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# HWAINTEK

HWAINTEK

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COMPREHENSIVE SAMPLE OF PRODUCTS

## Comprehensive Product Catalog

Edge Gateway | Industrial Controller | High Performance Computer | Industrial Touch Display

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Jiangsu Huaying Intelligent Technology Co., Ltd.

# COMPANY PROFILE

Jiangsu Huaying Intelligent Technology Co., Ltd.

Huaying Intelligent Technology Co.,Ltd.(referred to as Huaying technology) is committed to the automation, digitalization and intelligentization of various industries, and provides core hardware component that support data acquisition, data processing, edge control and intelligent sensing for various scenarios. Huaying Technology Technology is specialized in the research, development, production and sales of industrial computing hardware products, oriented to serving equipment manufacturers and system integrators, and engaged in the main business mode of providing customers with personalized hardware solutions based on the hardware technology with the advanced independent intellectual property right, and is committed to empowering smart industry with advanced technology.

Focusing on industries such as semiconductor, agriculture, intelligent manufacturing, new energy, medical treatment and health care, Huaying Technology Technology strives to grow together with the industry, make progress together with customers, and provide core processing and control hardware products and solutions for the industry.



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Edge gateway

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## Product Characteristics

HG series products of Huaying Technology are edge gateway hardware products designed as per industrial standards, and based on Intel ATOM series processor, are standardly equipped with independent PHY network port, serial port and USB port, so as to complete data acquisition and pre-processing at the device side and transfer data to the server side through the network, thus realizing data fusion and centralized data processing decision-making.

This series of hardware products are compatible with mainstream operating systems such as WINDOWS, LINUX and UOS, and widely support the environment required by mainstream protocols such as TCP/IP,MODBUS, MQTT and ETHERCAT.

The products are widely used in business scenarios such as production line data acquisition, factory MES system interfacing, industrial informatization data acquisition, etc.

## Application Scenarios

- 3C intelligent manufacturing line station information management
- Data acquisition of silicon growth in photovoltaic monocrystalline silicon furnace
- Paddy farmland information collection
- Ceramic high temperature furnace data collection
- Steel wastewater treatment information collection
- Factory MES system client

## Product Introduction



### HG20 Series Edge Gateway

- Equipped with Intel® Apollo Lake processor
- External Nano SIM interface for convenient communication deployment
- Hardware compatibility with multiple protocols such as TCP/IP and Modbus
- Can expand Ethernet wired communication and 4G/5G/WIFI/Bluetooth wireless communication
- Ultra low power consumption, balanced performance



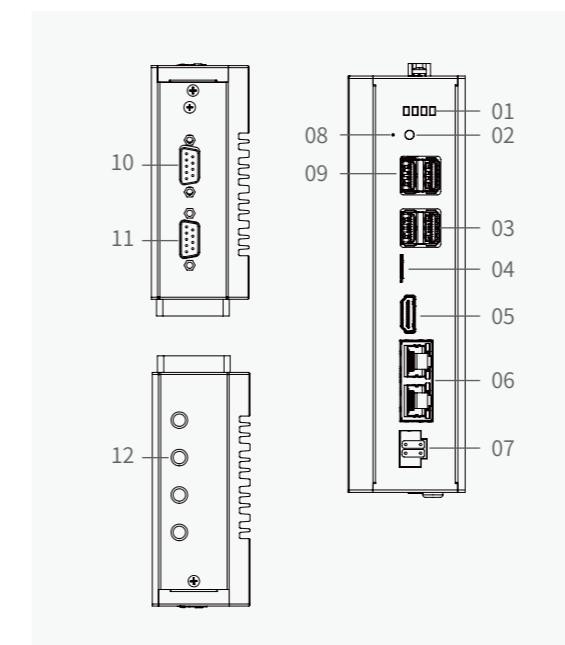
### HG30 Series Edge Gateway

- Equipped with Intel® Elkhart Lake processor
- Compact size and powerful performance, balancing data transmission and processing capabilities
- PS-ON remote switch terminal for easy remote operation
- Hardware compatibility with multiple protocols such as TCP/IP and Modbus
- Can expand Ethernet wired communication and 4G/5G/WIFI/Bluetooth wireless communication

## HG21Series gateway specification

Attribute		HG21
Product Image		
System parameters	CPU	Intel® Celeron® J3455/Pentium® J4205
	Chipset	Intel® SoC Integrated
	BIOS	AMI 64Mbit UEFI
	Memory	LPDDR4, MAX 8GB
	Storage	1x M.2 B/M-Key 2280, SATA 3.0
External I/O Others	Display	1x HDMI, MAX 3840 x 2160@30Hz
	Ethernet	2x LAN, Intel® I225-V
	Serial port	1x RS-232/485 (BIOS) ; 1x RS-232
	USB	3x USB 3.0; 1x USB 2.0
	SIM	1x Nano SIM
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Support long press restart
	M.2	1x M.2 E-Key 2242, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix
	Overall power consumption	MAX 35W
Mechanical parameters	Mounting method	Guide rail installation (wall -mounted optional)
	Dimension	172 x 121 x 47mm (L x W x H)
	Net weight	0.9kg
Environmental parameters	Operational temperature	0~60°C, with airflow at 0.7m/s
	Storage temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )
	EMC	CE、FCC Class B

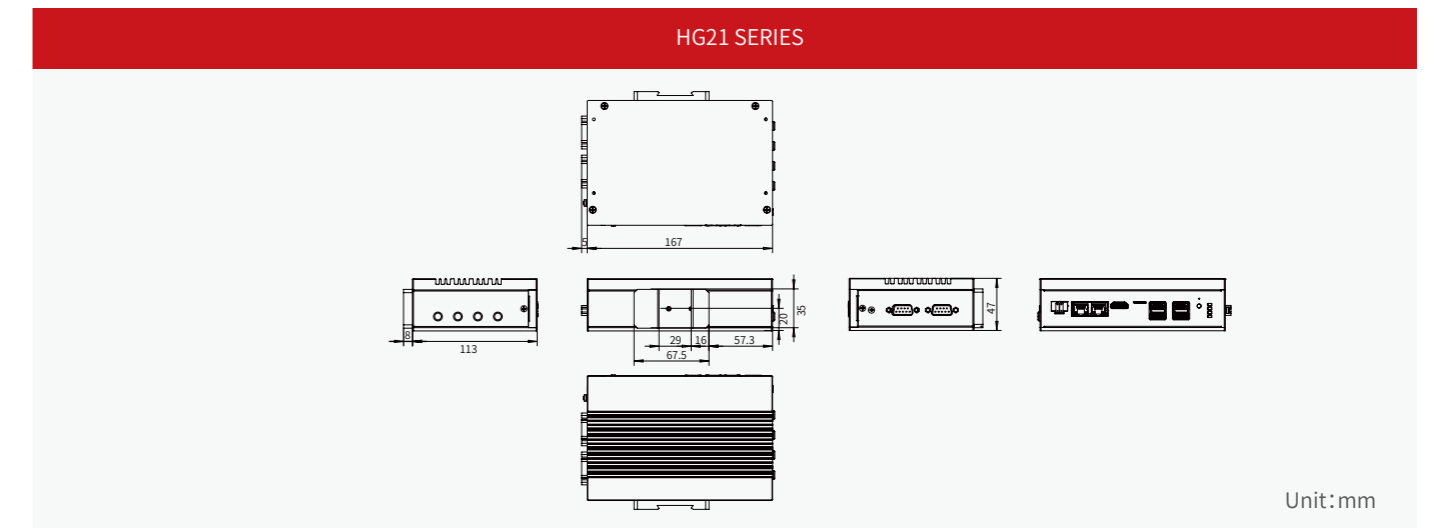
## Interface Description



### HG21 SERIES

- 01 LED (PWR、SATA、USER1、 USER2)
- 02 Power Button (power switch)
- 03 1 x USB2.0
- 04 SIM
- 05 HDMI
- 06 2xLAN
- 07 Power input interface (24V DC IN)
- 08 Reset (long-press restart system)
- 09 3 x USB3.0
- 10 COM2 (RS232)
- 11 COM1 (RS485)
- 12 ANT (antenna interface)

## Dimension Drawing




## Ordering information

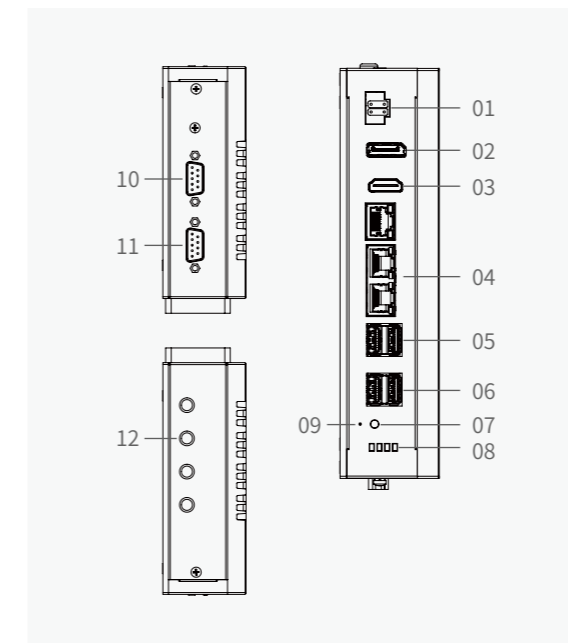
Model	CPU	MEM	SSD	HDD	EXTENSION MODULE
HG21-J3XXX	J3455	4G	128G/256G	/	/
HG21-J4XXX	J4205	4G/8G	128G/256G	/	/
HG21-J4XXX/5G	J4205	4G/8G	128G/256G	/	RM500U-CN+Antenna
HG21-J4XXX/WIFI	J4205	4G/8G	128G/256G	/	AX200+Antenna

★ XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence

## HG31D Series Product Specification

Attribute		HG31D
Product Image		
System Parameters	CPU	Intel® Celeron® J6412
	Chipset	Intel® SoC Integrated
	BIOS	Insyde BIOS
	Memory	2x SODIMM DDR4, MAX 64GB
	Storage	1x M.2 B/M-Key 2280, SATA 3.0
External I/O	Display	1x DP, MAX 4096 x 2160@60Hz; 1x HDMI, MAX 4096 x 2160@60Hz
	Ethernet	3x LAN, Intel® I210-AT
	Serial port	2x RS-232/485
	USB	2x USB3.0; 2x USB2.0
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Supports long press to reset the system
Internal expansion	M.2	1x M.2 E-Key 2230, Supports Wi-Fi; 1x M.2 B-Key 3052, Supports 4G/5G
	SIM	1x Nano SIM
Operation System	OS	Windows 10 IoT LTSC、Linux
	Power supply	Input Voltage: 24V DC IN, 4PIN Phoenix Overall power consumption: MAX 60W
Mechanical parameters	Mounting method	Guide rail mounting (wall-mounted optional)
	Dimension	186 x 125.5 x 45mm
	Net weight	1.2kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s
	Storage Temperature	-25°C ~70°C, 60°C @ 95% (non-condensing)
	Relative humidity	10 ~ 95% @ 40°C (non-condensing)
	EMC	CE、FCC Class B

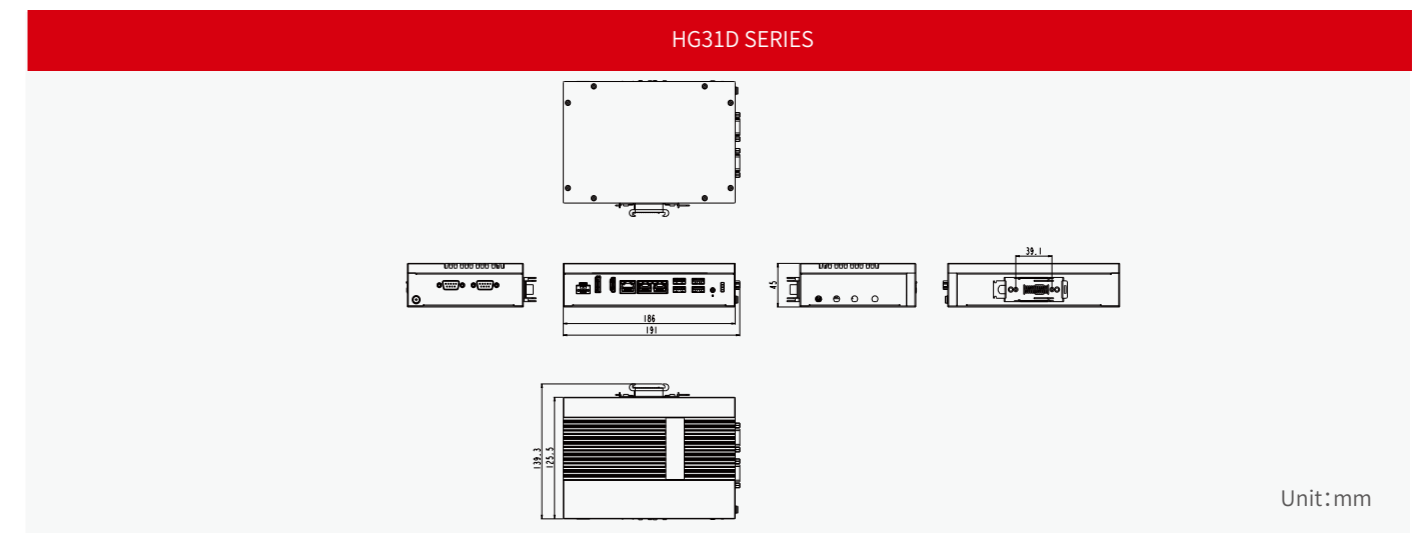
## Interface Description



### HG31D SERIES

- 01 Power input interface (24V DC IN)
- 02 DP
- 03 HDMI
- 04 3x LAN
- 05 2x USB3.0
- 06 2x USB2.0
- 07 Power Button
- 08 LED (PWR、SATA、USER1、USER2)
- 09 Reset
- 10 COM1 (RS232/485)
- 11 COM2 (RS232/485)
- 12 ANT (antenna interface)

## Dimension Drawing



## Ordering information

Model	CPU	MEM	SSD	HDD	EXTENSION MODULE
HG31D-J6XXX	J6412	4G/8G	128G/256G	/	/
HG31D-J6XXX/5G	J6412	4G/8G	128G/256G	/	RM500U-CN+Antenna
HG31D-J6XXX/WIFI	J6412	4G/8G	128G/256G	/	AX200+Antenna

\* XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence

# INDUSTRIAL CONTROLLER

## HM Series

HM300 | HM500

## HPM Series

HPM130 | HPM150

## Product Characteristics

HM and HPM series products of Huaying Technology are based on IA+FPGA hardware heterogeneous architecture. The hardware is compatible with the requirements of IEC-61131-3 and IEC-61499 for hard-ware environment, and can deploy SOFT PLC RUNTIME environment based on CODESYS, so as to realize the functions such as PLC, motion control, etc. The network completely adopts Intel's independent PHY chip design and adapts to the demand of field buses such as Ether-CAT.

