



MODEL. I600-BI SERIES

Fanless Design Industrial Box PC



Introduction

I600-BI embedded fanless Industrial Box Pc adopts an internal modular design, supports B85/B365 chipsets, has multiple processors to choose from, and has rich IO interfaces and expandable slots. It supports WINDOWS 7/8/10/11/LINUX operating system, supports 3G, 4G Internet access function, meet communication requirements (need to select the module separately), supports Wifi, Bluetooth dual communication module (need to select the module separately), supports 12 serial ports 12*RS-232 (4*RS422/485 optional) to meet the use beyond the basics.

Specification

B85 Mother Board Specification

| I600-BI Series | | | |
|----------------|--|--|---|
| Model | I600-BI(2E) | I600-BI(4E) | I600-BI(6E) |
| Chipset | B85 | | |
| CPU | Celeron G Series Core 4th-i3 / i5 / i7 | | |
| Memory | 2*DDR3 RAM Slots, Up to 16GB | | |
| Storage | 1*MSATA SSD Slot 1*M.2 NVME SSD Slot 2*SATA SSD Slots | | |
| Display | 1*HDMI: Resolution up to 4096*2304@24Hz 1*DP: Resolution up to 3840*2160@60Hz 1*DVI: Resolution up to 1920*1200@60Hz | | |
| Expansion | 1*Mini PCIE Slot, Support 4G and WIFI module 1*PCIE 16X or 2*PCI | | |
| Ethernet | 2*Intel i211V LAN Chip | 4*Intel i211V LAN Chip | 2*Intel i211V + 4*Intel i210 LAN Chip (Support POE) |
| | RJ-45 Type (10 / 100 / 1000 Mbps) | | |
| USB | 6*USB 3.0 (Type-A) 2*USB 2.0 (Type-A) | | |
| COM | 2*RS-232/422/485 (DB9 Type) 4*RS-232 (DB9 Type) | 4*RS-232/422/485 (DB9 Type) 4*RS-232 (DB9 Type) | 6*RS-232/422/485 (DB9 Type) 4*RS-232 (Phoenix Terminal Type) |
| Audio | 1*Line-In+1*Line-Out | | |



Specification

B365 Mother Board Specification

| I600-BI Series | | | |
|----------------|--|--|---|
| Model | I600-BI(2E) | I600-BI(4E) | I600-BI(6E) |
| Chipset | B365 | | |
| CPU | Celeron G Series Core 6 / 7 / 8 / 9th-i3 / i5 / i7 / i9 | | |
| Memory | 2*DDR4 RAM Slot, Up to 64GB | | |
| Storage | 1*MSATA SSD Slot 1*M.2 NVME SSD Slot 2*SATA SSD Slots | | |
| Display | 1*HDMI: Resolution up to 4096*2304@24Hz 1*DP: Resolution up to 3840*2160@60Hz 1*DVI: Resolution up to 1920*1200@60Hz | | |
| Expansion | 1*Mini PCIE Slot, Support 4G and WIFI module 1*PCIE 16X or 2*PCI | | |
| Ethernet | 2*Intel i225V LAN Chip | 2*Intel i211V LAN Chip 2*Intel i225V LAN Chip | 4*Intel i210V+2*Intel i225V LAN Chip (Support POE) |
| | RJ-45 Type (10 / 100 / 1000 / 2500 Mbps) | | |
| USB | 6*USB 3.0 (Type-A) 2*USB 2.0 (Type-A) | | |
| COM | 2*RS-232/422/485 (DB9 Type) 4*RS-232 (DB9 Type) | 4*RS-232/422/485 (DB9 Type) 4*RS-232 (DB9 Type) | 6*RS-232/422/485 (DB9 Type) 4*RS-232 (Phoenix Terminal Type) |
| Audio | 1*Line-In+1*Line-Out | | |



