PWM Light power control with external trigger input, I_{max}: 1A per channel
- 1×2.5" SATA SSD bay



Automation Control application
NP-61X3-16I16O

Extension Interface

- 1×Intel® GbE LAN controller(Optional)
- 16×DI NPN/PNP, isolated 2500 Vrms
- 16×DO Transistor output, I_{max}:0.5A per channel, isolated 2500 Vrms



Machine Vision application
NP-61X3-MVS-L1

Extension Interface

- 1×Intel® GbE LAN controller(Occupies 1×miniPCle slot)
- 1×RS485, RS485 support auto flow control
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel
- 4×PWM Light power control with external trigger input , I_{max}: 1A per channel
- 1×2.5" SATA SSD bay

Automation Control application
NP-61X3-L2

Extension Interface

- 2×Intel® GbE LAN controller(Occupies 1×miniPCle slot)
- 1×2.5" SATA SSD bay



Machine Vision and Automation Control application
NP-61X3-MVS-L4

Extension Interface

- 4×Intel® GbE LAN controller(Occupies 2×miniPCle slots)
- 1×RS485, RS485 support auto flow control
- 8×DI NPN/PNP
- 8×DO Transistor output, I_{max}:0.5A per channel
- 1×2.5" SATA SSD bay



Automation Control application
NP-61X3-L4

Extension Interface

- 4×Intel® GbE LAN controller

NP-6123/6133 SERIES



AGV, Energy storage, Edge computing application

NP-61X3-CAN2

Extension Interface

- 2xCAN Bus 2.0 A/B



AGV, Energy storage, Edge computing application

NP-61X3-CAN4

Extension Interface

- 4x CAN BUS 2.0 A/B

Automation Control application

NP-61X3-HDD

Extension Interface

- 1x2.5" SATA SSD bay



Ordering Information

Product Code	Configuration
NP-61X3	CPU:NULL, RAM:NULL, mSATA:NULL, 1×RS232/485(selectable), 4×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input
NP-61X3-MVS	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 1×RS-485, 4×LAN, 4×USB3.0, 8×DI, 8×DO, 4×PWM Light control support external Trigger input, VGA/HDMI, DC12~24V Power input(当Must be DC24V power input when using light control functionalities)
NP-61X3-MVS-L1	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 1×RS-485, 5×LAN, 4×USB3.0, 8×DI, 8×DO, 4×PWM Light control support external Trigger input, VGA/HDMI, DC12~24V Power input(Must be DC24V power input when using light control functionalities)
NP-61X3-MVS-L4	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 1×RS-485, 8×LAN, 4×USB3.0, 8×DI, 8×DO, VGA/HDMI, DC12~24V Power input
NP-61X3-16I16O	CPU:NULL, RAM:NULL, mSATA:NULL, 1×RS232/485(selectable), 4×LAN, 4×USB3.0, 16×DI, 16×DO, VGA/HDMI, DC12~24V Power input
NP-61X3-L2	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 6×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input
NP-61X3-L4	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 8×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input
NP-61X3-CAN2	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 4×LAN, 4×USB3.0, 2×CAN, VGA/HDMI, DC12~24V Power input
NP-61X3-CAN4	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 4×LAN, 4×USB3.0, 4×CAN, VGA/HDMI, DC12~24V Power input
NP-61X3-HDD	CPU:NULL, RAM:NULL, mSATA:NULL, SATA:NULL, 1×RS232/485(selectable), 4×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input

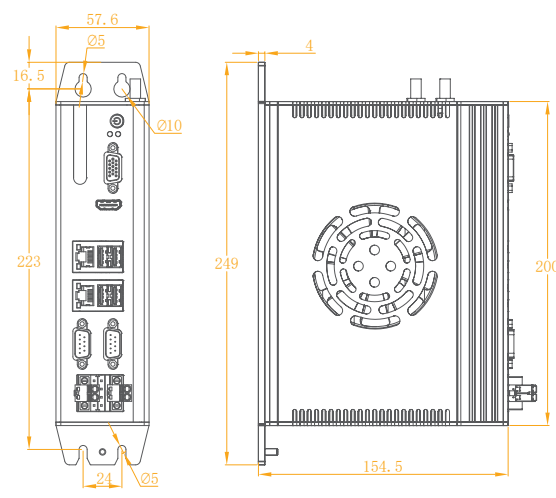
Option items

Parts	NP-6123	NP-6133	NP-6143	NP-6133-125H	NP-6133-255H
CPU	i3-6100,i3-6100T,i3-7100,i3-7100T, i3-8100,i3-8100T,i3-9100,i3-9100T	i3-10100, i3-10100T	i3-12100, i3-12100T, i3-13100, i3-13100T,i3-14100, i3-14100T	Intel® Core™ Ultra 125H	Intel® Core™ Ultra 255H
	i5-6500,i5-6500T,i5-7500,i5-7500T, i5-8500,i5-8500T,i5-9500,i5-9500	i5-10500, i5-10500T, i5-11500, i5-11500T	i5-12500, i5-12500T, i5-13500, i5-13500T, i5-14500, i5-14500T		
	i7-6700,i7-6700T,i7-7700,i7-7700T, i7-8700,i7-8700T,i7-9700,i7-9700T	i7-10700, i7-10700T, i7-11700, i7-11700T	i7-12700, i7-12700T, i7-13700, i7-13700T, i7-14700, i7-14700T		
	i9-9900, i9-9900T	i9-10900, i9-10900T, i9-11900, i9-11900T	i9-12900, i9-12900T, i9-13900, i9-13900T, i9-14900, i9-14900T		
	G3900,G4400	-	-		
DDR4 Memory	DDR4-2400MHz: 4GB, 8GB, 16GB		DDR5 4800MT/s:8GB,16GB,32GB	DDR5-5600MHz:4GB,8GB, 16GB,32GB,48GB	
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB				
M.2 SATA SSD	128GB, 256GB, 512GB, 1TB, 2TB				
Wifi Set	miniPCIE WIFI Set (7260 series) ,Cylindrical antenna				
3G/4G Module	mini PCIE: EC20, EG25, EC25				
Mount Option	DIN-Rail, Wall-mounted				

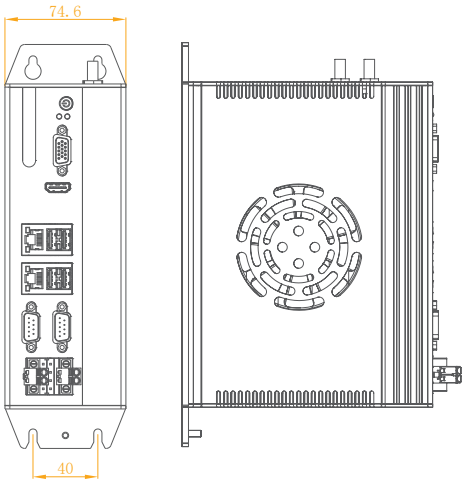
NP-6125/6135 SERIES



Dimensions



BASIC (Unit: mm)