In addition, this series of products can support the isolation of the underlying hardware to achieve the con-tainerization of hardware, and can deploy different oper-ating systems and software oper-ating environments, so as to realize running of the different task loads in inde-pendent system environment, thus ensuring the inde-pendence and security of each task, and also ensuring the instantaneous communication of data between the tasks. The products are widely used by customers in industries and fields such as high reliability industrial control, robotics, AGV, AMR and CNC, etc.

## Application Scenarios

- Lithium battery winding control line
- Logistics express-delivery parcels separation control line
- Multi-axis controller for textile processing
- AGV/AMR core control
- Semiconductor die-bonding equipment control

## Product Introduction



### HM300 Series Industrial Controller

- Equipped with Intel® Elkhart Lake processor
- Support the mainstream fieldbus protocol EtherCAT, and real-time Ethernet communication
- Integrated with motion control modules, which can control up to 128 axes
- Support built-in super capacitor for a stronger anti-vibration performance to ensure data and system security
- Compact size, strong performance and strong anti-interference performance



### HM500 Series Industrial Controller

- Equipped with Intel® 11th Tiger Lake processor
- Support the mainstream fieldbus protocol EtherCAT, and real-time Ethernet communication
- Integrated with complex motion control modules, which can control up to 256 axes
- Support built-in super capacitor for a stronger anti-vibration performance to ensure data and system security



### HPM130 Series Touch All-in-one Machine


- Equipped with Intel® Elkhart Lake processor
- 10-wire capacitive multi-touch and AG anti-glared surface treatment
- Support the mainstream fieldbus protocol EtherCAT and real-time Ethernet communication
- 10.1", 12.1", 15.6", 17", 19" and 21.5" display screens are optional
- Support visual configuration software and realize intelligent interaction



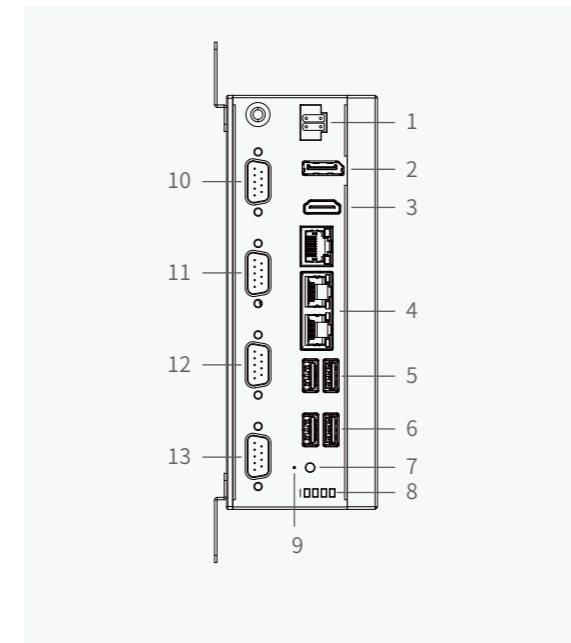
### HPM150 Series Touch All-in-one Machine

- Equipped with Intel® 11th Tiger Lake processor
- Support the mainstream fieldbus protocol EtherCAT and real-time Ethernet communication
- 15.6" display screens are optional
- Support visual configuration software and cloud-side remote monitoring

## HM300 Series Product Specification

Attribute		HM311
Product Image		
System Parameters	CPU	Intel® Celeron® J6412
	Chipset	Intel® SoC Integrated
	BIOS	AMI 128Mbit UEFI
	Memory	2x SODIMM DDR4, MAX 32GB
	Storage	1x M.2 B/M-Key 2280, SATA 3.0
External I/O	Display	1x DP, MAX 4096 x 2160@60Hz; 1x HDMI, MAX 4096 x 2160@60Hz
	Ethernet	2x LAN, Intel® I210-AT; 1x LAN, Intel® I226-V
	Serial port	3x RS-232/485; 1x RS-232
	USB	2x USB3.0; 2x USB2.0
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Support long-press restart
	M.2	1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G
	SIM	1x Nano SIM
	UPS	Support, Optional
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix
	Overall power consumption	MAX 60W
Mechanical parameters	Mounting method	Wall mounting(guide rail optional)
	Dimension	172 x 125 x 62.5mm (L x W x H)
Environmental parameters	Net weight	1.12 kg
	Operating Temperature	0~60°C, airflow at 0.7m/s
	Storage Temperature	-25°C ~70°C, 60°C @ 95% (non-condensing)
	Relative humidity	10 ~ 95% @ 40°C (non-condensing)
	EMC	CE、FCC Class B

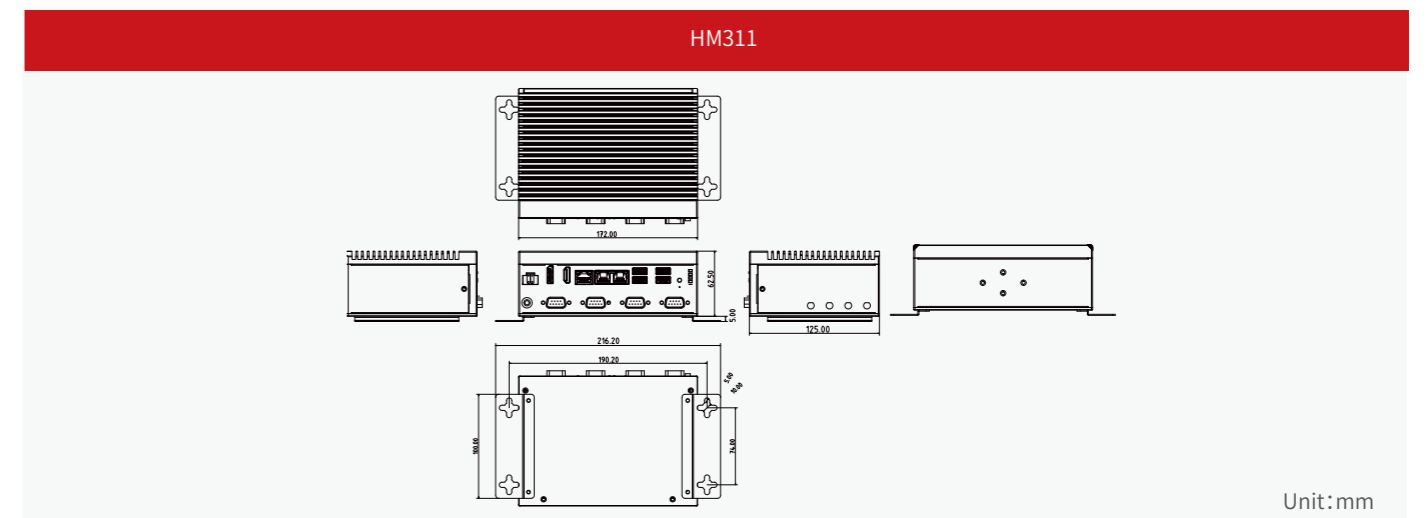
## Interface Description



### HM311

- 01 Power input interface (24V DC IN)
- 02 DP
- 03 HDMI
- 04 3x LAN
- 05 2x USB3.0
- 06 2x USB2.0
- 07 Power Button
- 08 LED (PWR、SATA、USER1、USER2)
- 09 Reset
- 10 COM1 (RS485)
- 11 COM2 (RS232)
- 12 COM3 (RS485)
- 13 COM4 (RS232)

## Dimension Drawing




## Ordering information

Model	CPU	MEM	SSD	HDD	extension module
HM311-J6XXX	J6412	4G/8G	128G/256G/512G/1T	/	/
HM311-J6XXX/UPS	J6412	4G/8G	128G/256G/512G/1T	/	RM500U-CN+Antenna
HM311-J6XXX/WIFI	J6412	4G/8G	128G/256G/512G/1T	/	AX200+Antenna

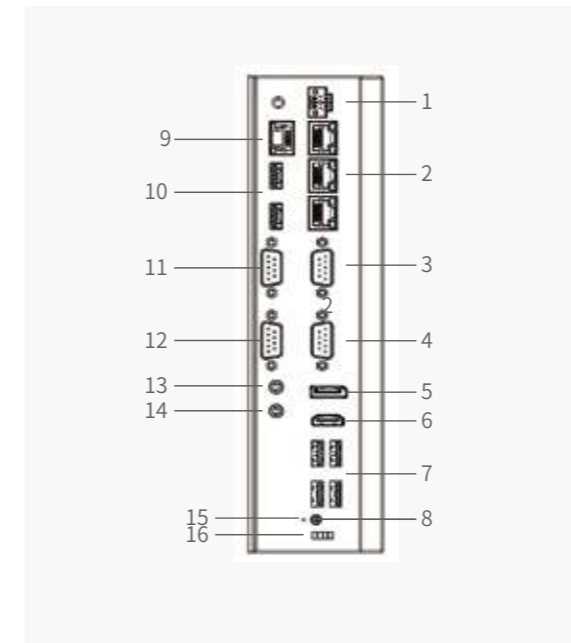
\* XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence



## HM500 Series Product Specification

Attribute		HM511D
Product Image		
System Parameters	CPU	Intel® Core™ i5-1135G7/ i7-1165G7
	Chipset	Intel® SoC Integrated
	BIOS	Insyde BIOS
	Memory	2x SODIMM DDR4, MAX 64GB
	Storage	1x M.2 M-Key 2280, Support PCIe X2 & SATA Mode
External I/O	Audio	1x Mic in; 1x Headphone
	Display	1x DP, MAX 4K@60Hz; 1x HDMI, MAX 4K@30Hz
	Ethernet	4x LAN, Intel® I210
	Serial port	2x RS-232/485; 2x RS-232
	USB	4x USB3.0; 2x USB2.0
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Support long press one key restore system
	M.2	1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G
	SIM	1x Nano SIM
	TPM	Support, Reserved
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix
	Overall power consumption	MAX 120W
Mechanical parameters	Mounting method	Wall mounting (guide rail optional)
	Dimension	236 x 165 x 63.5mm (L x W x H)
	Net weight	2.2 kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )
	EMC	CE、FCC Class B

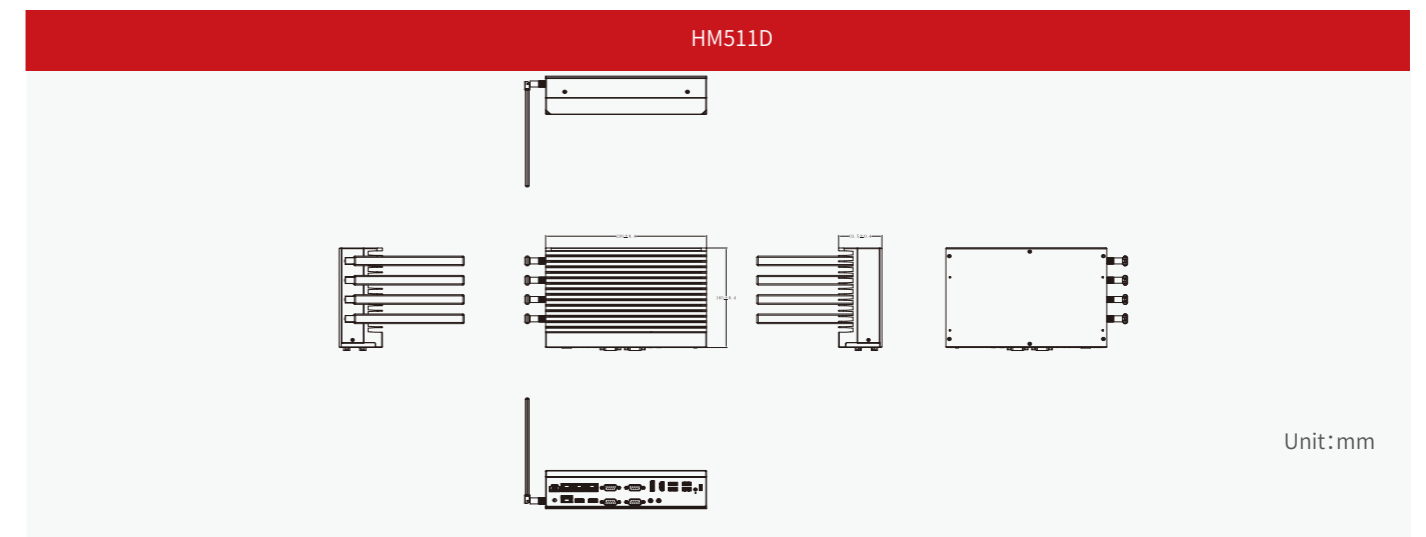
## Interface Description



### HM511D

- 01 Power input interface (24V DC IN)
- 02 3x LAN
- 03 COM1(RS232/485)
- 04 COM2 (RS232/485)
- 05 DP
- 06 HDMI
- 07 2x USB2.0, 2x USB3.2
- 08 Power Button
- 09 1x LAN
- 10 2x USB3.2
- 11 COM3(RS232)
- 12 COM4(RS232)
- 13 1x Headphone
- 14 1x Mic in
- 15 Reset
- 16 LED (PWR、SATA、USER1、USER2)

## Dimension




## Ordering information

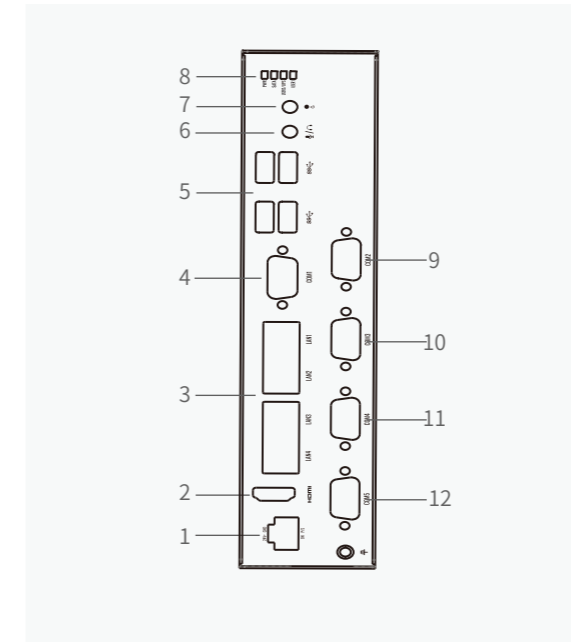
Model	CPU	MEM	SSD	HDD	EXTENSION MODULE
HM511D-C11XXX	I5-1135G7	8G/16G	128G/256G/512G/1T	/	/
HM511D-C11XXX/WIFI	I5-1135G7	8G/16G	128G/256G/512G/1T	/	AX200
HM511D-M11XXX	I7-1165G7	8G/16G	128G/256G/512G/1T	/	/
HM511D-M11XXX/5G	I7-1165G7	8G/16G	128G/256G/512G/1T	/	RM500U-CN

\* XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence

## HM500 Series Product Specification

Attribute		HM512
Product Image		
System Parameters	CPU	Intel® Core™ i5-1135G7/ i5-1155G7
	Chipset	Intel® SoC Integrated
	BIOS	AMI 128Mbit UEFI
	Memory	2x SODIMM DDR4, MAX 64GB
	Storage	1x M.2 M-Key 2280, SATA 3.0; 1x SATA
External I/O	Display	1x HDMI, MAX 4096 x 2304@60Hz
	Ethernet	4x LAN, Intel® I210-AT
	Serial port	3x RS-232; 2x RS-485
	USB	4x USB3.0
	Audio	1 x Line out/Mic in
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Support long-press restart
	M.2	1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G
	SIM	1x Nano SIM
	TPM	Support, Reserved
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix
	Overall power consumption	MAX 120W
Mechanical parameters	Mounting method	Wall mounting (guide rail optional)
	Dimension	236 x 165 x 63.5mm (L x W x H)
	Net weight	2.2 kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )
	EMC	CE、FCC Class B

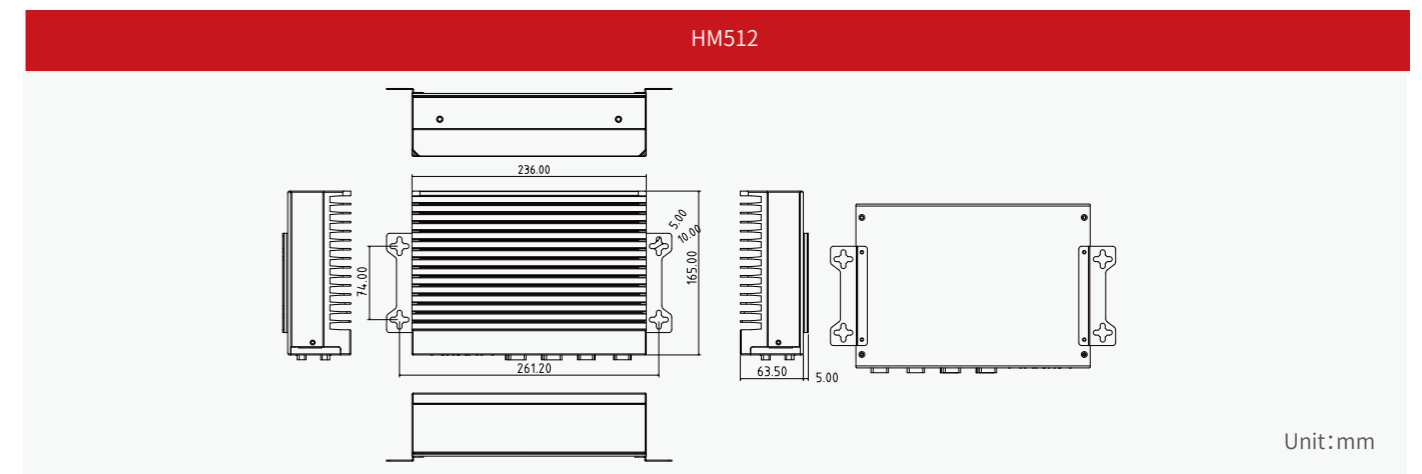
## Interface Description



### HM512

- 01 Power input interface (24V DC IN)
- 02 HDMI
- 03 4x LAN
- 04 COM1 (RS232)
- 05 4x USB3.0
- 06 1 x Line out/Mic in
- 07 Power Button
- 08 LED (USER1、USER2、UPS、SATA)
- 09 COM2 (RS485)
- 10 COM3 (RS485)
- 11 COM4 (RS232)
- 12 COM5 (RS232)

## Dimension



## Ordering information

Model	CPU	MEM	SSD	HDD	EXTENSION MODULE
HM512-C11XXX	I5-1135G7	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HM512-C11XXX/UPS	I5-1135G7	8G/16G	128G/256G/512G/1T	/	HE-UPS-IN10
HM512-C11XXX/B	I5-1155G7	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HM512-C11XXX/UPS/B	I5-1155G7	8G/16G	128G/256G/512G/1T	/	HE-UPS-IN10

\* XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence

### HPM130 Series Product Specification

Attribute		HPM131-AC101	HPM131-AC121	HPM131-AC156
Product Image				
System Parameters	CPU	Intel® Celeron® J6412		
	Chipset	Intel® SoC Integrated		
	BIOS	AMI 128Mbit UEFI		
	Memory	2x SODIMM DDR4, MAX 32GB		
	Storage	1x M.2 B/M-Key 2280, SATA3.0		
LCD	Screen typ	10.1" a-Si TFT-LCD	12.1" a-Si TFT-LCD	15.6" a-Si TFT-LCD
	Native resolution	1280 x 800	1280 x 800	1920 x 1080
	Max number of colors	216.96(H) x 135.60(V)mm	262.565(H) x 164.16 (V)mm	344.16(H) x 193.59(V)mm
	Colors	16.7M	16.7M	16.7M
	Brightness	400 cd/m <sup>2</sup>	450 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
	Contrast	800:1	1000:1	3000:1
	Viewing Angle	85/85/85/85	85/85/85/85	89/89/89/89
	Backlit life	50000h	50000h	50000h
Touch	Touch type	Capative touch		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 7H		
	Transmittance	≥85%		
	Touch points	Multi points/single point		
External I/O	Display	1x DP, MAX 4096 x 2160@60Hz; 1x HDMI, MAX 4096 x 2160@60Hz		
	Ethernet	2x LAN, Intel® I210-AT; 1x LAN, Intel® I226-V		
	Serial port	1x RS-232/485 (BIOS) ; 1x RS-232		
	USB	2x USB3.0; 2x USB2.0		
Others	REMOTE	Support remote switch, integrated in the power supply part		
	RESET	Support long-press restart		
	M.2	1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G		

Attribute		HPM131-AC101	HPM131-AC121	HPM131-AC156
Operation System	SIM	1x Nano SIM		
	OS	Windows 10 IoT LTSC、Linux		
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix		
	Overall power consumption	MAX 60W		
Mechanical parameters	Mounting method	Embedded top rail mounting or VESA hole mounting		
	Overall dimensions	273 x 191.6 x 47.7mm	319.52 x 221.6 x 51.5mm	404.16 x 253.56 x 49.5mm
	Opening size	266 x 184.6mm	312.52 x 214.6mm	397.16 x 246.56mm
	Net weight	3.1kg	4.0kg	4.4kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s		
	Storage Temperature	-40°C ~85°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		
	IP Level	IP65 on the front		

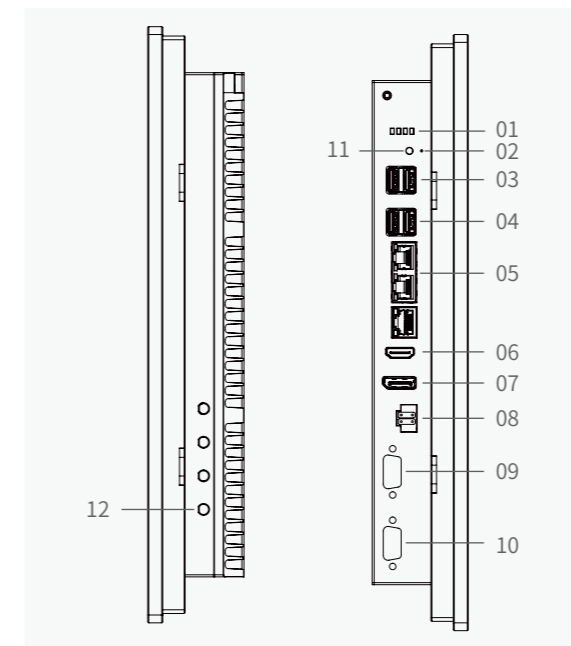
### HPM130 Series Product Specification

Attribute		HPM131-AC17	HPM131-AC19	HPM131-AC215
Product Image				
System Parameters	CPU	Intel® Celeron® J6412		
	Chipset	Intel® SoC Integrated		
	BIOS	AMI 128Mbit UEFI		
	Memory	2x SODIMM DDR4, MAX 32GB		
	Storage	1x M.2 B/M-Key 2280, SATA3.0		
LCD	Screen type	17" a-Si TFT-LCD	19" a-Si TFT-LCD	21.5" a-Si TFT-LCD
	Resolution	1280*1024	1280*1024	1920*1080
	Active area	337.92(H) x 270.336 (V)mm	374.784(H) x 299.827(V)mm	476.64(H) x 268.11(V)mm
	Max number of colors	16.7M	16.7M	16.7M

## HPM130 Series Product Specification

Attribute		HPM131-AC17	HPM131-AC19	HPM131-AC215
Display	Max number of colors	16.7M	16.7M	16.7M
	Brightness	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>
	Contrast	1000:1	1000:1	1000:1
	Viewing Angle	89/89/89/89	89/89/89/89	89/89/89/89
	Backlit life	50000h	50000h	50000h
LCD	Touch type	Projected capacitive touch screen		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 7H		
	Transmittance	≥85%		
	Touch points	Multi points/single point		
External I/O	Display	1x DP, MAX 4096 x 2160@60Hz; 1x HDMI, MAX 4096 x 2160@60Hz		
	Ethernet	2x LAN, Intel® I210-AT; 1x LAN, Intel® I226-V		
	Serial port	1x RS-232/485 (BIOS) ; 1x RS-232		
	USB	2x USB3.0; 2x USB2.0		
	Others	REMOTE	Support remote switch, integrated in the power supply part	
RESET		Support long-press restart		
M.2		1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G		
SIM		1x Nano SIM		
Operation System		OS	Windows 10 IoT LTSC、Linux	
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix		
	Overall power consumption	MAX 60W		
Mechanical parameters	Mounting method	Embedded top rail mounting or VESA hole mounting		
	Overall dimensions	399.32 x 331.74 x 53.5mm	434.72 x 359.46 x 53.5mm	540.7 x 332.4 x 53.5mm
	Opening size	392.32 x 324.74mm	427.72 x 352.46mm	533.7 x 325.4mm
	Net weight	5.95kg	6.45kg	7.55kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s		
	Storage Temperature	-40°C ~85°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		
	IP Level	IP65 on the front		

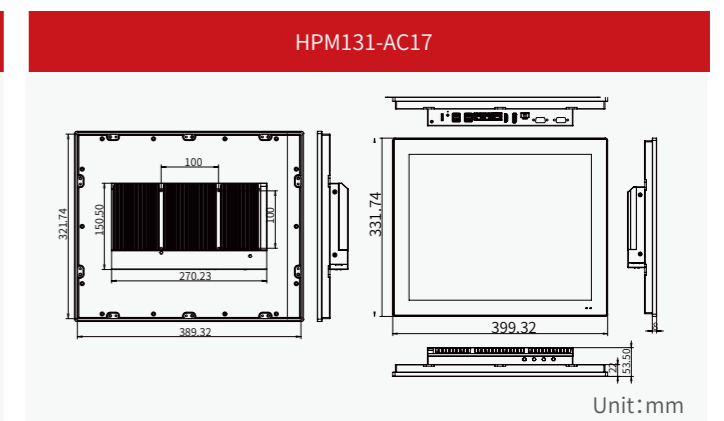
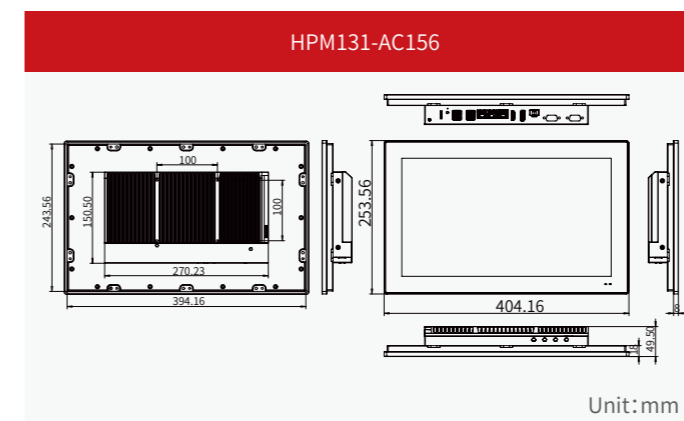
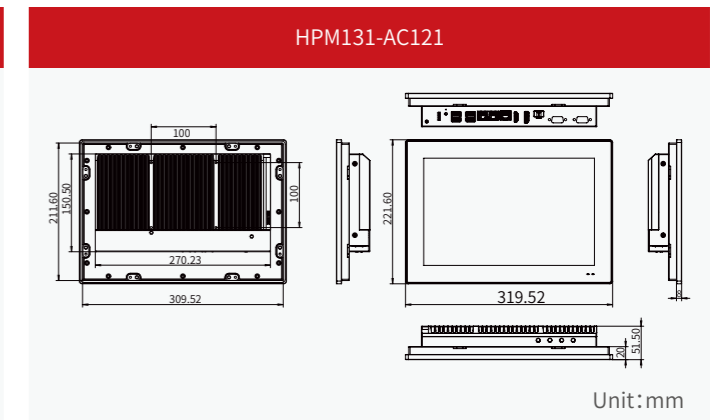
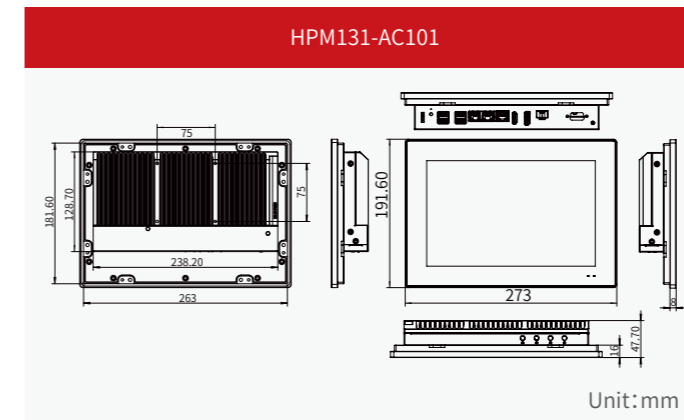
## Interface Description