Fittings Information

| | | |
|-------------|-------------------------|---|
| RAM | DDR3 | 4GB / 8GB |
| | DDR4 | 4GB / 8GB / 16GB / 32GB |
| Storage | M.2 NVME | 128GB / 256GB / 512GB / 1TB / 2TB / 4TB |
| | MSATA | 64GB / 128GB / 256GB / 512GB / 1TB |
| | SATA | 120GB / 128GB / 240GB / 256GB / 480GB / 512GB / 960GB / 1TB / 2TB / 4TB |
| GSM Module | 4G | 4G+GPS |
| WIFI Module | 7260AN / 7260AC / AX210 | |
| GPU | Nvidia T600 | |

Device Specification

| | |
|---------------------|---|
| BIOS | AMI UEFI BIOS |
| Power Input | DC 9-36V With Overvoltage Protection |
| | Support Auto-Start |
| | 3 Pin Phoenix Terminal Type DC Plug |
| RTC | Support |
| Working Temperature | -20°C - 70°C , Support 24/7 Working |
| Storage Temperature | -30°C - 80°C |
| Humidity | 90% (20±50°C) |
| Size | 290.5mm*232mm*117.5mm |
| Structure | Fully Enclosed Aluminum Alloy Material |
| Heat dissipation | Fanless Design, Conduction Heat Dissipation |
| Installation | Desktop / Embedded / Wall-Mounted |
| System | Windows and Linux |



Ordering Information

| Model | Chipset | LAN | USB | COM | Display | RAM | SSD | Expansion | Power |
|-------------|---------|-----|-----|------------------------------|-------------------------|-------------------------|------------------------------------|----------------------------|----------|
| I600-BI(2E) | B85 | 2 | 8 | 2*RS-232/422/485 4*RS-232 | 1*HDMI 1*DP 1*VGA | 2*DDR3 Up to 16GB | 1*M.2 NVME 1*MSATA 2*SATA | 1*Mini PCIE PCIE or PCI | DC 9-36V |
| I600-BI(4E) | | 4 | | 4*RS-232/422/485 4*RS-232 | | | | | |
| I600-BI(6E) | | 6 | | 6*RS-232/422/485 4*RS-232 | | | | | |
| I600-BI(2E) | B365 | 2 | | 2*RS-232/422/485 4*RS-232 | | 2*DDR4 Up to 64GB | | | |
| I600-BI(4E) | | 4 | | 4*RS-232/422/485 4*RS-232 | | | | | |
| I600-BI(6E) | | 6 | | 6*RS-232/422/485 4*RS-232 | | | | | |

CPU Information

| Intel Chipset B85 | | | | | |
|-------------------|------|---------|-----------|-------|------------------|
| CPU | Core | Threads | Frequency | Cache | Graphics |
| Celeron G1820 | 2 | 2 | 2.70GHz | 2 MB | HD Graphics |
| Celeron G1820T | 2 | 2 | 2.40GHz | 2 MB | HD Graphics |
| Celeron G1830 | 2 | 2 | 2.80GHz | 2 MB | HD Graphics |
| Celeron G1840 | 2 | 2 | 2.80GHz | 2 MB | HD Graphics |
| Celeron G1840T | 2 | 2 | 2.50GHz | 2 MB | HD Graphics |
| Celeron G1850 | 2 | 2 | 2.90GHz | 2 MB | HD Graphics |
| i3-4130 | 2 | 4 | 3.40GHz | 3 MB | HD Graphics 4400 |
| i3-4130T | 2 | 4 | 2.90GHz | 3 MB | HD Graphics 4400 |
| i3-4330 | 2 | 4 | 3.50GHz | 4 MB | HD Graphics 4600 |
| i3-4330T | 2 | 4 | 3.00GHz | 4 MB | HD Graphics 4600 |
| i3-4350 | 2 | 4 | 3.60GHz | 4 MB | HD Graphics 4600 |