EXPANSION (Unit: mm)

Specifications

Model Name		NP-6125	NP-6135	NP-6135-125U	NP-6135-255U
System	CPU	Intel® Core™ 6/7/8/9th Gen. i7/i5/i3/Pentium® /Celeron® LGA1151 type CPU	Intel® Core™ 10/11th Gen. i9/ i7/i5/i3 LGA1200 type CPU	Intel® Core™ Ultra 125H CPU, 14 cores/18 threads, Base Frequency 12GHz(P-core)/700MHz(E-core)	Intel® Core™ Ultra 255H CPU, 16 cores/16 threads, Base Frequency 2GHz(P-core)/1.5GHz(E-core)
	TDP	Max. 65W			28W
	BIOS	AMI UEFI BIOS			
	GPU	-			Intel® Arc™ graphics
	NPU	-			Intel® AI Boost
	Peak TOPS	-			33 (GPU18+NPU11)
	Memory	2×SO-DIMM DDR4-2400MHz, max up to 32GB			2×SO-DIMM DDR5 -5600MT/s, max up to 96GB
	Storage	1×mSATA bay, 1×M.2(B Key, Type 2280) bay support SATA			
I/O	USB	4×USB3.0, 1×USB2.0 Type A on the board for USB dongle			
	COM	2×RS232/RS485, RS485 support auto flow control, ESD protection for RS232			
	Ethernet	2×Intel GbE LAN controller			
Display	VGA	Support up to 1920×1200@60Hz			
	HDMI	Support up to 3840×2160@60Hz			
Expansions	Expansions	1× Full-size PCIe Mini slot with SIM card holder(with USB signal)			
Other	Watch Dog	1-255 levels programmable			
	OS	Windows 10 IoT, Ubuntu, CentOS, Debian			
Power	Voltage Input	DC 12~24V ±10%, overcurrent, overvoltage and polarity inverse protection, (Must be DC24V when using Light Control			
	Power Consumption	Basic: Max. 120W/Expansion: Max. 200W			
Chassis	Structure	Aluminum-magnesium alloy BOX with fan embedded to assist cooling, Wall-mounted or DIN-Rail fixing style			
	Dimensions(L×W×H)	Basic:200mm×154.5mm×57.6mm/Expansion:200mm×154.5mm×74.6mm			
Reliability	Work Temperature	20°C ~ 60°C (-4°F~140°F) with air flow (SSD)			
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)			
	Relative Humidity	5~95%(Non-condensing)			
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64			
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27			
	EMC	CE/FCC Class A			

Feature

LAN
2×Intel® Gigabit ports
Support EtherCAT and jumbo frames

USB
4×USB3.0
1×USB2.0 Type A onboard for dongle

COM
2×RS232/RS485, RS485 support auto flow control

Display
VGA and HDMI display port.

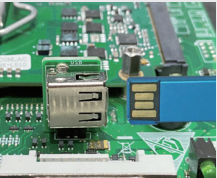
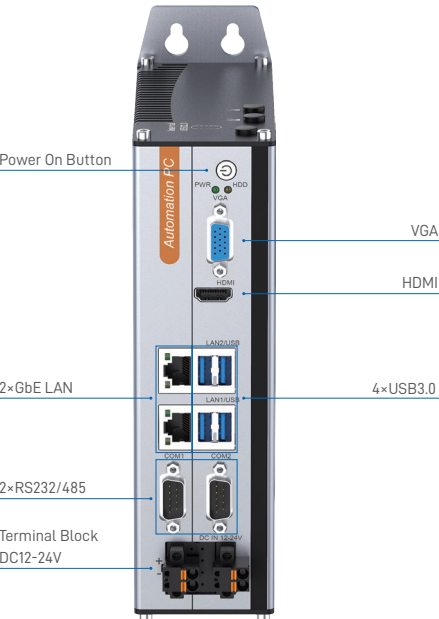
miniPCle
1×miniPCle slot for Wifi, 3G/4G/5G, LAN

Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.

Perfect cooling system design
Fully enclosed structure, separately space for fan cooling system, cable-free design.
Working temperature: -20°C~60°C

Option different I/O ports and accept customized
Option different I/O board and ports
Esay to change customized logo.

I/O Port



Machine Vision application
NP-6125-H1 & NP-6135-H1

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 8×DI NPN/PNP, isolated 2500 Vrms
- 8×DO Transistor output, I_{max}:0.5A per channel, isolated 2500 Vrms
- 4×PWM Light power control with external trigger input, I_{max}: 1A per channel



Automatic Sorting System Based on Machine Vision
NP-6125-JH2B & NP-6135-JH2B

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP, isolated 2500Vrms
- 16×DO Transistor output, I_{max}:0.5A per channel, isolated 2500 Vrms



Automatic Sorting System Based on Machine Vision
NP-6125-H1B & NP-6135-H1B

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI NPN/PNP, isolated 3750Vrms
- 16×DO Transistor output, I_{max}:0.5A per channel, isolated 3750 Vrms

AGV and Service robots application
NP-6125-JH3 & NP-6135-JH3

Extension Interface

- 4×USB2.0
- 2×RS232/485, RS485 support auto flow control
- 2×CAN Bus 2.0A/B, 1 x DB9(Female)
- 8×DI NPN/PNP, isolated 2500Vrms
- 8×DO Transistor output, I_{max}:0.5A per channel, isolated 2500 Vrms



Machine Vision application
NP-6125-JH2 & NP-6135-JH2

Extension Interface

- 2×Intel® GbE PoE LAN, max. 15w per channel
- 8×DI NPN/PNP, isolated 2500Vrms
- 8×DO Transistor output, I_{max}:0.5A per channel, isolated 2500 Vrms
- 4×PWM Light power control with external trigger input, I_{max}: 1A per channel



Intelligent Gateway Industry application
NP-6125-JH4 & NP-6135-JH4

Extension Interface

- 8×RS485, RS485 support auto flow control, there are two status leds for data sending and receiving in each channel, 120oml terminal resistor can be turned on or off by the switch.
- 8×DI NPN/PNP, isolated 2500Vrms
- 4×Relay DO(Normally Open)



NP-6125/6135 SERIES



Intelligent Gateway Industry application NP-6125-JH5 & NP-6135-JH5

Extension Interface

- 1xIntel i210-ATGbE LAN controller
- 16xDI NPN/PNP
- 8xDO (NPN), I_{max}0.5A
- 8xRelay DO(N_O,30VDC(I_{max}: 3.0A))