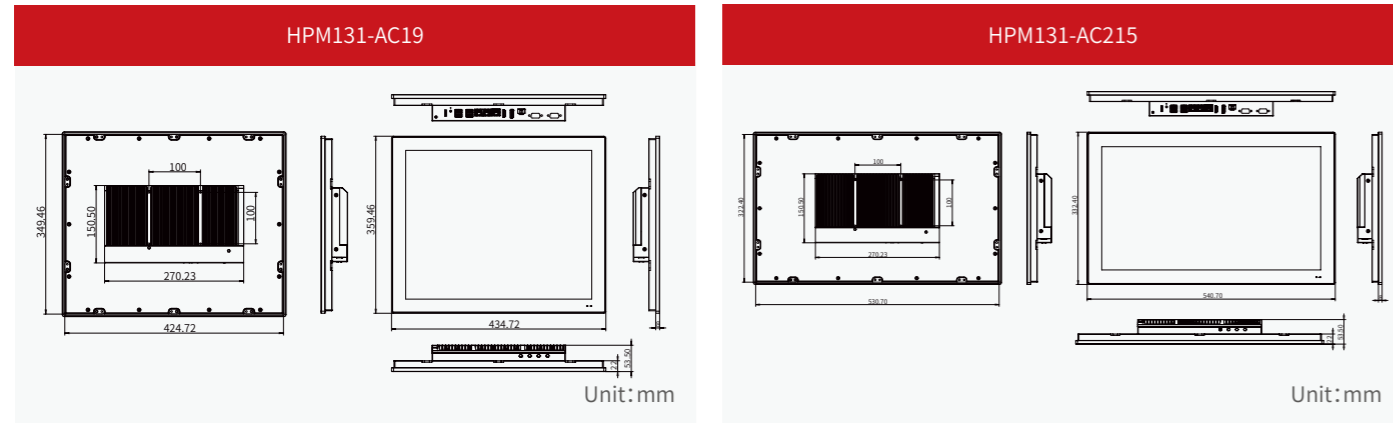


### HPM130 SERIES

- 01 LED (PWR, SATA, USER1、USER2)
- 02 Reset
- 03 2x USB2.0
- 04 2x USB3.0
- 05 3x LAN
- 06 HDMI
- 07 DP
- 08 Power input interface (24V DC IN)
- 09 COM1(RS485)
- 10 COM2 (RS232) \*10.1" No such interface
- 11 Power Button
- 12 ANT

## Dimension Drawing





### Ordering information

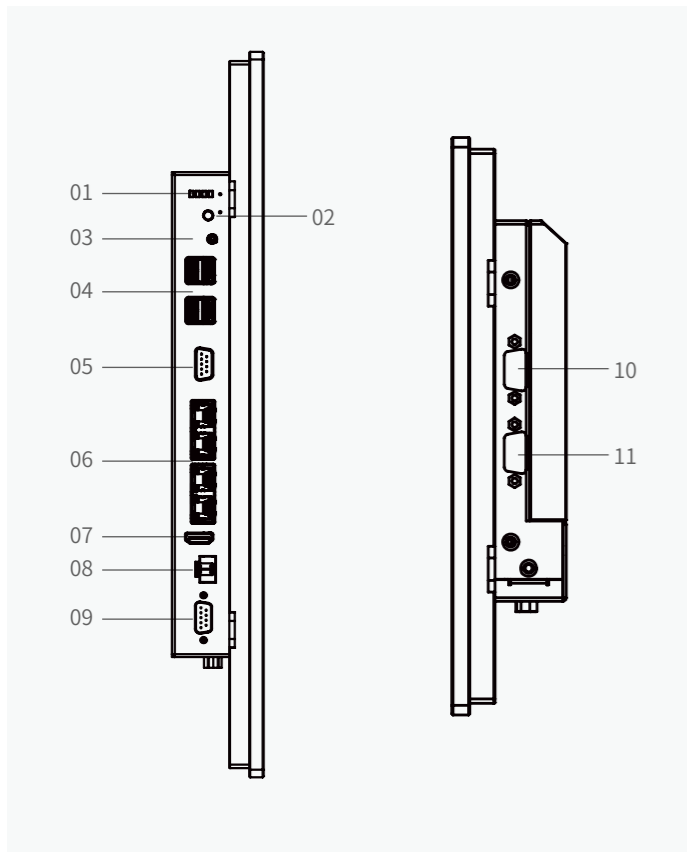
Model	Screen	CPU	MEM	SSD	HDD	Extension Module
HPM131-AC101-J6XXX	10.1"	J6412	4G/8G	128G/256G	/	/
HPM131-AC121-J6XXX	12.1"	J6412	4G/8G	128G/256G	/	/
HPM131-AC156-J6XXX	15.6"	J6412	4G/8G	128G/256G	/	/
HPM131-AC17-J6XXX	17"	J6412	4G/8G	128G/256G	/	/
HPM131-AC19-J6XXX	19"	J6412	4G/8G	128G/256G	/	/
HPM131-AC215-J6XXX	21.5"	J6412	4G/8G	128G/256G	/	/

XXX means Memory capacity 2<sup>x</sup>, SSD capacity 2<sup>x</sup>, HDD capacity XT in sequence

Attribute		HPM152-AC156
Product Image		
System Parameters	CPU	Intel® Core™ i5-1135G7
	Chipset	Intel® SoC Integrated
	BIOS	AMI 128Mbit UEFI
	Memory	2x SODIMM DDR4, MAX 64GB
	Storage	1x M.2 M-Key 2280, SATA 3.0
LCD	LCD	15.6" a-Si TFT-LCD
	Screen type	1920 x 1080
	Resolution	344.16(H) x 193.59(V)mm
	Max number of colors	16.7M
	Brightness	250 cd/m <sup>2</sup>
	Contrast	3000:1
	Viewing Angle	89/89/89/89
	Backlit life	50000h
Touch	Touch type	Projected capacitive touch screen
	Surface technics	AG Anti-glared
	Surface hardness	Mohs 7H
	Transmittance	≥85%
	Touch points	Multi points/single point
External I/O	Display	1x HDMI, MAX 4096 x 2304@60Hz
	Ethernet	4x LAN, Intel® I210-AT
	Serial port	3x RS-485; 2x RS-232
	USB	4x USB3.0
	Audio	1 x Line out/Mic in
Others	REMOTE	Support remote switch, integrated in the power supply part
	RESET	Support long-press restart
Internal expansion	USB	2x USB2.0, Socket
	M.2	1x M.2 E-Key 2230, Support Wi-Fi; 1x M.2 B-Key 3052, Support 4G/5G

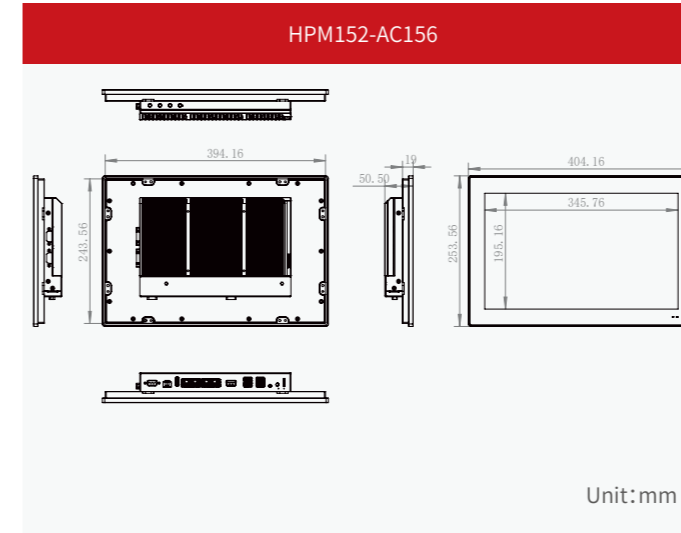
属性		HPM152-AC156
	SIM	1x Nano SIM
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	24V DC IN, 4PIN Phoenix
	Overall power consumption	MAX 60W
Mechanical parameters	Mounting method	Embedded top rail mounting or VESA hole mounting
	Overall dimensions	404.16 x 253.56 x50.5mm
	Opening size	397.16 x 246.56mm
	Net weight	4.35kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s
	Storage Temperature	-40°C ~85°C, 60°C @ 95% ( non-condensing )
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )
	EMC	CE、FCC Class B
	IP Level	IP65 for front panel

### Interface Description



### HPM150 SERIES

- 01 LED (USER1、USER2、UPS、SATA)
- 02 Reset
- 03 1 x Line out/Mic in
- 04 4 x USB3.0
- 05 COM1 (RS232)
- 06 4 x LAN
- 07 HDMI
- 08 Power input interface (24V DC IN)
- 09 COM2 (RS485)
- 10 COM3 (RS485)
- 11 COM4 (RS232)



### Ordering information

Model	Screen	CPU	MEM	SSD	HDD	Extension Module
HPM152-AC156-C11XXX	15.6"	i5-1135G7	8G/16G/32G	128G/256G/512G/1T	/	/
HPM152-AR156-C11XXX	15.6"	i5-1135G7	8G/16G/32G	128G/256G/512G/1T	/	/

\* XXX means Memory capacity 2X、SSD capacity 2X、HDD capacity XT in sequence

# High Performance Computer

## HC/HRC Series

HC6000 | HC7000

HRC-U | HRC-L

## Product Characteristics

HWAINTEK high performance computer product series is designed to meet high performance computing power demand, featured by ultra-high performance and good interface expansion capability.

The products also feature fanless embedded design. At the same time, this series of products have PCI, PCIe and other interface expansion capabilities, and can meet the expansion and computing power demand of machine vision and other industries.

This series is also designed with rack-type products to meet the demand of customers for supercomputing power, super storage, and GPU expansion.

This series of products are widely used in industries and fields that require computing power and interfaces, such as machine vision, gene sequencing, photovoltaic AI detection, etc.

## Application Scenarios

- Photovoltaic machine vision inspection
- Lithium battery winding inspection
- Gene sequencing
- 3C production line machine vision inspection
- Production line server data acquisition, storage and analysis

## Product Introduction



### HC6000 Series High Performance Computer

- Equipped with Sky/Kaby/Coffee Lake processor
- Multiple I/O form combinations to meet different application demands
- Support 4-route slot and realize multi-route PCI/PCIe expansion
- Modular design of internal components and cableless connection for stability
- Completely enclosed structure design to cope with harsh operating environment

### HC7000 Series High Performance Computer

- Equipped with Intel® 10th Comet/Rocket Lake processor
- Multiple I/O form combinations to support 11-route network port connection at most
- Support 2/4-route slot and realize multi-route PCI/PCIe expansion
- Modular design of internal components and cableless connection for stability
- Completely enclosed structure design with external fan to solve the problem of high power-consumption heat dissipation




### HRC-U Series Rack Mounted Controller

- Support Intel® 6th-13th Core i3/i5/i7 series processor
- Support H310C, Q170, Q470, Q670 series of multiple expansion interfaces
- Support 4 channels 3.5-inch HDD expansion and RAID
- Super large cas space, support up to 3090 series three-slot large-size graphics card
- Replaceable dust screen for easy maintenance



### HRC-L Series Mini Rack Computer

- Supports Intel 6/7/8/9 Core i3/i5/i7 processors
- Adopt Intel H110 chipset
- 2\*COM, 8\*USB, 5\*Intel Gigabit port
- 1\*VGA, 1\*HDMI
- 1\*PCIe x16

## HC6000 Series Product Specification

Attribute		HC6100	HC6110	HC6120	
Product Image					
System Parameters	CPU	Intel® Core™ i3-9100/i5-9400/i7-9700			
	Chipset	H110			
	BIOS	AMI 64Mbit UEFI			
	Memory	2x SODIMM DDR4, MAX 32GB			
	Storage	1x M.2 M-Key 2280, SATA 3.0; 1 x SATA			
External I/O	Display	2x DP, MAX 4096 x 2304@60Hz;			
		1x VGA, MAX 1920 x 1080@60Hz;			
	DP+DP/DP+VGA Dual independent display				
	Ethernet	1x LAN, Intel® I219LM		1x LAN, Intel® I219LM	
		2x LAN, Intel® I210AT		5x LAN, Intel® I210AT	
	Serial port	1x RS-232;	3x RS-232;	2x RS-232	
1x RS-485		3x RS-485	2x RS-485		
USB	4x USB3.0; 2x USB2.0		4x USB3.0; 4x USB2.0		
Audio	1x Line-out, 1x Mic-in, Realtek ALC662				
Others	REMOTE	-	4-pin connector for remote switches and indicator lights		
	RESET	Switch off and long press to reset BIOS			
Internal expansion	USB	-	1x USB2.0, Type-A		
	miniPCIe	1x miniPCIe, extensible WLAN/WWAN			
	SIM	1x USIM, extensible 3G/4G			
	PCIe	-			
	PCI	-			
Operation System	OS	Windows 10 IoT LTSC、Linux			
Power supply	Input Voltage	24V DC IN, 3PIN Phoenix			
	Overall power consumption	MAX 120W			
Mechanical parameters	Mounting method	Wall mounting			
	Dimension	220x226x66mm	220x226x75mm		
	Net weight	3.0kg	3.4kg		
	Operating temperature	0~60°C, with airflow at 0.7m/s			

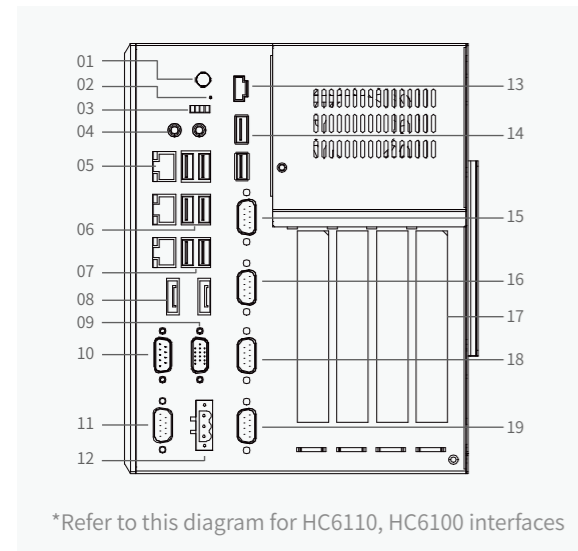
Attribute		HC6100	HC6110	HC6120
Environmental parameters	Storage Temperature	-40°C ~85°C, 60°C @ 95% (non-condensing)		
	Relative humidity	10 ~ 95% @ 40°C(non-condensing)		
	EMC	CE、FCC Class B		