| Intel Chipset B85 | | | | | |
|--------------------|------|---------|--------------|-------|------------------|
| CPU | Core | Threads | Frequency | Cache | Graphics |
| i3-4350T | 2 | 4 | 3.10GHz | 4 MB | HD Graphics 4600 |
| i5-4570 | 4 | 4 | 3.20-3.60GHz | 6 MB | HD Graphics 4600 |
| i5-4570S | 4 | 4 | 2.90-3.60GHz | 6 MB | HD Graphics 4600 |
| i5-4570T | 2 | 4 | 2.90-3.60GHz | 4 MB | HD Graphics 4600 |
| i5-4690 | 4 | 4 | 3.50-3.90GHz | 6 MB | HD Graphics 4600 |
| i5-4690S | 4 | 4 | 3.20-3.90GHz | 6 MB | HD Graphics 4600 |
| i5-4690T | 4 | 4 | 2.50-3.50GHz | 6 MB | HD Graphics 4600 |
| i7-4770 | 4 | 8 | 3.40-3.80GHz | 8 MB | HD Graphics 4600 |
| i7-4770S | 4 | 8 | 3.10-3.90GHz | 8 MB | HD Graphics 4600 |
| i7-4770T | 4 | 8 | 2.50-3.70GHz | 8 MB | HD Graphics 4600 |
| i7-4790 | 4 | 8 | 3.60-4.00GHz | 8 MB | HD Graphics 4600 |
| i7-4790S | 4 | 8 | 3.20-4.00GHz | 8 MB | HD Graphics 4600 |
| i7-4790T | 4 | 8 | 2.70-3.90GHz | 8 MB | HD Graphics 4600 |
| Intel Chipset B365 | | | | | |
| CPU | Core | Threads | Frequency | Cache | Graphics |
| Celeron G4900 | 2 | 2 | 3.10 GHz | 2 MB | UHD Graphics 610 |
| Celeron G4900T | 2 | 2 | 2.90 GHz | 2 MB | UHD Graphics 610 |
| Celeron G4930 | 2 | 2 | 3.20 GHz | 2 MB | UHD Graphics 610 |
| Celeron G4930T | 2 | 2 | 3.00 GHz | 2 MB | UHD Graphics 610 |
| i3-6100 | 2 | 4 | 3.70GHz | 3 MB | HD Graphics 530 |
| i3-6100T | 2 | 4 | 3.20GHz | 3 MB | HD Graphics 530 |
| i3-6300 | 2 | 4 | 3.80GHz | 4 MB | HD Graphics 530 |
| i3-6300T | 2 | 4 | 3.30GHz | 4 MB | HD Graphics 530 |
| i5-6400 | 4 | 4 | 2.70-3.30GHz | 6 MB | HD Graphics 530 |



| Intel Chipset B365 | | | | | |
|--------------------|------|---------|--------------|-------|------------------|
| CPU | Core | Threads | Frequency | Cache | Graphics |
| i5-6400T | 4 | 4 | 2.20-2.80GHz | 6 MB | HD Graphics 530 |
| i5-6500 | 4 | 4 | 3.20-3.60GHz | 6 MB | HD Graphics 530 |
| i5-6500T | 4 | 4 | 3.50-3.10GHz | 6 MB | HD Graphics 530 |
| i5-6600 | 4 | 4 | 3.30-3.90GHz | 6 MB | HD Graphics 530 |
| i5-6600T | 4 | 4 | 2.70-3.50GHz | 6 MB | HD Graphics 530 |
| i7-6700 | 4 | 8 | 3.40-4.00GHz | 8 MB | HD Graphics 630 |
| i7-6700T | 4 | 8 | 2.80-3.60GHz | 8 MB | HD Graphics 630 |
| i3-7100 | 2 | 4 | 3.90GHz | 3 MB | HD Graphics 630 |
| i3-7100T | 2 | 4 | 3.40GHz | 3 MB | HD Graphics 630 |
| i3-7300 | 2 | 4 | 4.00GHz | 4 MB | HD Graphics 630 |
| i3-7300T | 2 | 4 | 3.50GHz | 4 MB | HD Graphics 630 |
| i5-7500 | 4 | 4 | 3.40-3.80GHz | 6 MB | HD Graphics 630 |
| i5-7500T | 4 | 4 | 2.70-3.30GHz | 6 MB | HD Graphics 630 |
| i5-7600 | 4 | 4 | 3.50-4.10GHz | 6 MB | HD Graphics 630 |
| i5-7600T | 4 | 4 | 2.80-3.70GHz | 6 MB | HD Graphics 630 |
| i7-7700 | 4 | 8 | 3.60-4.20GHz | 8 MB | HD Graphics 630 |
| i7-7700T | 4 | 8 | 2.90-3.80GHz | 8 MB | HD Graphics 630 |
| i3-8100 | 4 | 4 | 3.60GHz | 6 MB | UHD Graphics 630 |
| i3-8100T | 4 | 4 | 3.10GHz | 6 MB | UHD Graphics 630 |
| i3-8300 | 4 | 4 | 3.70GHz | 8 MB | UHD Graphics 630 |
| i3-8300T | 4 | 4 | 3.20GHz | 8 MB | UHD Graphics 630 |
| i5-8400 | 6 | 6 | 2.80-4.00GHz | 9 MB | UHD Graphics 630 |
| i5-8400T | 6 | 6 | 1.70-3.30GHz | 9 MB | UHD Graphics 630 |
| i5-8500 | 6 | 6 | 3.00-4.10GHz | 9 MB | UHD Graphics 630 |