Guidance and Positioning Based on Machine Vision NP-6125-8PoE & NP-6135-8PoE

Extension Interface

- 8xIntel® GbE PoE LAN controller, max. 15W per channel



AGV and Service robots application NP-6125-CAN2 & NP-6135-CAN2

Extension Interface

- 2xCAN Bus 2.0 A/B

Machine Vision application NP-6125-H7 & NP-6135-H7

Extension Interface

- 4xUSB3.0
- 8xDI NPN/PNP, isolated 2500 Vrms
- 8xDO Transistor output, I_{max}0.5A per channel, isolated 2500 Vrms
- 4xPWM Light power control with external trigger input, I_{max}: 1A per channel



Automation Control application NP-6125-L2 & NP-6135-L2

Extension Interface

- 2xIntel® Gigabit ports



Machine Vision application NP-6125-H7B & NP-6135-H7B

Extension Interface

- 4xUSB3.0
- 16xDI NPN/PNP, isolated 2500 Vrms
- 16xDO Transistor output, I_{max}0.5A per channel, isolated 2500 Vrms

Machine Vision application

NP-6125-H1BP & NP-6135-H1BP

Extension Interface

- 4×Intel® GbE PoE LAN, max. 15w per channel
- 16×DI
- 16×DO



Ordering Infomation

Product Code	Configuration
NP-61X5	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL,2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input
NP-61X5-H1	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL,2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, 8×DI, 8×DO, 4×Light control, 4× External trigger input, 4×PoE LAN, DC12~24V Power input(must be DC24V input when using Light control)
NP-61X5-H1B	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL,2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, 8×DI, 8×DO, 4×Light control, 4× External trigger input, 4×PoE LAN, DC12~24V Power input(must be DC24V input when using Light control)
NP-61X5-H1BP-N	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2 x RS232/485(selectable), 2 x LAN, 4 x USB3.0, VGA/HDMI , 4 x PoE LAN, 16 x DI (2 A/B phase differential encoder inputs) , 16 x DO NPN (2 PWM single-ended outputs) , DC12~24V Power input
NP-61X5-H1BP-P	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2 x RS232/485(selectable), 2 x LAN, 4 x USB3.0, VGA/HDMI , 4 x PoE LAN, 16 x DI (2 A/B phase differential encoder inputs) , 16 x DO PNP (2 PWM single-ended outputs) , DC12~24V Power input
NP-61X5-JH2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, 8×DI, 8×DO, 4×Light control, 4× External trigger input, 2×PoE LAN, DC12~24V Power input(must be DC24V input when using Light control)
NP-61X5-JH2B	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, 16×DI, 16×DO, 2×PoE LAN, DC12~24V Power input
NP-61X5-JH3	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 4×RS232/485(selectable), 2×LAN, 4×USB3.0, 4×USB2.0, VGA/HDMI, 8×DI, 8×DO, DC12~24V Power input
NP-61X5-JH3-Audio	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 4×RS232/485(selectable), 2×LAN, 4×USB3.0, 4×USB2.0, VGA/HDMI, 8×DI, 8×DO, 1×Lineout, DC12~24V Power input
NP-61X5-JH4	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 8×RS485, 2×LAN, 4×USB3.0, VGA/HDMI, 8×DI, 4×Relay DO, DC12~24V Power input
NP-61X5-8POE	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, VGA/HDMI, 8×PoE LAN, DC12~24V Power input
NP-61X5-CAN2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 2×LAN, 4×USB3.0, 2×CAN2.0A/B, VGA/HDMI, DC12~24V Power input
NP-61X5-L2	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA:NULL, 2×RS232/485(selectable), 4×LAN, 4×USB3.0, VGA/HDMI, DC12~24V Power input
NP-61X5-H7	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA: NULL, 2 x RS232/485(Selectable), 2 x LAN, 4 x USB3.0, 8 x DI, 8 x DO, 4 x Light PWM Control, 4 x Light External Trigger,VGA/HDMI display port, DC12~24V Power input
NP-61X5-H7B	CPU:NULL, RAM:NULL, mSATA:NULL, M.2 SATA: NULL, 2 x RS232/485(Selectable), 2 x LAN, 4 x USB3.0, 16 x DI, 16 x DO, VGA/HDMI display port, DC12~24V Power input
NP-61X5-JH5	CPU:NULL, RAM:NULL, mSATA:NULL, 2xRS232/485(Selectable),8 x RS485, 3 x LAN,4 x USB3.0, VGA/HDMI display port, 16 x DI, 8 x DO,8 x Relay DO, 2 x CAN AB(Selectable),DC12~24V Power input

Option items

Parts	Description
CPU:NP-6125	Intel® Pentium®: G3900,G4400 Intel® Core™ Skylake: i3-6100, i3-6100T,i 5-6400, i5-6400T, i5-6500, i5-6500T, i7-6700, i7-6700T Intel® Core™ Kaby Lake: i3-7100, i5-7400, i5-7500, i7-7700, i7-7700T Intel® Core™ Coffee Lake: i3-8100, i5-8400, i5-8500, i7-8700
CPU:NP-6135	Intel® Core™ Comet lake: i3-10100T, i3-10100, i3-10105T, i3-10105, i5-10400T, i5-10400, i5-10500 Intel® Core™ Rocket lake: i5-11400T, i5-11500T, i5-11600T, i5-11400, i5-11500, i5-11600
CPU:NP-6135-125H	Intel® Core™ Ultra 125H
CPU:NP-6135-255H	Intel® Core™ Ultra 255H
DDR4 Memory	DDR4-2400MHz: 4GB, 8GB, 16GB
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB
M.2 SATA SSD	128GB, 256GB, 512GB, 1TB, 2TB
Wifi Set	miniPCIE WIFI Set (7260 series) ,Cylindrical antenna
3G/4G Module	mini PCIE: EC20, EG25, EC25
Mount Option	DIN-Rail , Wall-mounted

NP-6120/6140 SERIES



Feature

- 

LAN
6×Intel® Gigabit ports
Support EtherCAT and jumbo frames
- 

COM
1×RS232, 1×RS485, RS485 support auto flow control
- 

miniPCle
1×miniPCle slot for Wifi, 3G/4G/5G, LAN
- 

Option different I/O ports and accept customized
Option different I/O board and ports
Easy to change customized logo.