Attribute		HC6114	HC6124	
Product Image				
System Parameters	CPU	Intel® Core™ i3-9100/i5-9400/i7-9700		
	Chipset	H110		
	BIOS	AMI 64Mbit UEFI		
	Memory	2x SODIMM DDR4, MAX 32GB		
	Storage	1x M.2 M-Key 2280, SATA 3.0; 3 x SATA		
External I/O	Display	2x DP, MAX 4096 x 2304@60Hz;		
		1x VGA, MAX 1920 x 1080@60Hz;		
	DP+DP/DP+VGA Dual independent display			
	Ethernet	1x LAN, Intel® I219LM	1x LAN, Intel® I219LM;	
		2x LAN, Intel® I210AT	5x LAN, Intel® I210AT	
	Serial port	3x RS-232; 3x RS-485;	2x RS-232; 2x RS-485;	
USB	4x USB3.0; 2x USB2.0			
Audio	1x Line-out, 1x Mic-in, Realtek ALC662			
Others	REMOTE	4-pin connector for remote switches and indicator lights		
	RESET	Switch off and long press to reset BIOS		
Internal expansion	USB	1x USB2.0, Type-A		
	miniPCIe	1x miniPCIe, extensible WLAN/WWAN		
	SIM	1x USIM, extensible 3G/4G		
	PCIe	1x PCIe 16x (3.0) ;		
	PCI	1x PCIe 4x (2.0, x2signal)		
PCI	2 x PCI			



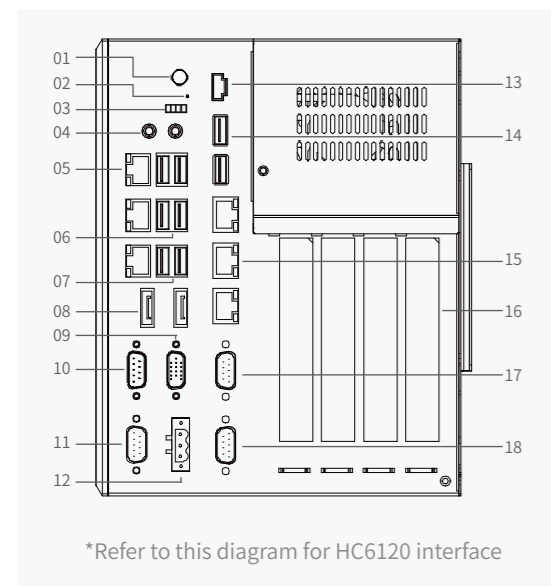
Attribute		HC6114	HC6124
Operation System	OS	Windows 10 IoT LTSC、Linux	
Power supply	Input Voltage	24V DC IN, 3PIN Phoenix	
	Overall power consumption	MAX 120W	
Mechanical parameters	Mounting method	Wall mounting	
	Dimension	220x226x176mm (L x W x H)	
	Net weight	4.0kg	
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s	
	Storage Temperature	-40°C ~85°C, 60°C @ 95% (non-condensing)	
	Relative humidity	10 ~ 95% @ 40°C(non-condensing)	
	EMC	CE、FCC Class B	

### Interface Description



#### HC6114

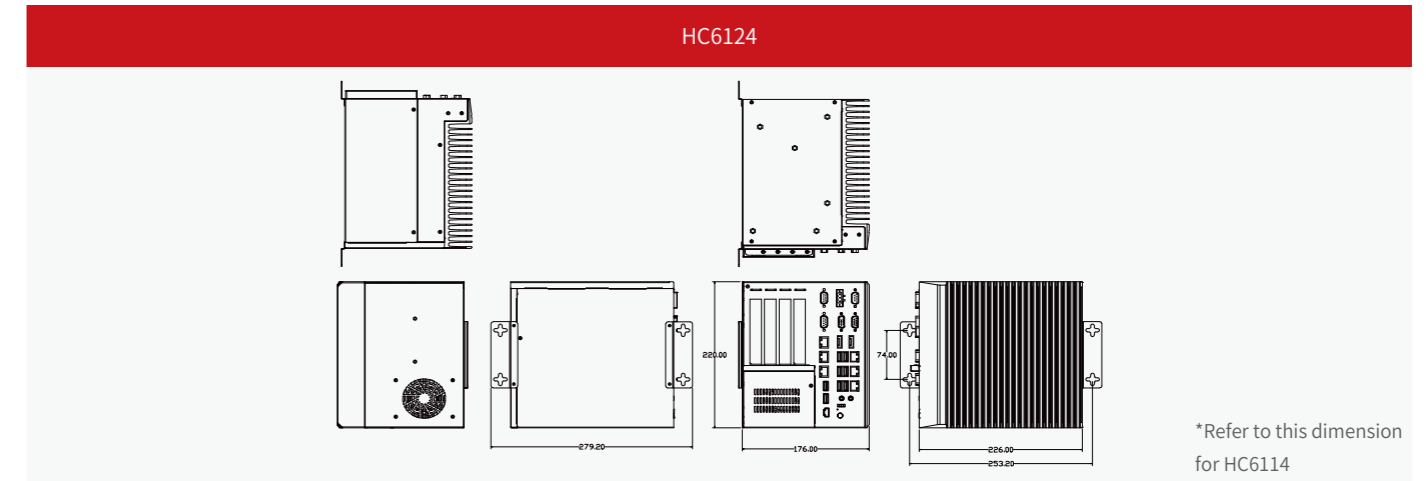
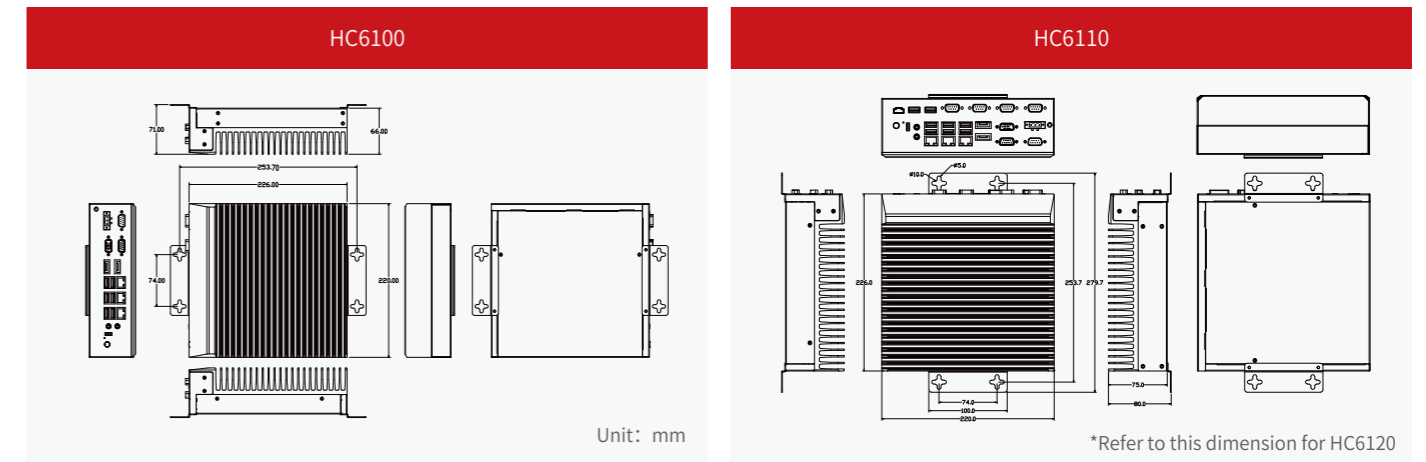
- 01 Power Button
- 02 Reset
- 03 LED (SATA、Standby、DG、WD)
- 04 Line-out、Mic-in
- 05 3x LAN
- 06 4 x USB3.0
- 07 2x USB2.0
- 08 2x DP
- 09 VGA
- 10 COM1 (RS232)
- 11 COM2 (RS485)
- 12 Power input interface (24V DC IN)
- 13 Remote (Remote switch)
- 14 2x USB2.0
- 15 COM3 (RS485)
- 16 COM4 (RS485)
- 17 (1x PCIe16x (3.0)、  
1x PCIe4x (2.0)、2x PCI)
- 18 COM5 (RS232)
- 19 COM6 (RS232)



#### HC6124

- 01 Power Button
- 02 Reset
- 03 LED (SATA、Standby、DG、WD)
- 04 Line-out、Mic-in
- 05 3 x LAN
- 06 4 x USB3.0
- 07 2x USB2.0
- 08 2x DP
- 09 VGA
- 10 COM1 (RS232)
- 11 COM2 (RS485)
- 12 Power input interface (24V DC IN)
- 13 Remote (Remote switch)
- 14 2x USB2.0
- 15 3 x LAN
- 16 (1x PCIe16x (3.0)、  
1x PCIe4x (2.0)、2x PCI)
- 17 COM3 (RS232)
- 18 COM4 (RS485)

### Dimension Drawing










### Ordering information

Model	CPU	MEM	SSD	HDD	Extension Module
HC6100-S9XXX	i3-9100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6100-C9XXX	i5-9400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6110-S9XXX	i3-9100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6110-C9XXX	i5-9400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6120-S9XXX	i3-9100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6120-C9XXX	i5-9400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6114-C9XXX	i5-9400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6114-M9XXX	i7-9700	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6124-C9XXX	i5-9400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC6124-M9XXX	i7-9700	8G/16G	128G/256G/512G/1T	1T/2T/4T	/

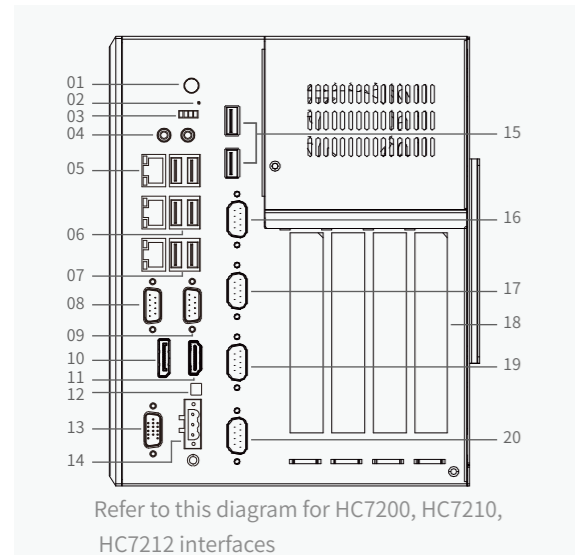
★ XXX means Memory capacity 2<sup>x</sup>、SSD capacity 2<sup>x</sup>、HDD capacity XT in sequence

## HC7000 Series Product Specification

Attribute		HC7200	HC7210	HC7220
Product Image				
System Parameters	CPU	Intel® Core™ i3-10100/i5-10400/i7-10700		
	Chipset	H420E		
	BIOS	AMI 128Mbit UEFI		
	Memory	2x SODIMM DDR4, MAX 64GB		
	Storage	1x M.2 M-Key 2280, SATA3.0; 1x SATA		
External I/O	Display	1x DP, MAX 4096 x 2304@60Hz; 1x HDMI, MAX 4096 x 2160@30Hz; 1x VGA, MAX 1920 x 1080@60Hz		
	Ethernet	1x LAN, Intel® I219LM 2x LAN, Intel® I210AT		1x LAN, Intel® I219LM; 5x LAN, Intel® I210AT
	Serial port	1x RS-232; 1x RS-485	3x RS-232; 3x RS-485	2x RS-232; 2x RS-485
	USB	4x USB3.0; 2x USB2.0	4x USB3.0; 4x USB2.0	
	Audio	1x Line-out, 1x Mic-in, Realtek ALC662		
	Others	REMOTE	2-pin connector for remote switches	
RESET		Support long-press restart		
Internal expansion	USB	-	1x USB2.0, Type-A	
	M.2	1x M.2 E-Key 2230, extensible Wi-Fi ; 1x M.2 B-Key 3052, extensible 4G/5G		
	SIM	1x Micro SIM		
	PCIe	-		
	PCI	-		
Operation System	OS	Windows 10 IoT LTSC、Linux		
Power supply	Input Voltage	24V DC IN, 3PIN Phoenix		
	Overall power consumption	MAX 180W		
Mechanical parameters	Mounting method	Wall mounting		
	Dimension	226 x 220 x 68mm	226 x 220 x 75mm	
	Net weight	3.1kg	3.5kg	
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s		
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		

Attribute		HC7212	HC7222	HC7214	HC7224
Product Image					
System Parameters	CPU	Intel® Core™ i3-10100/i5-10400/i7-10700			
	Chipset	H420E			
	BIOS	AMI 128Mbit UEFI			
	Memory	2 x SODIMM DDR4, MAX 64GB			
	Storage	1x M.2 M-Key 2280, SATA3.0; 1x SATA			
External I/O	Display	1x DP, MAX 4096 x 2304@60Hz; 1x HDMI, MAX 4096 x 2160@30 Hz; 1x VGA, MAX 1920 x 1080@60Hz			
	Ethernet	1x LAN, Intel® I219LM		1x LAN, Intel® I219LM ;	
		2x LAN, Intel® I210AT	5x LAN, Intel® I210AT	2x LAN, Intel® I210AT	5x LAN, Intel® I210AT
	Serial port	3x RS-232; 3x RS-485	2x RS-232; 2x RS-485	3x RS-232; 3x RS-485	2x RS-232; 2x RS-485
	USB	4x USB3.0; 4x USB2.0			
	Audio	1x Line-out, 1x Mic-in, Realtek ALC662			
Others	REMOTE	2-pin connector for remote switches			
	RESET	Support long-press restart			
Internal expansion	USB	1x USB2.0, Type-A			
	M.2	1x M.2 E-Key 2230, extensible Wi-Fi; 1x M.2 B-Key 3052, extensible 4G/5G			
	SIM	1x Micro SIM			
	PCIe	1 x PCIe 16x (3.0) ; 1 x PCIe 4x (3.0, x2 signal)			
	PCI	-			2x PCI
Operation System	OS	Windows 10 IoT LTSC、Linux			
Power supply	Input Voltage	24V DC IN, 3PIN Phoenix			
	Overall power consumption	MAX 180W			
Mechanical parameters	Mounting method	Wall mounting			
	Dimension	226 x 220 x 136mm		226 x 220 x 176mm	
	Net weight	3.8kg		4.1kg	
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s			
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )			
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )			
	EMC	CE、FCC Class B			