| Intel Chipset B365 | | | | | |
|--------------------|------|---------|---------------|-------|------------------|
| CPU | Core | Threads | Frequency | Cache | Graphics |
| i5-8500T | 6 | 6 | 2.10-3.50GHz | 9 MB | UHD Graphics 630 |
| i5-8600 | 6 | 6 | 3.10-4.30GHz | 9 MB | UHD Graphics 630 |
| i5-8600K | 6 | 6 | 3.60-4.30GHz | 9 MB | UHD Graphics 630 |
| i5-8600T | 6 | 6 | 2.30-3.70GHz | 9 MB | UHD Graphics 630 |
| i7-8086K | 6 | 12 | 4.00-5.00 GHz | 12 MB | UHD Graphics 630 |
| i7-8700 | 6 | 12 | 3.20-4.60 GHz | 12 MB | UHD Graphics 630 |
| i7-8700T | 6 | 12 | 2.40-4.00 GHz | 12 MB | UHD Graphics 630 |
| i7-8700K | 6 | 12 | 3.70-4.70 GHz | 12 MB | UHD Graphics 630 |
| i3-9100 | 4 | 4 | 3.60-4.20GHz | 6 MB | UHD Graphics 630 |
| i3-9100T | 4 | 4 | 3.10-3.70GHz | 6 MB | UHD Graphics 630 |
| i3-9300 | 4 | 4 | 3.70-4.30GHz | 8 MB | UHD Graphics 630 |
| i3-9300T | 4 | 4 | 3.20-3.80GHz | 8 MB | UHD Graphics 630 |
| i3-9320 | 4 | 4 | 3.70-4.40GHz | 8 MB | UHD Graphics 630 |
| i3-9350K | 4 | 4 | 4.00-4.60GHz | 8 MB | UHD Graphics 630 |
| i5-9400 | 6 | 6 | 2.90-4.10GHz | 9 MB | UHD Graphics 630 |
| i5-9400T | 6 | 6 | 1.80-3.40GHz | 9 MB | UHD Graphics 630 |
| i5-9500 | 6 | 6 | 3.00-4.40GHz | 9 MB | UHD Graphics 630 |
| i5-9500T | 6 | 6 | 2.20-3.70GHz | 9 MB | UHD Graphics 630 |
| i5-9600 | 6 | 6 | 3.10-4.60GHz | 9 MB | UHD Graphics 630 |
| i5-9600T | 6 | 6 | 2.30-3.90GHz | 9 MB | UHD Graphics 630 |
| i5-9600K | 6 | 6 | 3.70-4.60GHz | 9 MB | UHD Graphics 630 |
| i7-9700 | 8 | 8 | 3.00-4.70 GHz | 12 MB | UHD Graphics 630 |
| i7-9700T | 8 | 8 | 2.00-4.30 GHz | 12 MB | UHD Graphics 630 |
| i7-9700K | 8 | 8 | 3.60-4.90 GHz | 12 MB | UHD Graphics 630 |