- 

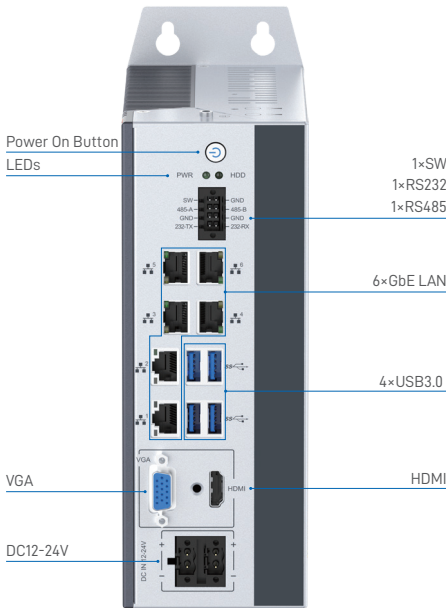
USB
4×USB3.0
1×USB2.0 Type A onboard for dongle
- 

Display
VGA and HDMI display port.
- 

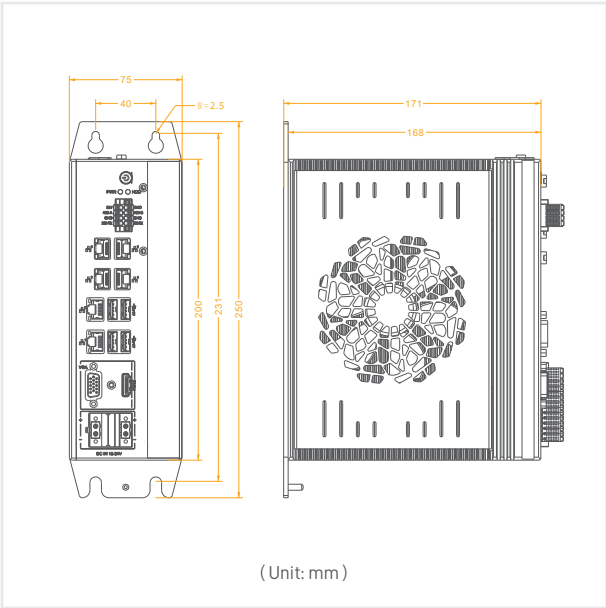
Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.
- 

Perfect cooling system design
Fully enclosed structure, separately space for fan cooling system, cable-free design.
Working temperature: -20°C~60°C

I/O Port



Dimensions



Specifications

Model Name		NP-6120	NP-6140
System	CPU	Intel® Core™ 6/7/8/9th Gen. i7/i5/i3/Pentium® /Celeron® LGA1151 type CPU	Intel® Core™ 12/13/14th Gen. i9/ i7/i5/i3 LGA1700 type CPU
	TDP	Max. 65W	
	BIOS	AMI UEFI BIOS	
	Memory	2×SO-DIMM DDR4-3200MT/s (up to 32GB)	2×SO-DIMM DDR4-3200MT/s (up to 64GB)
	Storage	1×M.2 SSD 2242 M-Key SATA3.0, 1×M.2 SSD 2280 M-Key SATA3.0	
I/O	USB	4×USB3.0, 1×USB2.0 Type A on the board for USB dongle	
	COM	1×RS232(COM1), 1×RS485(COM2), Maximum baud rate:115.2kbit	
	Ethernet	6×Intel GbE LAN controller	
Display	VGA	Support up to 1920×1200@60Hz	
	HDMI	Support up to 3840×2160@30Hz	Support up to 3840×2160@60Hz
Expansions	Expansions	1×Full-size PCIe Mini slot with SIM card holder, only USB2.0 signal, expansion 3G/4G/CAN modules	1×Full-size PCIe Mini slot with SIM card holder, expansion WIFI/3G/4G/CAN modules
Other	Watch Dog	1~255 levels programmable	
	TPM	dTPM: SLB9670VQ2.0	
OS	Windows	Windows 10, Windows11	
	Linux	Ubuntu, Debian	
Power	Voltage Input	DC 12~24V ±10%, overcurrent, overvoltage and polarity inverse protection, (Must be DC24V when using Light Control)	
	Power Consumption	Basic: Max. 120W/Expansion: Max. 200W	
Chassis	Structure	Aluminum-magnesium alloy BOX with fan embedded to assist cooling, Wall-mounted or DIN-Rail fixing style	
	Dimensions(L×W×H)	200mm×168mm×75mm	
	Net Weight	2.4Kg	
Reliability	Work Temperature	20°C ~ 60°C (-4°F~140°F) with air flow (SSD)	
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)	
	Relative Humidity	5~95%(Non-condensing)	
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64	
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27	
	EMC	CE EMC, Follow IEC/EN61000-6-2,IEC/EN 61000-6-4, FCC ClassA	
	Safety	Follow IEC/EN 62368-1	

Machine Motion Control, Robot Control application
NP-61X0-16I160

Extension Interface

- 16×DI (NPN/PNP)
- 16×DO (NPN or PNP, select the mode by the switch)



Machine Motion Control, Robot Control application
NP-61X0-EX01

Extension Interface

- 1×Intel GbE LAN controller
- 1×Mic in, 1×Line out
- 2×USB2.0
- 1×R5232, 3×R5485
- 2×CAN2.0 A/B(Optional)
- 8×DI (NPN/PNP)
- 8×DO (NPN or PNP, select the mode by the switch)

Machine Motion Control, Robot Control application
NP-61X0-MVS

Extension Interface

- 4×PWM Light Control support External Trigger Input
- 2×USB2.0
- 1×RS232/RS485
- 8×DI (NPN/PNP)
- 8×DO (NPN or PNP, select the mode by the switch)



Ordering Information

Product Code	Configuration
NP-6120	CPU:NULL, RAM:NULL, M.2: NULL, 1×RS232, 1×RS485, 6×LAN, 4×USB3.0, HDMI/VGA display, DC12-24V DCIN
NP-6140	CPU:NULL, RAM:NULL, M.2: NULL, 1×RS232, 1×RS485, 6×LAN, 4×USB3.0, HDMI/VGA display, DC12-24V DCIN
NP-6120-16I160	CPU:NULL, RAM:NULL, M.2:NULL, SATA:NULL, 1×RS232, 1×RS485, 6×LAN, 4×USB3.0, HDMI/VGA display, 16×DI, 16×DO, DC12-24V DC IN
NP-6140-16I160	CPU:NULL, RAM:NULL, M.2:NULL, SATA:NULL, 1×RS232, 1×RS485, 6×LAN, 4×USB3.0, HDMI/VGA display, 16×DI, 16×DO, DC12-24V DC IN
NP-6120-EX01	CPU:NULL, RAM:NULL, M.2: NULL, SATA:NULL, 2×RS232, 4×RS485, 7×LAN, 4×USB3.0, HDMI/VGA display, 2×USB2.0, 1×Mic in, 1×Line out,8x DI, 8 x DO, DC12-24V DC IN
NP-6140-EX01	CPU:NULL, RAM:NULL, M.2: NULL, SATA:NULL, 2×RS232, 4×RS485, 7×LAN, 4×USB3.0, HDMI/VGA display, 2×USB2.0, 1×Mic in, 1×Line out,8x DI, 8 x DO, DC12-24V DC IN
NP-6120-MVS	CPU:NULL, RAM:NULL,M.2: NULL, SATA:NULL, 1×RS232, 1×RS485, 1×RS232/485, 6×LAN, 4×USB3.0, HDMI/VGA display, 2×USB2.0, 4×PWM Light, 8×DI, 8×DO,DC12-24V DC IN(Must be DC24V when using LightControl)
NP-6140-MVS	CPU:NULL, RAM:NULL,M.2: NULL, SATA:NULL, 1×RS232, 1×RS485, 1×RS232/485, 6×LAN, 4×USB3.0, HDMI/VGA display, 2×USB2.0, 4×PWM Light, 8×DI, 8×DO,DC12-24V DC IN(Must be DC24V when using LightControl)