## Interface Description

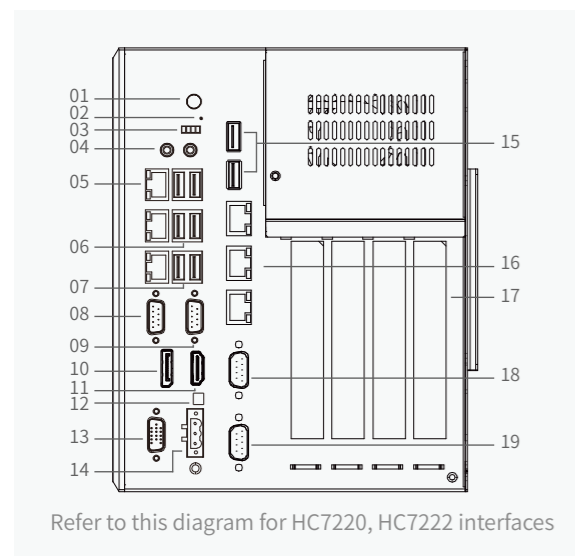


### HC7214

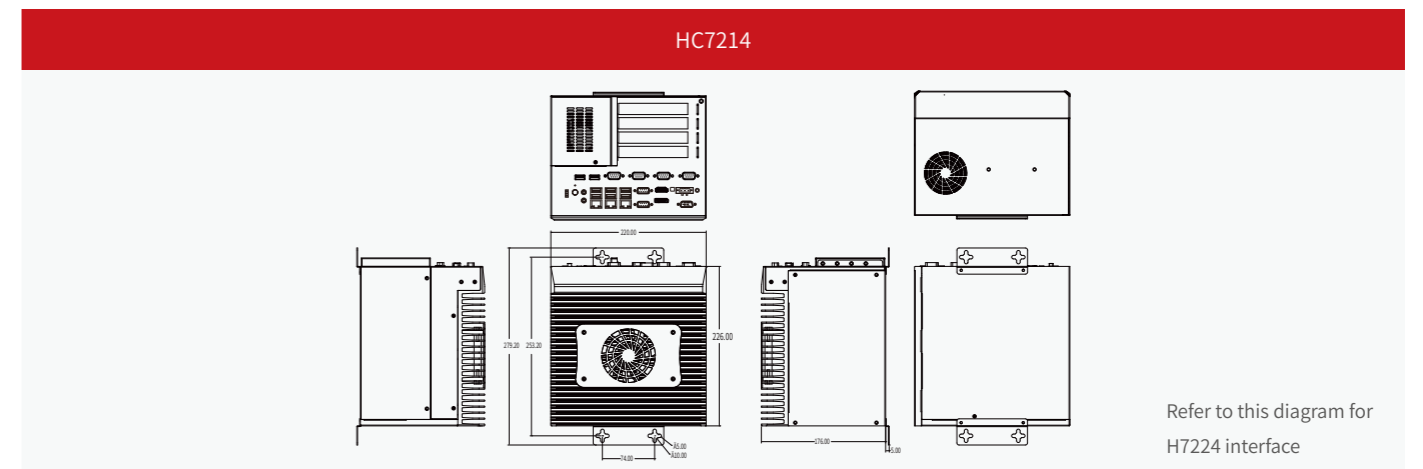
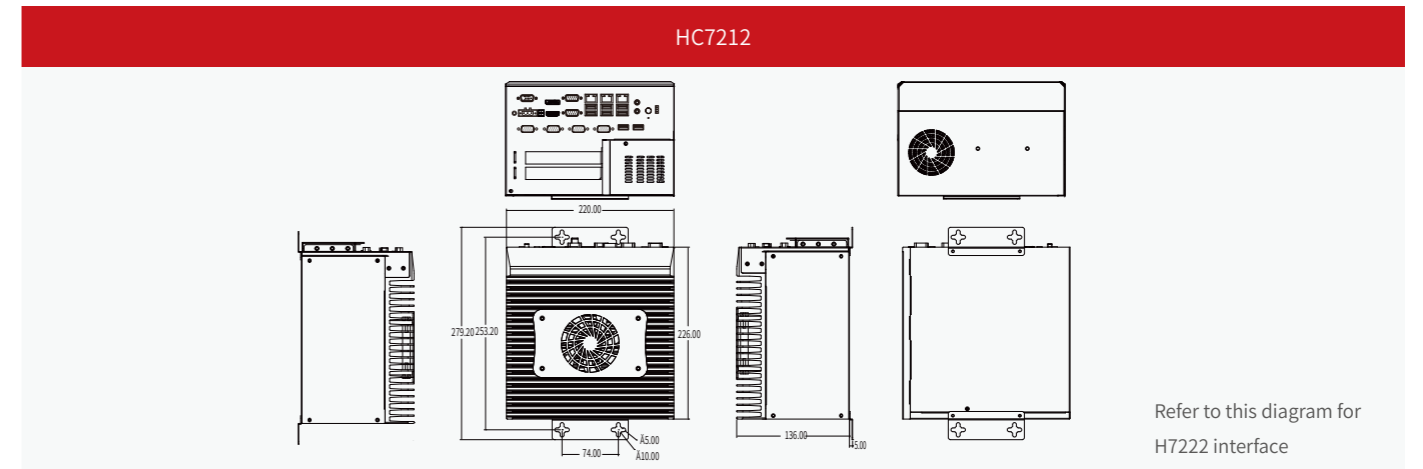
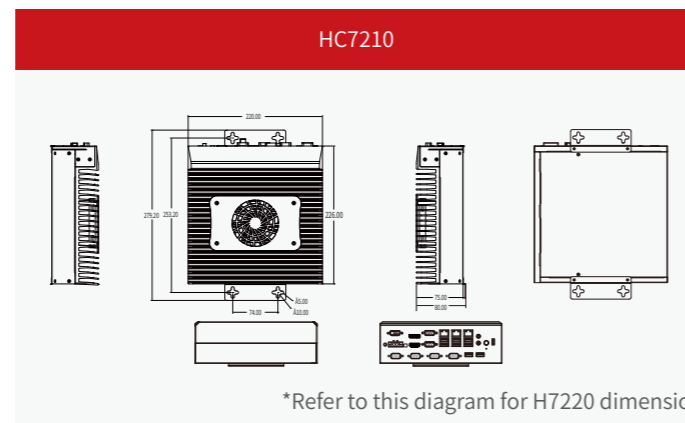
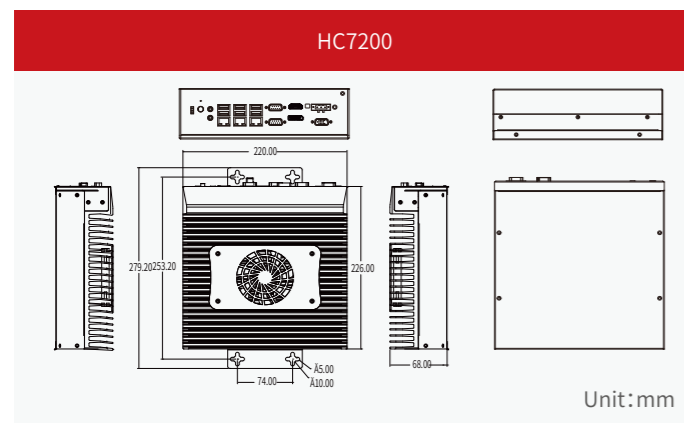
- 01 Power Button
- 02 Reset
- 03 LED (DG, Standby, SATA, WD)
- 04 Line-out, Mic-in
- 05 3x LAN
- 06 4x USB3.0
- 07 2x USB2.0
- 08 COM1 (RS232)
- 09 COM2 (RS485)
- 10 DP
- 11 HDMI
- 12 Remote (Remote switch)
- 13 VGA
- 14 Power input interface (24V DC IN)
- 15 2x USB2.0
- 16 COM3 (RS485)
- 17 COM4 (RS485)
- 18 (1x PCIe3.0 (16x) ,  
1x PCIe3.0 (4x) , 2x PCI
- 19 COM5 (RS232)
- 20 COM6 (RS232)

### HC7224

- 01 Power Button
- 02 Reset
- 03 LED (DG, Standby, SATA, WD)
- 04 Line-out, Mic-in
- 05 3 x LAN
- 06 4 x USB3.0
- 07 2x USB2.0
- 08 COM1 (RS232)
- 09 COM2 (RS485)
- 10 DP
- 11 HDMI
- 12 Remote (Remote switch)
- 13 VGA
- 14 Power input interface (24V DC IN)
- 15 2x USB2.0
- 16 3 x LAN
- 17 (1x PCIe3.0 (16x) ,  
1x PCIe3.0 (4x) , 2x PCI
- 18 COM3 (RS232)
- 19 COM4 (RS485)



## Dimension Drawing



## Ordering information


Model	CPU	MEM	SSD	HDD	Extension Module
HC7200-S10XXX	i3-10100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7200-C10XXX	i5-10400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7210-S10XXX	i3-10100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7210-C10XXX	i5-10400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7220-S10XXX	i3-10100	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7220-C10XXX	i5-10400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7214-C10XXX	i5-10400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7214-M10XXX	i7-10700	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7224-C10XXX	i5-10400	8G/16G	128G/256G/512G/1T	1T/2T/4T	/
HC7224-M10XXX	i7-10700	8G/16G	128G/256G/512G/1T	1T/2T/4T	/

\* XXX means Memory capacity 2<sup>X</sup>, SSD capacity 2<sup>X</sup>, HDD capacity XT in sequence

## HRC-U Series Product Specification

Attribut		HRC-UA-H310C	HRC-UA-H610D
Product Image			
System Parameters	CPU	Intel® 6/7/8/9th Core™	Intel® 12/13/14 Core™
	Chipset	H310C	H610
	BIOS	AMI UEFI BIOS	Insyde BIOS
	Memory	2x UDIMM DDR4, MAX 32GB	2x UDIMM DDR4, MAX 64GB
	Storage	1x mSATA, SATA 3.0; 3x SATA	1 x M.2 2242/2280, NVMe; 4 x SATA
External I/O	Display	1x HDMI, MAX 4096 x 2160@24 Hz; 1x DVI-D, MAX 1920 x 1200@60Hz; 1x VGA, MAX 1920 x 1200@60Hz	1x HDMI, MAX 4K@30Hz; 1x DP, MAX 4K@60Hz; 1x VGA, MAX 1920 x 1200@60Hz
	Ethernet	1x LAN, Intel® I219LM; 1x LAN, Intel® I225-V	1x LAN, Intel® I219V; 1x LAN, Intel® I210
	Serial port	1x RS-232; extensible 2x RS-485/232, 3x RS232	2x RS-232/485; extensible 4x RS/232
	USB	4x USB3.0; 4x USB2.0	4x USB3.0; 4x USB2.0
	Audio	1x Line-in, 1x Line-out, 1x Mic-in, Realtek ALC897	1x Line-in, 1x Line-out, 1x Mic-in, Realtek ALC897
	Internal expansion	USB	1x USB2.0, Type-A
M.2		-	1x M.2 2230, Support WIFI
miniPCIe		1x miniPCIe, Support WIFI; 1x miniPCIe, Support 3G/4G	-
SIM		1x SIM	-
PCIe		1x PCIe 16x (3.0) ; 1x PCIe 4x (3.0) ; 1x PCIe 1x (3.0)	1x PCIe 16x (4.0) ; 3x PCIe 4x (3.0) ;
PCI		4 x PCI	3x PCI
Operation System	OS	Windows、Linux	
Power supply	Input Voltage	220V AC IN	
	Power supply	300/650/1000W, ATX	
Mechanical parameters	Mounting method	Standard rack-mounted	

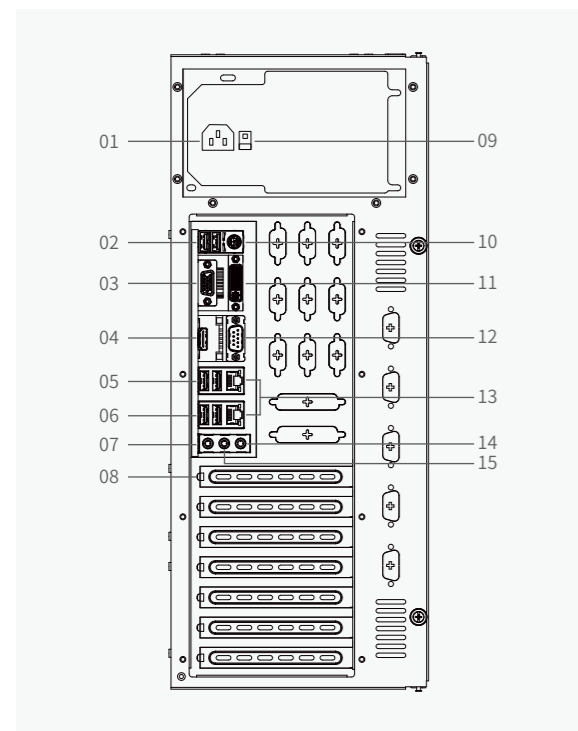
Attribute		HRC-UA-H310C	HRC-UA-H610D
Mechanical parameters	Dimension	176x430x471.4mm	
	Net weight	11.8kg	
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s	
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )	
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )	
	EMC	CE、FCC Class B	

Attribute		HRC-UA-Q270	HRC-UA-Q470	HRC-UA-Q670
Product Image				
System Parameters	CPU	Intel® 6/7/8/9th Core™	Intel® 10/11 th Core™	Intel® 12/13 th Core™
	Chipset	Q270	Q470	Q670
	BIOS	AMI UEFI BIOS, Support Watchdog Timer		
	Memory	2x UDIMM DDR4, MAX 64GB	2x UDIMM DDR4, MAX 128GB	
	Storage	1 x M.2 M-Key 2242/2280, SATA 3.0/PCIe 3.0; 4 x SATA		
External I/O	Display	1x HDMI, MAX 4096 x 2160@24 Hz; 1x DVI-D, MAX 1920 x 1200@60Hz; 1x VGA, MAX 1920 x 1200@60Hz		
	Ethernet	1x LAN, Intel® I219LM; 1x LAN, Intel® I225-V	1x LAN, Intel® I219LM; 1x LAN, Intel® I211	1x LAN, Intel® I219-V; 1x LAN, Intel® I225-V
	Serial port	1x RS-232; extensible 2x RS-485/232, 3x RS232		
	USB	4x USB3.0; 4x USB2.0		
	Audio	1x Line-in, 1x Line-out, 1x Mic-in, Realtek Audio HDA Codec		
	Internal expansion	USB	1x USB2.0, Type-A	
M.2		-	1 x M.2 E-Key 2230, extensible Wi-Fi	
miniPCIe		1x miniPCIe, extensible 3G/4G/WIFI;		
SIM		1x SIM		