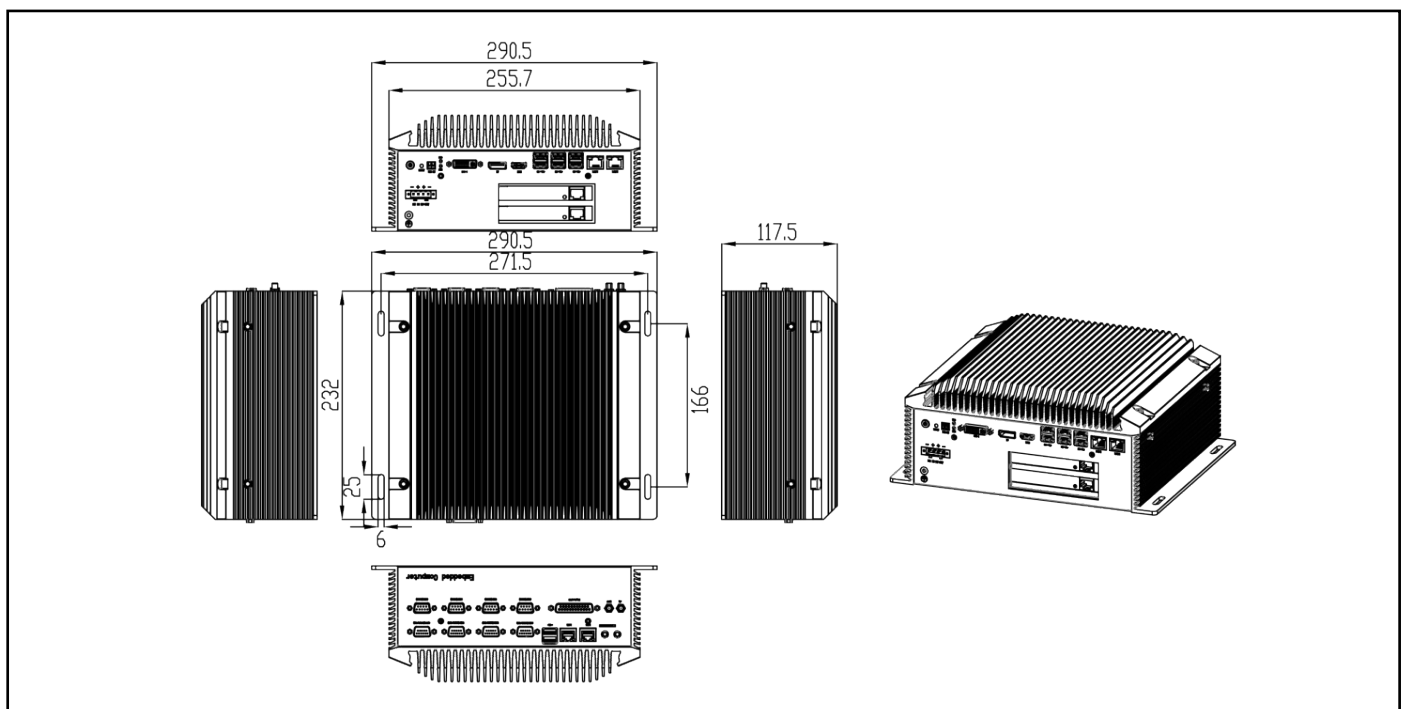


| Intel Chipset B365 | | | | | |
|--------------------|------|---------|---------------|-------|------------------|
| CPU | Core | Threads | Frequency | Cache | Graphics |
| i9-9900 | 8 | 16 | 3.10-5.00 GHz | 16 MB | UHD Graphics 630 |
| i9-9900T | 8 | 16 | 2.10-4.40 GHz | 16 MB | UHD Graphics 630 |
| i9-9900K | 8 | 16 | 3.60-5.00 GHz | 16 MB | UHD Graphics 630 |
| i9-9900KS | 8 | 16 | 4.00-5.00 GHz | 16 MB | UHD Graphics 630 |