Option items

Parts	NP-6120-xxxx	NP-6140-xxxx
CPU	i3-6100, i3-6100T, i3-7100, i3-7100T, i3-8100, i3-8100T, i3-9100,i3-9100T	i3-12100, i3-12100T, i3-12300,i3-12300T,i3-13100, i3-13100T, i3-14100, i3-14100T
	i5-6400, i5-6400T, i5-6500, i5-6500T, i5-7400, i5-7400T, i5-7500, i5-7500T, i5-8400, i5-8400T, i5-8500, i5-8500T, i5-9400, i5-9400T, i5-9500, i5-9500	i5-12400, i5-12400T, i5-12500, i5-12500T, i5-12600, i5-12600T, i5-13400, i5-13400T, i5-13500, i5-13500T, i5-13600, i5-13600T, i5-14400, i5-14400T, i5-14500, i5-14500T, i5-14600, i5-14600T
	i7-6700, i7-6700T, i7-7700, i7-7700T, i7-8700, i7-8700T, i7-9700,i7-9700T	i7-12700, i7-12700T, i7-13700, i7-13700T, i7-14700, i7-14700T
	i9-9900, i9-9900T	i9-12900,i9-12900T,i9-13900,i9-13900T,i9-14900, i9-14900T
	G3900,G4400	-
DDR4 Memory	DDR4-3200MHz: 4GB, 8GB, 16GB	DDR4-3200MHz: 4GB.8GB. 16GB. 32GB
M.2 SSD 2242	64GB, 128GB, 256GB, 512GB, 1TB	
M.2 SSD 2280	64GB, 128GB, 256GB,512GB, 1TB, 2TB	
Wifi Set	N/A	mini PCIE: Intel 7260
3G/4G Module	mini PCIE: EC20, EG25, EC25	
Mount Option	DIN-Rail, Wall-mounted	

NP-6116 SERIES



Feature

LAN
3×Gigabit ports

COM
1×RS232, 1×RS485

miniPCIe
2×miniPCIe slot for Wifi, 3G/4G/5G, LAN

Wide voltage power supply : DC12V~24V
overcurrent, overvoltage and polarity inverse protection.
Double fastening power plugs.

Compact design
book style, wall mounted, din rail mounted
extremely space-saving design.

USB
3×USB

Display
DP and HDMI display port

Fastened MSATA electronic disk slot
To avoid IPC failure caused by the use of mechanical
hard drive in the vibration, high temperature and
illegal power.

Perfect cooling system design
Fully enclosed structure, fanless, cable-free design.
Working temperature: -20°C~60°C

Specifications

Model Name		NP-6116-J1900	NP-6116-J6412	NP-6116-N97
System	CPU	Intel® Celeron J1900, 2.0GHz, 4 cores/4 threads, 2MB L2 cache	Intel® Celeron J6412, 2.0~2.6GHz, 4 cores/4 threads, 15MB L2 cache	Intel® Celeron J6412, 2.0~2.6GHz, 4 cores/4 threads, 15MB L2 cache
	TDP	Max. 10W		12W
	BIOS	AMI BIOS UEFI	AMI UEFI BIOS	AMI UEFI BIOS
	Memory	1×SO-DIMM DDR3L-1333MHz (Up to 8GB)	1×SO-DIMM DDR4-3200MHz (Up to 32GB)	1×SO-DIMM DDR4-3200MHz (Up to 16GB)
	Storage	1×M.2 2242 SATA2.0	1×M.2 2242	1×M.2 2242
I/O	USB	1×USB3.0, 2×USB2.0	3×USB3.1	2×USB3.0, 2×USB2.0
	COM	1×RS232, 1×RS485	1×RS232, 1×RS485	1×RS232, 1×RS485
	Ethernet	2×RTL8111H GbE LAN, 1×Intel GbE LAN	3×Intel GbE LAN	4×Intel GbE LAN
Display	DP	Support up to 2560×1600 @60Hz	Support up to 4096×2160 @60Hz	Support up to 4096×2160 @60Hz
	HDMI	Support up to 1920×1080 @60Hz	Support up to 3840×2160 @60Hz	Support up to 3840×2160 @60Hz
Expansions	Expansions	1×Full-size PCIe Mini slot with SIM card holder		
Other	LED	1×Programmable led		2×Programmable led
	Remote ON-OFF	1~255 levels programmable		
OS	Windows	Windows 10 IoT		
	Linux	Ubuntu		
Power	Voltage Input	DC 12~24V ±10%, overcurrent, overvoltage and polarity inverse protection		
	Power Consumption	Max. 45W		Max. 90W
Chassis	Structure	Aluminum-magnesium alloy box, Fanless, Wall-mounted or DIN-Rail		
	Dimensions(L×W×H)	138mm×102mm×48mm		170mm×112mm×48mm
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)		
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)		
	Relative Humidity	5~95%(Non-condensing)		
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64		
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27		
	EMC	CE/FCC Class B		