## HRC-U Series Product Specification

Attribute		HRC-UA-Q270	HRC-UA-Q470	HRC-UA-Q670
Internal expansion	PCIe	1x PCIe 16x or 8x (3.0) ; 1x PCIe 16x or 8x (3.0) ; 3x PCIe 4x (3.0)		1x PCIe 16x or 8x (4.0) ; 1x PCIe 16x or 8x (4.0) ; 3x PCIe 4x (4.0) ; 1x PCIe 4x (3.0)
	PCI	2 x PCI		1x PCI
Operation System	OS	Windows, Linux		
Power supply	Input Voltage	220V AC IN		
	Power supply	300/650/1000W, ATX		
Mechanical parameters	Mounting method	Standard rack-mounted		
	Dimension	176x430x471.4mm		
	Net weight	11.8kg		
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s		
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		

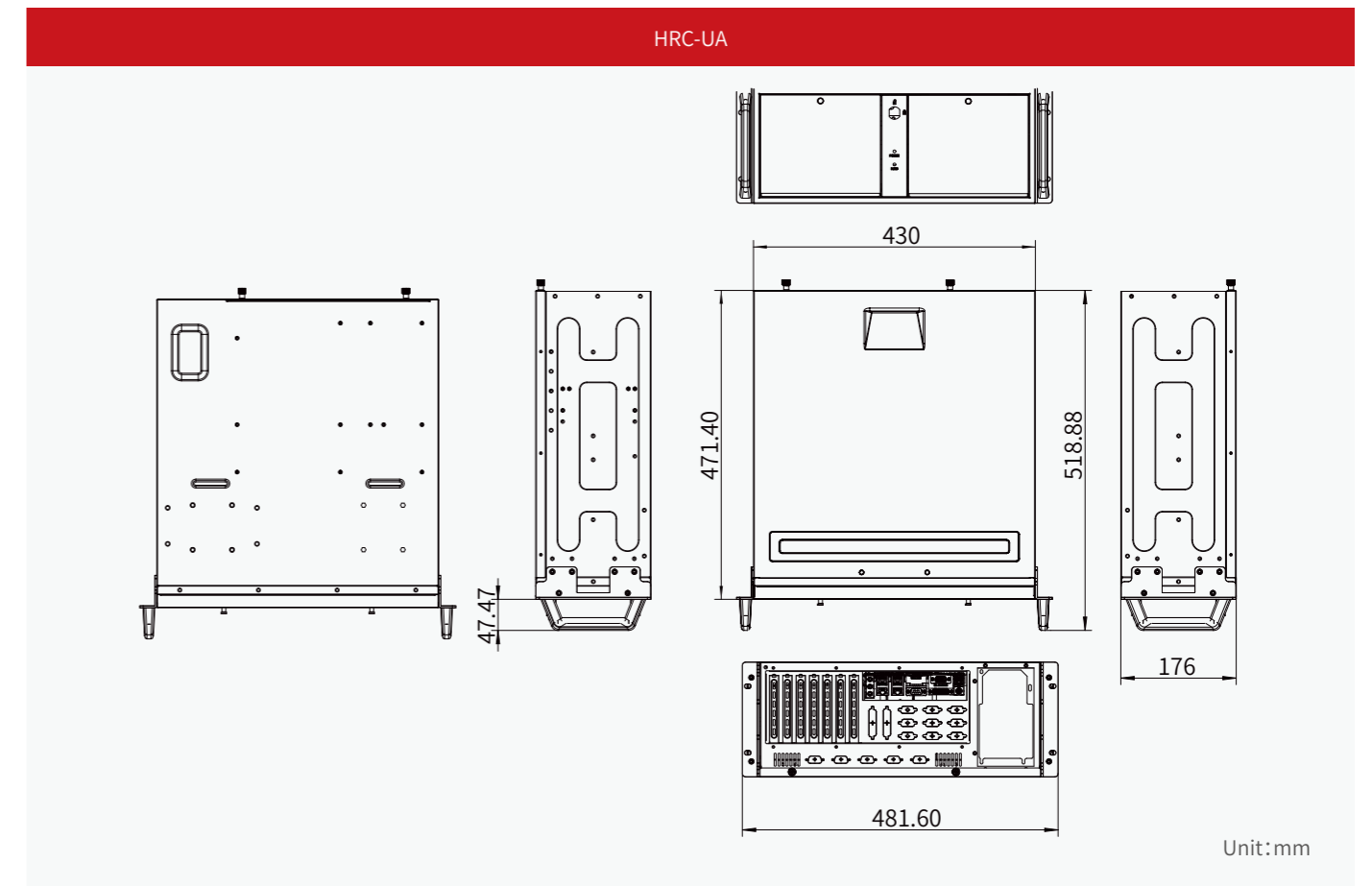
## Interface Description



### HRC-U SERIES

- 01 Power input (220V AC IN)
- 02 2x USB2.0/USB3.0
- 03 VGA
- 04 HDMI
- 05 2x USB3.0
- 06 2x USB3.0
- 07 Mic-in
- 08 PIC/PCIe Expansion
- 09 Power Button
- 10 PS/2
- 11 DVI
- 12 RS232
- 13 2x LAN
- 14 Line-in
- 15 Line-out

## Dimension Drawing




## Ordering information

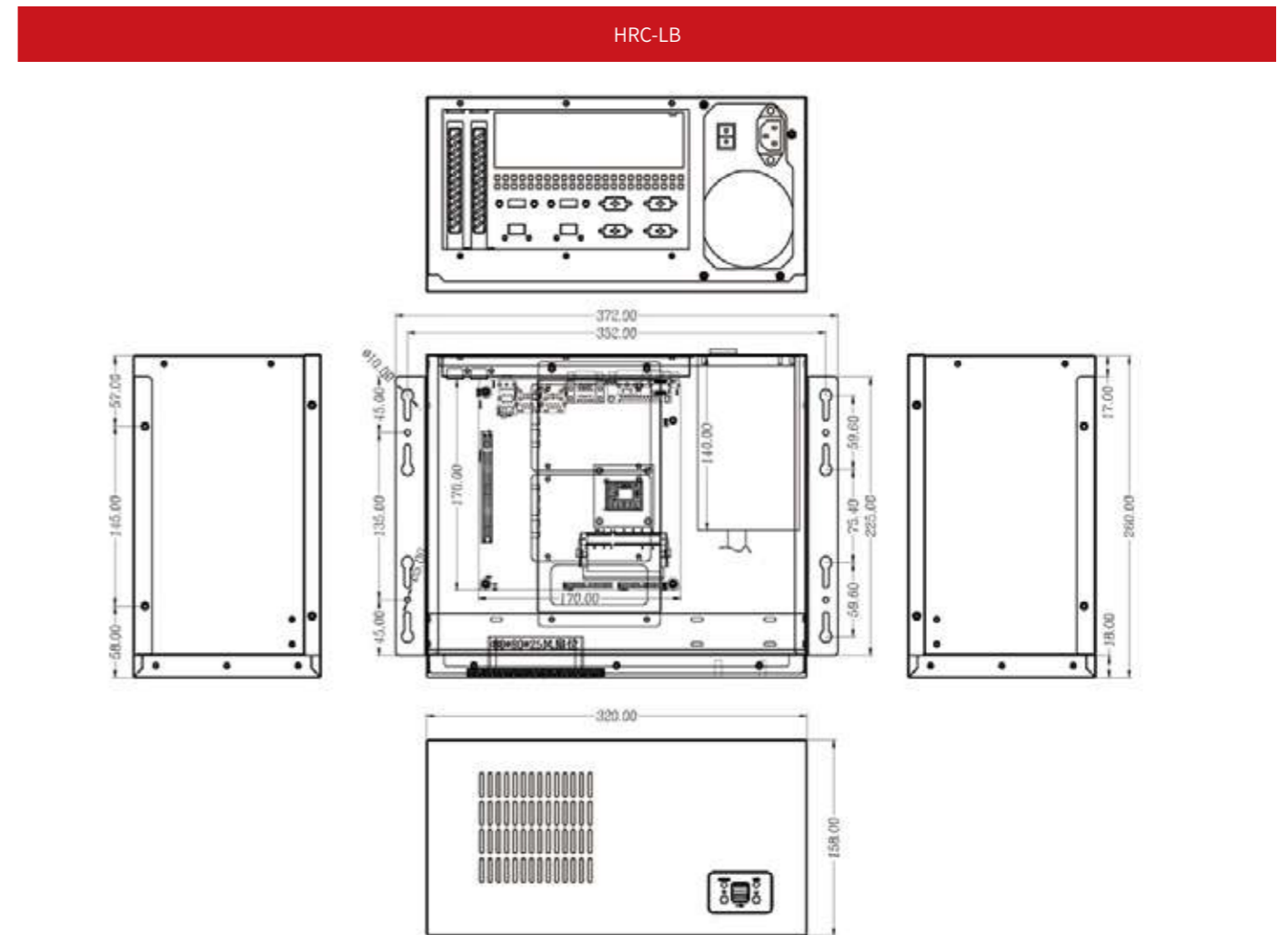
Model	CPU	MEM	SSD	HDD	Extension Module
HRC-UA-H310C	i5-6500/9400 i7-6700/7700/9700	8G/16G/32G	128G/256G/512G /1T (mSATA)	1T/2T/4T/8T	/
HRC-UA-H610D	i5-12400/i5-12500 i7-12700	8G/16G/32G/64G	128G/256G/512G /1T (M.2 NVMe)		
HRC-UA-Q270	i5-6500/9400 i7-6700/7700/9700	8G/16G/32G/64G	128G/256G/512G /1T (M.2)		
HRC-UA-Q470	i5-10500 i7-10700	8G/16G/32G/64G /128G	128G/256G/512G /1T (M.2)		
HRC-UA-Q670	i3-12100 i5-12400 i7-12700				

\* HRC-U series rack mounted industrial control computer can be equipped with optional accessories like CPU/MEM/SSD/HDD as needed.

## HRC-L Series Product Specification

Attribute		HRC-LB
Product Image		
System Parameters	CPU	Intel® 6/7/8/9 th Core™ Desktop CPU
	Chipset	H110
	BIOS	AMI UEFI BIOS(Support Watchdog Timer)
	Memory	Support DDR4 2666, 1 * UDIMM Slot, Up to 32GB
	Storage	1 * Mini-SATA Slot, 2 * SATA 3.0 7P Connector
External IO	Display	1 * VGA (DB15/F): max resolution up to 1920*1200@60Hz 1 * HDMI (TYPE-A): max resolution up to 4096*2160@24Hz
	Ethernet	1 * Intel® I219 GBE LAN Chip (10/100/1000 Mbps, RJ45) 4 * Intel® I210 GBE LAN Chip (10/100/1000 Mbps, RJ45)
	Serial port	2 * RS232 (DB9/M, COM1-2, Full Lanes)
	USB	4x USB3.0; 4x USB2.0
Internal expansion	USB	1x USB2.0, Type-A
	PCIe	1x PCIe 16x
Operation System	OS	Windows 10 IoT LTSC、Linux
Power supply	Input Voltage	220V AC IN
	Power supply	300/650W, ATX
Mechanical parameters	Mounting method	Vertical mounting
	Dimension	320x158x260mm
	Net weight	5kg
Environmental parameters	Operating Temperature	0~60°C, with airflow at 0.7m/s
	Storage Temperature	-25°C ~70°C, 60°C @ 95% ( non-condensing )
	Humidity	10 ~ 95% @ 40°C ( non-condensing )
	EMC	CE、FCC Class B

## Dimension Drawing



Unit:mm

## Ordering information

Model	CPU	MEM	SSD	HDD	Extension Module
HRC-LA-H420E	i3-10100/i5-10400 /i7-10700	8G/16G/32G/64G	128G/256G/512G/ 1T (M.2)	1T/2T/4T/8T	/

\* HRC-L series rack mounted industrial control computer can be equipped with optional accessories like CPU/MEM/SSD/HDD as needed

## Product Characteristics

HWAINTEK fanless multi-touch all-in-one industrial grade tablet computer is designed specifically for noiseless, low power consumption applications.

The sizes range from 10.1" to 21.5". All sizes are designed with a 16:9 widescreen, which is about 40% larger than the 4:3 display area. Two touch technology methods of capacitive and resistive type are provided to meet the demand of different industrial scenarios. The product is compatible with mainstream upper computer configuration software and meets most interaction scenarios.

This series of products can meet the hardware requirements of almost any interaction scenarios.