System Information

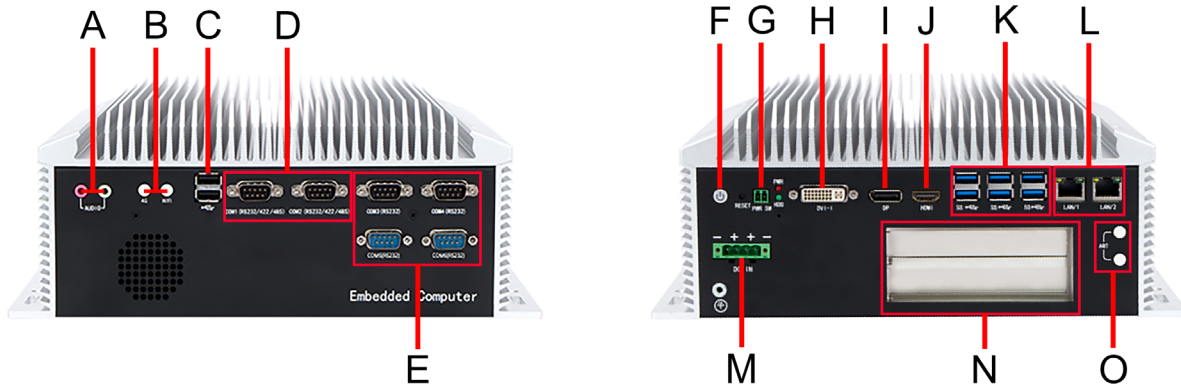
| Chipset | CPU | Specification |
|---------|------------------|-------------------------------|
| B85 | Celeron-G Series | Windows XP / 7 / 10 and Linux |
| | 4th | Windows 7 / 10 and Linux |
| B365 | 6th / 7th | Windows 7 / 10 and Linux |
| | 8th / 9th | Windows 10 / 11 and Linux |
| | Celeron-G series | Windows 10 / 11 and Linux |

Dimensions



I/O Port

Model I600-BI(2E)

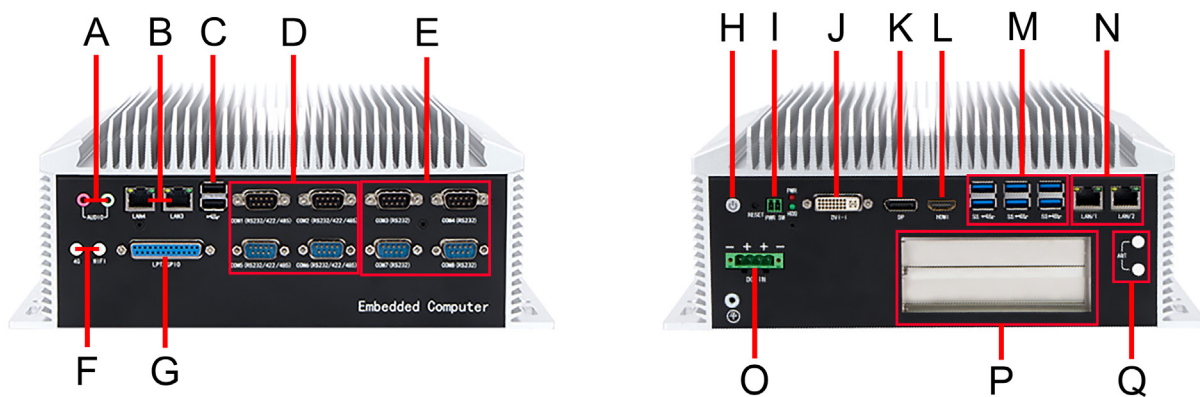


- A** : SPK+MIC
- B** : 4G+WIFI
- C** : USB2.0
- D** : COM (RS-232/422/485)
- E** : COM (RS-232)