I/O Port

DC IN 12~24V
1×RS232
1×RS485
LEDs
Power On Button
HDMI
DP
3×USB3.1
3×LAN

NP-6116-J6412

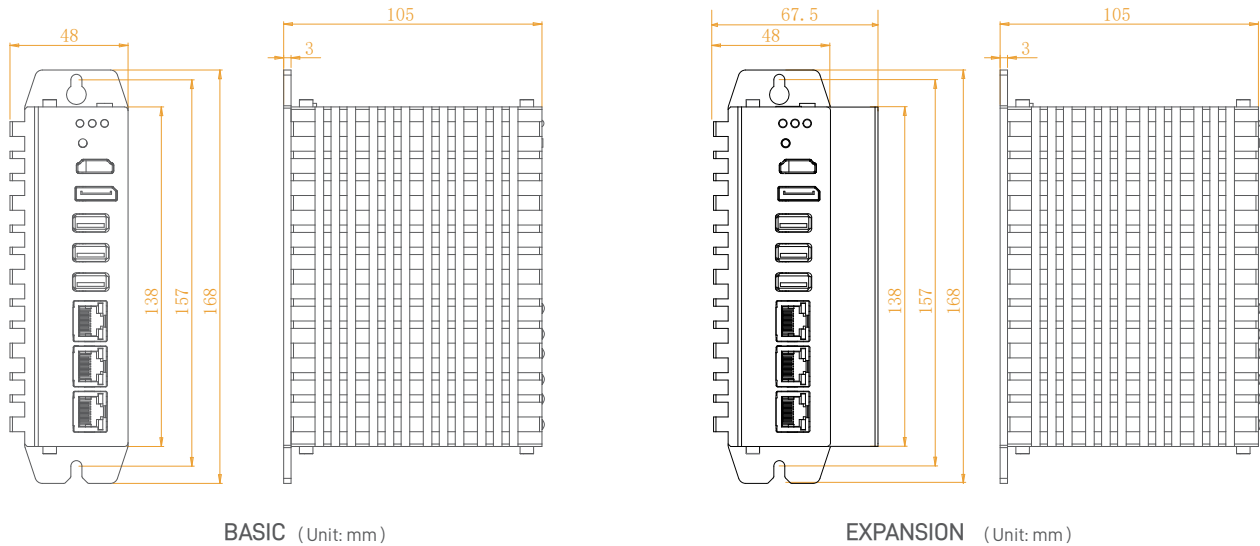
DC IN 12~24V
1×RS232
1×RS485
LEDs
Power On Button
HDMI
DP
USB3.0
2×USB2.0
3×LAN

NP-6116-J1900

LEDs
Power On Button
HDMI
DP
2×USB3.0
2×USB2.0
4×LAN

NP-6116-N97

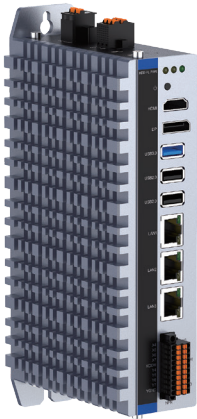
Dimensions



Automation Control application
NP-6116-10

Extension Interface

- 8 x DI, 8 x DO(NPN)
- 8 x DI, 8 x DO(PNP)



Automation Control application
NP-6116-L2

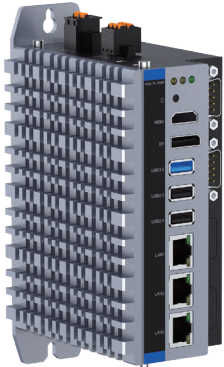
Extension Interface

- 2×Intel® Gigabit ports

Automation Control application
NP-6116-2COM

Extension Interface

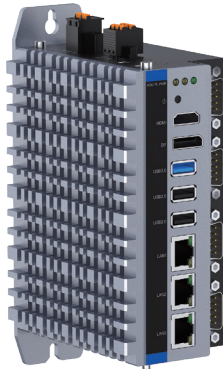
- 1xRS232, 3xRS485, 2xRS485 high baud rate serial ports



Automation Control application
NP-6116-4COM

Extension Interface

- 1xRS232, 3xRS485, 2xRS485 high baud rate serial ports



Ordering Infomation

Product Code	Configuration
NP-6116-J1900	CPU:J1900, RAM:NULL, M.2 SATA: NULL, 1×RS232, 1×RS485, 3×LAN, 1×USB3.0, 1×USB2.0, HDMI/DP display, DC12-24V DC IN
NP-6116-J6412	CPU:J6412, RAM:NULL, M.2: NULL, 1×RS232, 1×RS485, 3×LAN,3×USB3.0, HDMI/DP display, DC12-24V DC IN
NP-6116-N97	CPU:N97, RAM:NULL, M.2 SATA: NULL, 1×RS232, 1×RS485, 4×LAN, 2×USB3.0, 1×USB2.0, 1×Audio , HDMI/DP display, DC12-24V DC IN
NP-6116-IO-J1900	CPU:J1900, RAM:NULL, M.2 SATA: NULL, 1×RS232, 1×RS485, 3×LAN, 1×USB3.0, 1×USB2.0, 8×DI,8×DO(PNP), HDMI/DP display, DC12-24V DC IN
NP-6116-IO-J6412	CPU:J6412, RAM:NULL, M.2: NULL, 1×RS232, 1×RS485, 3×LAN,3×USB3.0,8×DI,8×DO , HDMI/DP display, DC12-24V DC IN
NP-6116-L2-J1900	CPU:J1900, RAM:NULL, M.2 SATA: NULL, 1×RS232, 3×RS485, 5×LAN, 1×USB3.0, 1×USB2.0, HDMI/DP display, DC12-24V DC IN
NP-6116-L2-J6412	CPU:J6412, RAM:NULL, M.2: NULL, 1×RS232, 3×RS485, 5×LAN,3×USB3.0, HDMI/DP display, DC12-24V DC IN
NP-6116-2COM-J1900	CPU:J1900, RAM:NULL, M.2 SATA: NULL, 1×RS232, 3×RS485, 3×LAN, 1×USB3.0, 1×USB2.0, HDMI/DP display, DC12-24V DC IN
NP-6116-2COM-J6412	CPU:J6412, RAM:NULL, M.2: NULL, 1×RS232, 3×RS485, 3×LAN,3×USB3.0, HDMI/DP display, DC12-24V DC IN
NP-6116--4COM-J1900	CPU:J1900, RAM:NULL, M.2 SATA: NULL, 1×RS232, 3×RS485, 3×LAN, 1×USB3.0, 2×USB2.0, 4×RS232/485, HDMI/DP display, DC12-24V DC IN
NP-6116--4COM-J6412	CPU:J6412, RAM:NULL, M.2: NULL, 1×RS232, 3×RS485, 3×LAN,3×USB3.1,4×RS232/485, HDMI/DP display, DC12-24V DC IN

Option items

Parts	Description
DDR3L Memory	DDR3L-1333MHz: 4GB, 8GB
DDR4 Memory	DDR4-3200MHz: 4GB, 8GB, 16GB, 32GB
M.2 SATA SSD	64GB, 128GB, 256GB, 512GB
M.2 SSD	64GB, 128GB, 256GB, 512GB, 1TB
Wifi Set	mini PCIe: Intel 7260
3G/4G Module	mini PCIe: EC20, EG25, EC25
Mount Option	DIN-Rail, Wall-mounted

NP-6117 SERIES



Feature



LAN
3×Gigabit ports



COM
1×RS232, 1×RS485 (Phoenix terminal)



miniPCle
1×miniPCle slot for Wifi, 3G/4G/5G, LAN



Wide voltage power supply: DC12V~24V
DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.



Compact design
book style, wall mounted, din rail mounted extremely space-saving design.



USB
2×USB
1×USB2.0 Type A onboard for dongle



Without cable inside
Without cable connection to protect the reliability and lower failure rate.