## Application Scenarios

- Woodworking material cutting
- Aluminum machining
- CNC numerical control
- Laser metal machining
- Agricultural information collection and display
- Medical device interaction

## Product Introduction



### HP10-AC series Touch Display

- 10-wire capacitive multi-touch, AG anti-glared surface treatment
- Support USB, serial port touch signal input, with serial port signal for
- 10.1", 12.1", 15.6", 17", 19", 21.5" display screens are optional
- IP65 protection for front panel, completely enclosed
- design of top railmounting
- Touch accuracy up to 1mm, high sensitivity



### HP10-AR series Touch Display

- Support USB, serial port touch signal input, with serial port signal for remote transmission
- 10.1", 12.1", 15.6", 17", 19", 21.5" display screens are optional
- IP65 protection for front panel, completely enclosed design of top rail mounting
- Resistive screen, no touch media requirements, superior usage performance
- Super anti-interference, adapt to complex electromagnetic environment

### HP10-AC specification

Attribute		HP11-AC101	HP11-AC121	HP11-AC156
LCD	Screen type	10.1" a-Si TFT-LCD	12.1" a-Si TFT-LCD	15.6" a-Si TFT-LCD
	Resolution	1280 x 800	1280 x 800	1920 x 1080
	Aspect Ratio	16:10	16:10	16:9
	Active area	216.96(H) x 135.60(V)mm	262.565(H) x 164.16 (V)mm	344.16(H) x 193.59(V)mm
	Max number of colors	16.7M	16.7M	16.7M
	Pixel density	149 PPI	123 PPI	141 PPI
	Brightness	400cd/m <sup>2</sup>	450cd/m <sup>2</sup>	250cd/m <sup>2</sup>
	Contrast	800:1	1000:1	3000:1
	Viewing Angle	85/85/85/85	85/85/85/85	89/89/89/89
	Backlight type	WLED	WLED	WLED
Backlit life	50000h	50000h	50000h	
Touch screen	Touch type	Projected capacitive touch screen		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 7H		
	Transmittance	≥85%		
	Communication	USB		
	Touch points	Multi touch/ single touch		
Drive support	Windows7, Windws 8, Windows 10, Linux			
Environmental parameters	Operating temperature	-20°C~70°C, with airflow at 0.7m/s		0°C ~ 60°C, with airflow at 0.7m/s
	Storage temperatur	-25°C~70°C, 60°C @ 95% (non-condensing)		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		

### HP10-AR specification

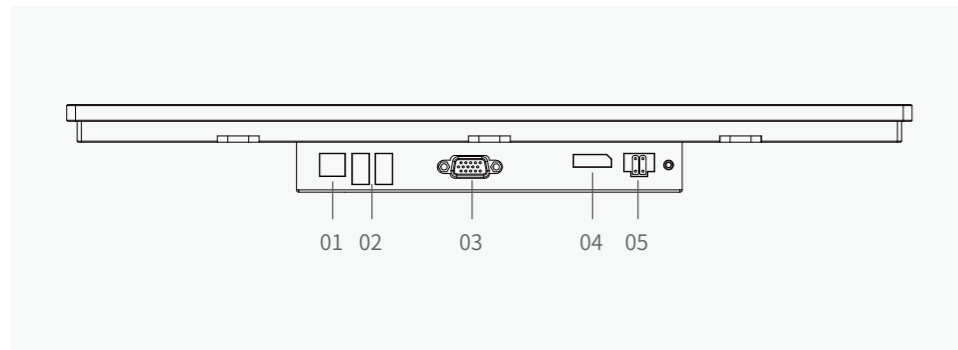
Attribute		HP11-AR101	HP11-AR121	HP11-AR156
LCD	Screen type	10.1" a-Si TFT-LCD	12.1" a-Si TFT-LCD	15.6" a-Si TFT-LCD
	Resolution	1280 x 800	1280 x 800	1920 x 1080
	Aspect Ratio	16:10	16:10	16:9
	Active area	216.96(H) x 135.60(V)mm	262.565(H) x 164.16 (V)mm	344.16(H) x 193.59(V)mm
	Max number of colors	16.7M	16.7M	16.7M
	Pixel density	149PPI	123PPI	141PPI
	Brightness	400cd/m <sup>2</sup>	450cd/m <sup>2</sup>	250cd/m <sup>2</sup>
	Contrast	800:1	1000:1	3000:1
	Viewing Angle	85/85/85/85	85/85/85/85	89/89/89/89
	Backlight type	WLED	WLED	WLED
Backlit life	50000h	50000h	50000h	
Touch screen	Touch type	5-wire resistive touch screen		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 3H		
	Transmittance	≥78%		
	Communication	USB		
	Touch points	Single point		
Drive support	Windows7, Windws 8, Windows 10, Linux			
Environmental parameters	Operating temperatu	-20°C~60°C, with airflow at 0.7m/s		
	Storage temperatur	-25°C~70°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10~95% @ 40°C(non-condensing)		
	EMC	CE、FCC Class B		

Attribute		HP11-AC17	HP11-AC19	HP11-AC215
LCD	Screen type	17" a-Si TFT-LCD	19" a-Si TFT-LCD	21.5" a-Si TFT-LCD
	Resolution	1280 x 1024	1280 x 1024	1920 x 1080
	Aspect Ratio	5:4	5:4	16:9
	Active area	337.92(H) x 270.336 (V)mm	374.784(H) x 299.827(V)mm	476.64(H) x 268.11(V)mm
	Max number of colors	16.7M	16.7M	16.7M
	Pixel density	96PPI	86PPI	102PPI
	Brightness	250cd/m <sup>2</sup>	250cd/m <sup>2</sup>	300cd/m <sup>2</sup>
	Contrast	1000:1	1000:1	1000:1
	Viewing Angle	89/89/89/89	89/89/89/89	89/89/89/89
	Backlight type	WLED	WLED	WLED
Backlit life	50000h	50000h	50000h	
Touch screen	Touch type	Projected capacitive touch screen		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 7H		
	Transmittance	≥85%		
	Communication	USB		
	Touch points	Multi touch/ single touch		
Drive support	Windows7, Windws 8, Windows 10, Linux			
Environmental parameters	Operating temperature	-20°C~70°C, with airflow at 0.7m/s		
	Storage temperatur	-25°C~70°C, 60°C @ 95% (non-condensing)		
	Relative humidity	10 ~ 95% @ 40°C ( non-condensing )		
	EMC	CE、FCC Class B		

Attribute		HP11-AR17	HP11-AR19	HP11-AR215
LCD	Screen type	17" a-Si TFT-LCD	19" a-Si TFT-LCD	21.5" a-Si TFT-LCD
	Resolution	1280 x 1024	1280 x 1024	1920 x 1080
	Aspect Ratio	5:4	5:4	16:9
	Active area	337.92(H) x 270.336 (V)mm	374.784(H) x 299.827(V)mm	476.64(H) x 268.11(V)mm
	Max number of colors	16.7M	16.7M	16.7M
	Pixel density	96PPI	86PPI	102PPI
	Brightness	250cd/m <sup>2</sup>	250cd/m <sup>2</sup>	300cd/m <sup>2</sup>
	Contrast	1000:1	1000:1	1000:1
	Viewing Angle	89/89/89/89	89/89/89/89	89/89/89/89
	Backlight type	WLED	WLED	WLED
Backlit life	50000h	50000h	50000h	
Touch screen	Touch type	5-wire resistive touch screen		
	Surface technics	AG Anti-glared		
	Surface hardness	Mohs 3H		
	Transmittance	≥78%		
	Communication	USB		
	Touch points	Single point		
Drive support	Windows7, Windws 8, Windows 10, Linux			
Environmental parameters	Operating temperature	-20°C~60°C, with airflow at 0.7m/s		
	Storage temperatur	-25°C~70°C, 60°C @ 95% ( non-condensing )		
	Relative humidity	10~95% @ 40°C(non-condensing)		
	EMC	CE、FCC Class B		



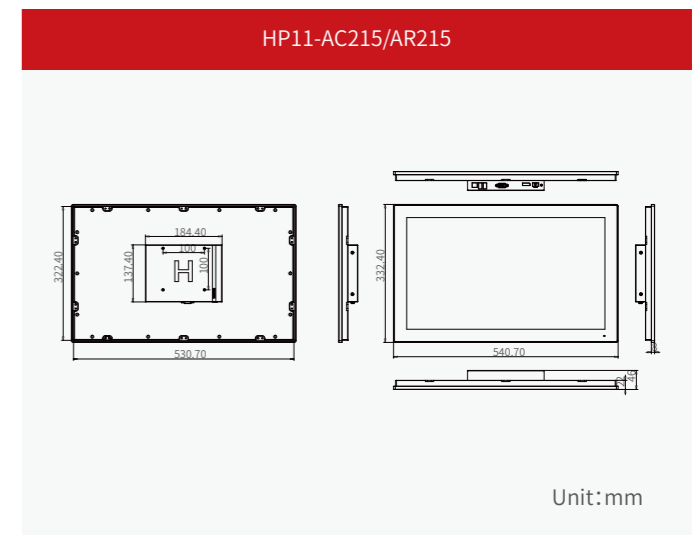
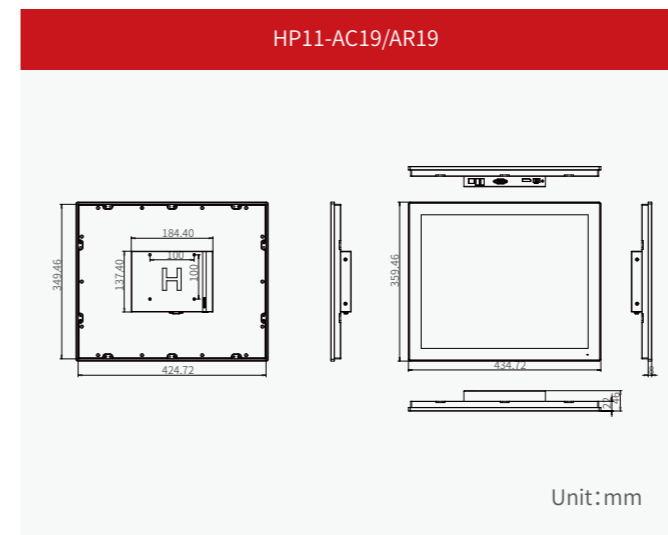
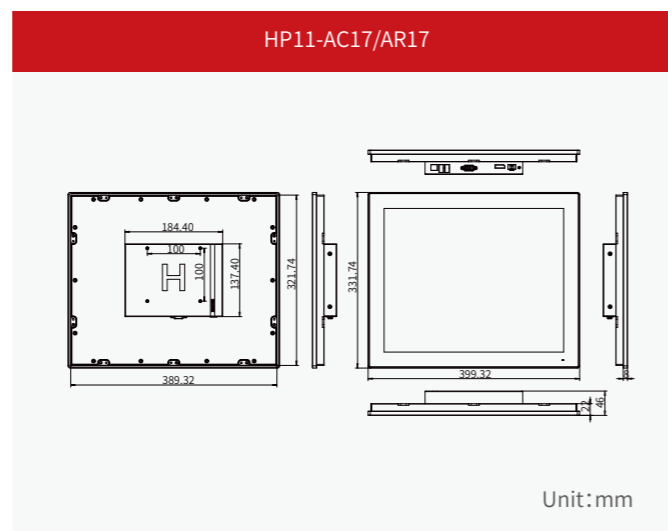
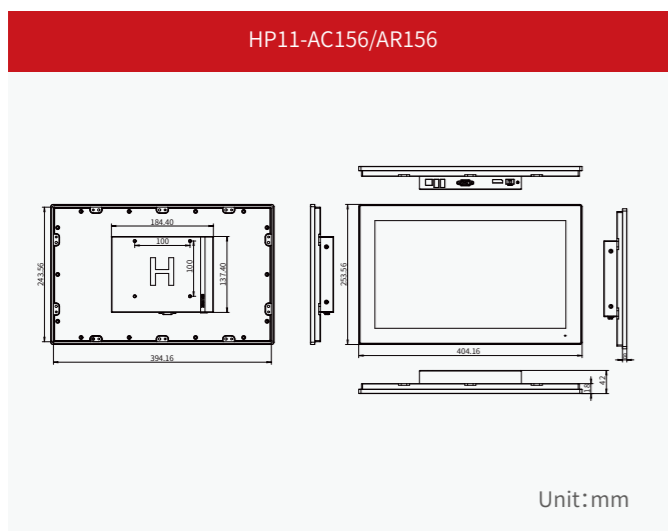
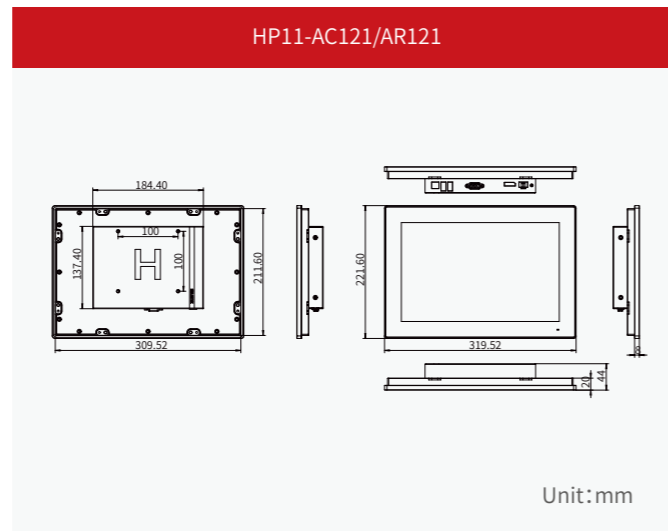
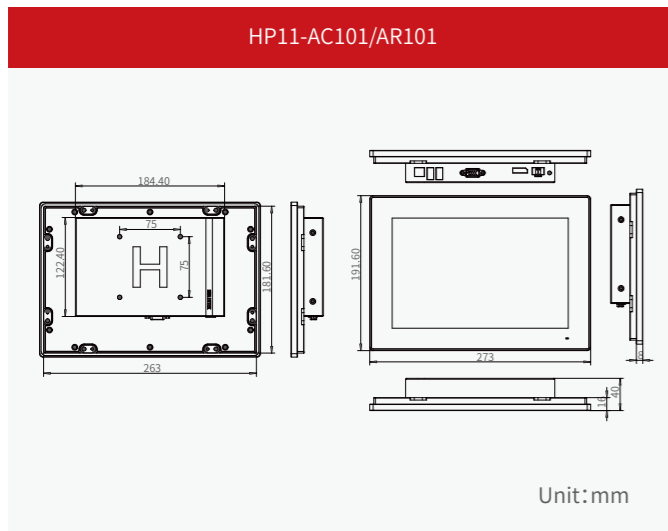
## Interface Description



### HP10 SERIES

- 01 USB2.0 (TOUCH)
- 02 2x USB2.0
- 03 VGA
- 04 DP
- 05 Power input interface(24V DC IN)

## Dimension Drawing



## Ordering information

Model	Screen type	Screen size	Touch signal
HP11-AC101	Capacitive screen	10.1"	USB
HP11-AC121	Capacitive screen	12.1"	USB
HP11-AC156	Capacitive screen	15.6"	USB
HP11-AC17	Capacitive screen	17"	USB
HP11-AC19	Capacitive screen	19"	USB
HP11-AC215	Capacitive screen	21.5"	USB
HP11-AR101	Resistive screen	10.1"	USB
HP11-AR121	Resistive screen	12.1"	USB
HP11-AR156	Resistive screen	15.6"	USB
HP11-AR17	Resistive screen	17"	USB
HP11-AR19	Resistive screen	19"	USB
HP11-AR215	Resistive screen	21.5"	USB

# HWAINTEK

ADVANCED TECHNOLOGY EMPOWERS INTELLIGENT INDUSTRY

Focus on intelligent industry

Help industrial intelligence

Enable industrial automation enterprises to transform to intelligence