- F** : POWER
- G** : POWER SW
- H** : DVI
- I** : Display Port
- J** : HDMI

- K** : USB3.0
- L** : LAN
- M** : DC POWER IN
- N** : Expansion
- O** : ANT1-2

Model I600-BI(4E)



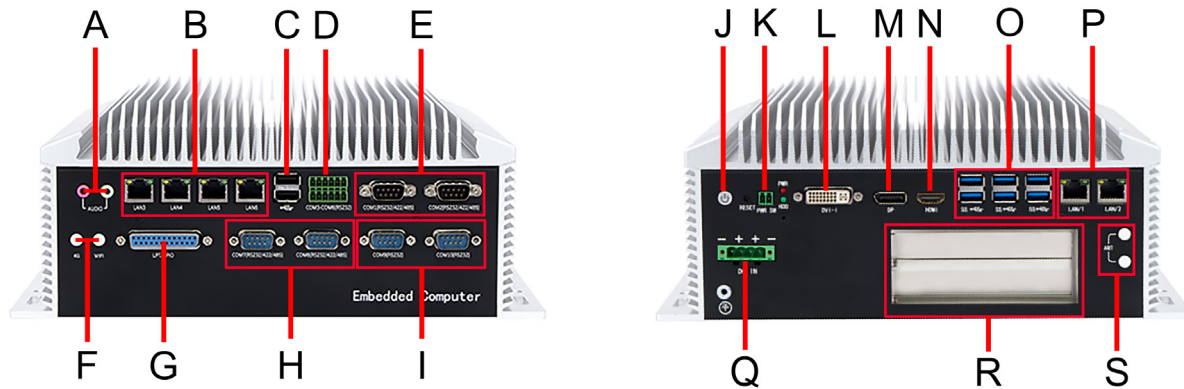
- A** : SPK+MIC
- B** : LAN
- C** : USB2.0
- D** : COM (RS-232/422/485)
- E** : COM (RS-232)

- F** : 4G+WIFI
- G** : LTP/GPIO
- H** : POWER
- I** : POWER SW
- J** : DVI

- K** : Display Port
- L** : HDMI
- M** : USB3.0
- N** : LAN
- O** : DC IN
- P** : Expansion
- Q** : ANT1-2

I/O Port

Model I600-BI(6E)



- A** : SPK+MIC
- B** : LAN
- C** : USB2.0
- D** : COM Terminal (RS-232)
- E** : COM (RS-232/422/485)
- F** : 4G+WIFI
- G** : LTP/GPIO
- H** : COM (RS-232/422/485)
- I** : COM (RS-232)
- J** : POWER
- K** : POWER SW
- L** : DVI
- M** : Display Port
- N** : HDMI
- O** : USB3.0
- P** : LAN
- Q** : DC IN
- R** : Expansion
- S** : ANT1-2

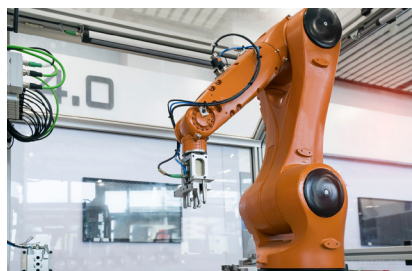
Package List

| | |
|-------------|---|
| Adapter | 1*12V 10A Adapter |
| Power Cable | 1*Power Cable (The type is depends on the national standard of the buyer) |
| Terminal | 2 Pin Phoenix Terminal for Power |

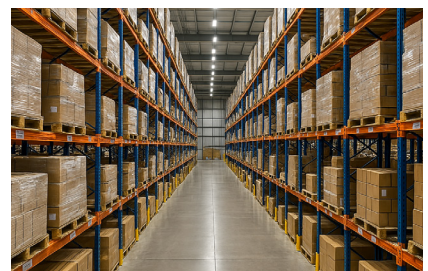
Applications



Industrial Factory



Industrial Robot



WareHouse

