

Powerful. Beautiful.

Excellence · Innovation

IPC21121

IPC22121

IPC24121



Shanghai Panelmate Electronics Co., Ltd.

12.1" XGA Industrial Panel PC 

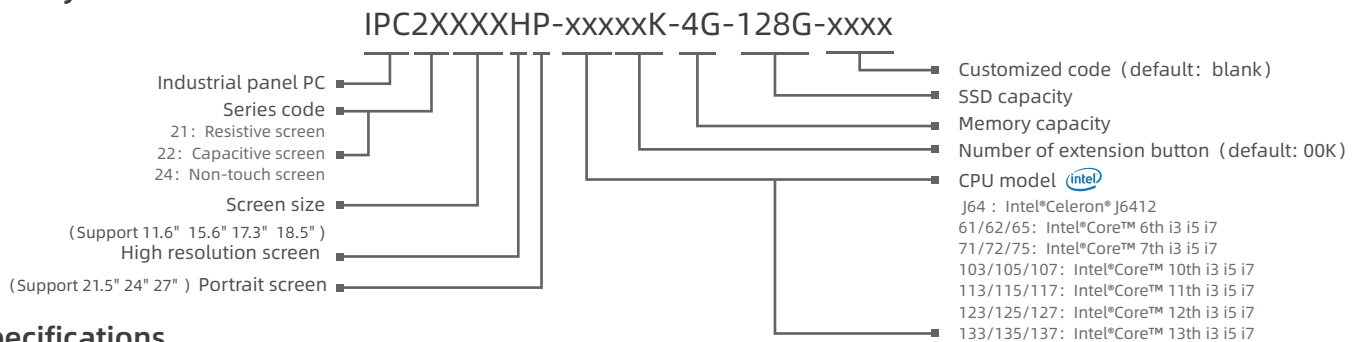
PANELMATE
Creative HMI Solution



Features

- Display type: 10.1", 10.4", 11.6", 12.1", 12.2", 15", 15.6", 17", 17.3", 18.5", 19", 21.5", 24", 27"
- Front panel/back cover: Aluminium-magnesium alloy
- Large aluminium fins design to ensure the reliability and heat dissipation
- IP: Front panel IP65 / Rear cover IP20
- Screen Type: Single point resistive touchscreen, Multi-point capacitive touchscreen, Tempered glass screen
- OS: Win7, Win8, Win10, Win11, Linux, etc
(Intel® Celeron® J6412, Intel® Core™ 10th or above don't support win7)
- Processor: Intel® Celeron® J6412, Intel® Core™ 6/7/10/11/12/13th i3/i5/i7
- According to the different motherboard, equipped with many interfaces
- DC 12~36V
- Extendable WIFI/4G
- Customized LOGO