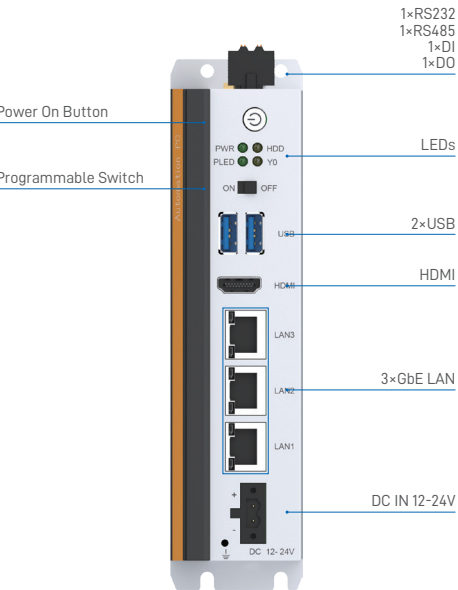


Fastened MSATA electronic disk slot
To avoid IPC failure caused by the use of mechanical hard drive in the vibration, high temperature and illegal power.

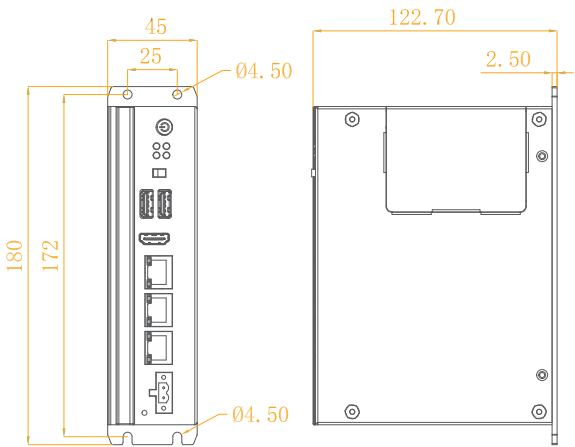


Perfect cooling system design
Fully enclosed structure, fanless, cable-free design
Working temperature: -20°C~60°C.

I/O Port



Dimensions



(Unit: mm)

Specifications

Model Name		NP-6117	
System	CPU	Intel® Celeron J1900, 2.0GHz, 4 cores/4 threads, 2MB L2 cache	Intel® Celeron J6412, 2.0~2.6GHz, 4 cores/4 threads, 15MB L2 cache
	TDP	Max. 10W	
	BIOS	AMI UEFI BIOS	
	Memory	1×SO-DIMM DDR3L-1333MHz (Up to 8GB)	1×SO-DIMM DDR4-2400MHz (Up to 32GB)
	Storage	1×mSATA SSD bay	
I/O	USB	1×USB3.0, 1×USB2.0	2×USB3.0, 1×USB2.0 Type A on the board for USB dongle
	COM	1×RS232, 1×RS485 (Phoenix terminal)	
	Ethernet	1×Intel GbE LAN controller, 2×RTL8111H GbE LAN controller	
	DI	1×DI NPN, 1×Programmable Switch	
	DO	1×DO Transistor output; 1×Programmable LED	
Display	HDMI	Support up to 1920 x 1080	Support up to 4096×2160
Expansions	Expansions	1×Full-size PCIe Mini slot with SIM card holder(with USB signal)	
Other	Watch Dog	1~255 levels programmable	
OS	Windows	Windows 10 IoT	
	Linux	Ubuntu	
Power	Voltage Input	DC 12~24V ±10%, overcurrent, overvoltage and polarity inverse protection	
	Power Consumption	Max. 45W	
Chassis	Structure	Aluminum-magnesium alloy box, Fanless, Wall-mounted or DIN-Rail	
	Dimensions(L×W×H)	160mm×123.2mm×45mm	
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)	
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)	
	Relative Humidity	5~95%(Non-condensing)	
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64	
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27	
	EMC	CE/FCC Class A	

Ordering Infomation

Product Code	Configuration
NP-6117-J1900	CPU:J1900, RAM:NULL, mSATA: NULL, 1×RS232, 1×RS485, 3×LAN, 1×USB3.0, 1×USB2.0, HDMI, 2×DI, 2×DO, DC12/24V Power Input
NP-6117-J6412	CPU:J6412, RAM:NULL, mSATA: NULL, 1×RS232, 1×RS485, 3×LAN, 2×USB3.0, HDMI, 2×DI, 2×DO, DC12/24V Power Input

Option items

Parts	Description
DDR3L Memory	DDR3L-1333MHz: 4GB, 8GB
DDR4 Memory	DDR4-2400MHz: 4GB, 8GB, 16GB
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB
Wifi Set	mini PCIE: Intel 7260
3G/4G Modules	mini PCIE: EC20, EG25, EC25
Mount Option	DIN-Rai, Wall-mounted

NP-6118 SERIES



Feature



Compact design with rugged aluminum alloy housing
Book style with ultra-compact, sealed housing with fanless design.



Fanless Design
Fanless design and working temperature is -20 to 60°C.



Flexible modular design
Product is with modular design structure, easy for maintenance and upgrade.

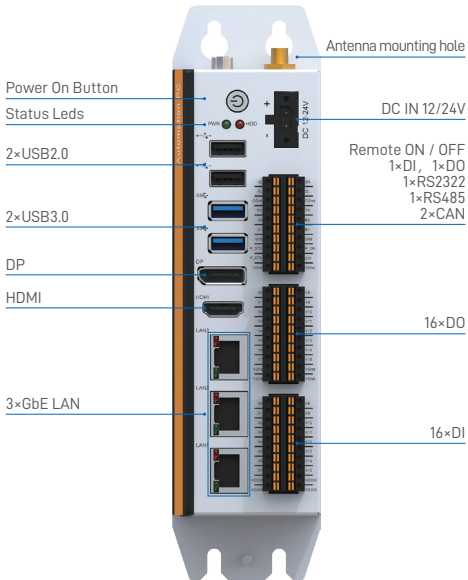


No cable design
Using high quality connector between the boards, reliability and stability for no cable connection design.



Fastened power connector
DC 12/24V ±10% power input, with over-current, overvoltage and reverse protection measures, the interface using.

I/O Port



UPS
Build in super capacitor UPS, can backup for 5 seconds.



USB
4xUSB, 1xUSB2.0 Type A on the board for USB dongle.

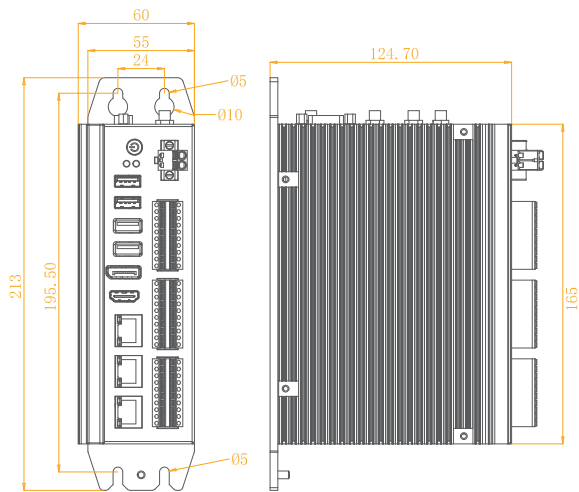


Super capacitor
IO signal can be triggered to save data when power. As a filter when power fluctuations. Space-saving



Easy for customization
Customized logo, Customized Independent IO

Dimensions



(Unit: mm)

Specifications

Model Name		NP-6118-16I160C	
System	CPU	Intel® Celeron J1900, 2.0~2.41GHz, 4 cores/4 threads, 2MB L2 cache	Intel® Celeron J6412, 2.0~2.6GHz, 4 cores/4 threads, 15MB L2 cache
	TDP	Max. 10W	
	BIOS	AMI UEFI BIOS	
	Memory	1xSO-DIMM DDR3L-1333MHz (max. 8GB)	1xSO-DIMM DDR4-2400MHz (max. 32GB)
	Storage	1xmSATA SSD bay	
I/O	USB	1xUSB3.0, 3xUSB2.0, 1xUSB2.0 Type A on the board for USB dongle	2xUSB3.0, 2xUSB2.0, 1xUSB2.0 Type A on the board for USB dongle
	COM	1xRS232, 2xRS485 (Phoenix terminal)	
	Ethernet	1xIntel GbE LAN controller, 2xRTL8111H GbE LAN controller	
	DI	16xDI NPN/PNP, isolated 3750 Vrms	
	DO	16xDO, Transistor output, I _{max} :0.5A per channel, isolated 3750 Vrms	
Display	CAN	2xCAN Bus 2.0A/B Selectable(Phoenix terminal)	
	HDMI	Support up to 1920x1080@60Hz	Support up to 4096x2160@60Hz
	DP	-	Support up to 4096x2160@60Hz
Expansions	Expansions	1xFull-size PCIe Mini slot with SIM card holder(with USB signal), 1xM.2KEY-A, Support Wifi modules	
Other	Watch Dog	1~255 levels programmable	
OS	Windows	Windows 10 IoT	
	Linux	Ubuntu	
Power	Voltage Input	DC12/24V±10%, overcurrent, overvoltage and polarity inverse protection, Super capacitors integrated	
	Power Consumption	Max. 45W	
Chassis	Structure	Aluminum-magnesium alloy box, Fanless, Wall-mounted or DIN-Rail	
	Dimensions(LxWxH)	165mmx124.7mmx60mm	
Reliability	Work Temperature	-20°C ~ 60°C (-4°F~140°F) with air flow (SSD)	
	Storage Temperature	-40°C ~ 80°C (-40°F~176°F) with air flow (SSD)	
	Relative Humidity	5~95%(Non-condensing)	
	Vibration	Operating Random Vibration Test 5~500Hz, 1.5Grms@with SSD, follow IEC 60068-2-64	
	Operating Shock	Operating 20G peak acceleration (11ms duration), follow IEC 60068-2-27	
	EMC	CE/FCC Class A	

Ordering Infomation

Product Code	Configuration
NP-6118-16I160C-J1900	CPU:J1900, RAM:NULL, mSATA: NULL, 1xRS232, 2xRS485, 2xCAN2.0, 3xLAN, 1xUSB3.0, 3xUSB2.0, HDMI, 16xDI, 16xDO, DC12/24V Power Input
NP-6118-16I160C-J6412	CPU:J6412, RAM:NULL, mSATA: NULL, 1xRS232, 2xRS485, 2xCAN2.0, 3xLAN,2xUSB3.0, 2xUSB2.0, HDMI/DP, 16xDI, 16xDO, DC12/24V Power Input

Option items

Parts	Description
DDR3L Memory	DDR3L-1333MHz: 4GB, 8GB
DDR4 Memory	DDR4-3200MHz: 4GB, 8GB, 16GB
mSATA SSD	64GB, 128GB, 256GB, 512GB, 1TB
Wifi Set	Intel AX210 wifi 6E M.2 Set
3G/4G Modules	mini PCIe: EC20, EG25, EC25
Mount Option	DIN-Rail, Wall-mounted

Supercapacitor UPS

NP-6310-A

Supercapacitor UPS with 12V/24V DC Backup Power



- 12V/24V DC Output, 9A Max – Ideal for embedded & automation systems
- Intelligent control with communication via Modbus RTU or I/O signaling
- 1080Ws Energy Storage ensuring extended backup operation
- Supports RS232 & RS485 for real-time monitoring
- DIN-Rail & Wall-Mounting Options for flexible installation
- Compact and fanless design for high-reliability applications
- (L)160mmx (W)123.2mmx (H)43mm

NP-6311

Supercapacitor UPS with 24V DC Backup Power



- 24V DC Output, 6A Max – Ideal for embedded & automation systems
- Support RS485, CAN2.0 B
- Support IO state feedback
- DC24V input, Overvoltage and reverse polarity protection
- Wall mounted or DIN Rail rail mounted installation(Optional)
- Support -20~60°C wide temperature working environment
- (L)100mm x(W)100mm x(H)80mm

eLink-200M

Remote Transmission Sender BOX



- All communication between the automation panel and the PC is transmitted using network cables
- Use standard Ethernet cable, Ultra long distance transmission, up to 100 meters
- Wide Input Range DC12~24V
- DIN-rail mounting

eLink-RVL

Remote Transmission Receive BOX

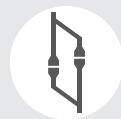


- All communication between the automation panel and the PC is transmitted using network cables
- Use standard Ethernet cable, Ultra long distance transmission, up to 100 meters
- Wide Input Range DC12~24V
- DIN-rail mounting



Wide voltage power supply: DC12V~24V

DC12V power input, optional DC24V, with surge power, over voltage and reverse polarity protection, with phoenix terminal contact.



Real-time status monitoring

Powered device (PC) can monitor status in real time via RS232/RS485
Configurable power management policy
Remote power on/off via DIO for powered devices



Ultracapacitor storage

Ultra-long life supercapacitor storage, up to 10 years 500,000 charge/discharge cycles
High conversion efficiency, environmentally friendly, safe, long backup time



Wide-temperature operation

Wide temperature industrial grade devices
Withstands -20°C to 60°C operating environments

High performance decoding chip

Industrial grade design with surge protection

Maximum 100 meters communication

Transmitting video signal, USB signal and serial port signal at the same time

Bracket mounting kit