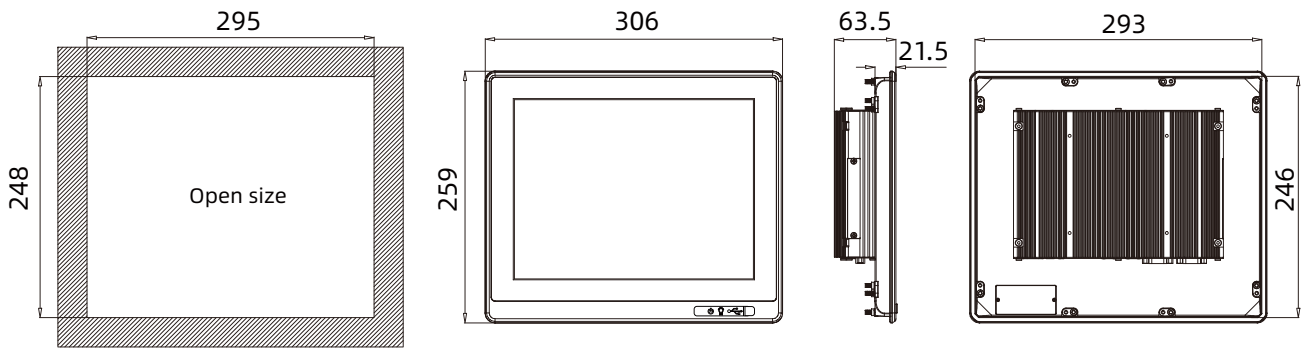
Namely Rule



Specifications

| Model | IPC21121&IPC22121&IPC24121 | |
|------------------------|----------------------------|---|
| Processor | CPU | Intel® Celeron® J6412、Intel® Core™ 6/7/10/11/12/13th i3/i5/i7 |
| | BIOS | AMI UEFI 64Mbit |
| | chipset | Intel® Soc |
| | Memory | DDR4-3200 Max 64G |
| | Storage | 1 x mSATA+2 x M.2 |
| I/O | Network (LAN) | 2 x 1000Mbps RJ45 with surge protection/3xRJ45 (processor Intel® Core™ 10/11/12/13th) |
| | Audio | Realtek ALC662VD audio controller, support 5.1 channels |
| | USB | 4xUSB3.0 |
| | COM | 2xRS232/RS485 with surge protection, RS485 support automatic flow control |
| | Expansion Slot | 1xMin-PCIe X1, Support 4G LTE/WIFI/BT with Sim card slot |
| | Rear I/O | Intel® Celeron® J6412: 1xHDMI/2xRJ45/4xUSB/2xCOM/AUDIO/DC IN/Reset/Ground Intel® Core™ 6/7代: 1xHDMI/2xRJ45/4xUSB/2xCOM/AUDIO/DC IN/Reset/Ground Intel® Core™ 10/11/12/13代: 1xHDMI/3xRJ45/4xUSB/2xCOM/DC IN/Reset/Ground |
| Power | Input Voltage | DC 12~36V |
| | Power | 30W (Intel® Celeron® J6412、Intel® Core™ 6/7th) ; 109W (Intel® Core™ 10/11/12/13th) |
| Physical | Display Port | HDMI |
| | Dimension (WxHxD) | 306mmx259mmx63.5mm (12.04"x10.20"x2.50") |
| | Open Size (WxH) | 295mmx248mm (11.61"x9.76") |
| | Net Weight(kg) | 3kg |
| | Mounting | Embedded; Wall-mounted; VESA |
| LCD | Display Type | 12.1" XGA TFT |
| | Resolution | 1024x768 |
| | Colors | 16.7M |
| | Active Area (WxH) | 245.76mmx184.32mm (9.68"x7.26") |
| | Backlight | LED |
| | MTBF (hour) | 50000hrs |
| | Pixel Pitch (HxV) | 0.24x0.24 |
| | Luminance(cd/m2) | 350cd/m2 |
| | Contrast Ratio | 800:1 |
| | Viewing Angle | (L) 80/ (R) 80/ (U) 80/ (D) 80 |
| Touchscreen | Touch Type | Single point resistive touchscreen & Multi-point capacitive touchscreen & Tempered glass screen |
| | Light Transmission | >85% |
| | Controller | USB interface |
| | Driver Support | Windows7, Window8, Windows10, Windows11, Linux, etc (Intel® Celeron® J6412, Intel® Core™ 10 or above don't support Win7) |
| | Multi-touch | 10 points |
| | Surface Hardness | Resistive touchscreen: Mohs' Number >= 3H; Capacitive touchscreen: Mohs' Number 7H |
| Environment | Operating Temperature | -20~70°C |
| | Storage Temperature | -30~80°C |
| | Relative Humidity | 5~95% (Non condensation) |
| | Shock | Operating 10G peak acceleration(11 ms duration), follow IEC 60068-2-27 |
| | Vibration | Operating Random Vibration Test 5~500Hz, 1Grms@with HDD; 2Grms@with SSD, follow IEC 60068-2-64 |
| | EMC | CE/FCC Class A |
| Front Panel Protection | IP65 | |

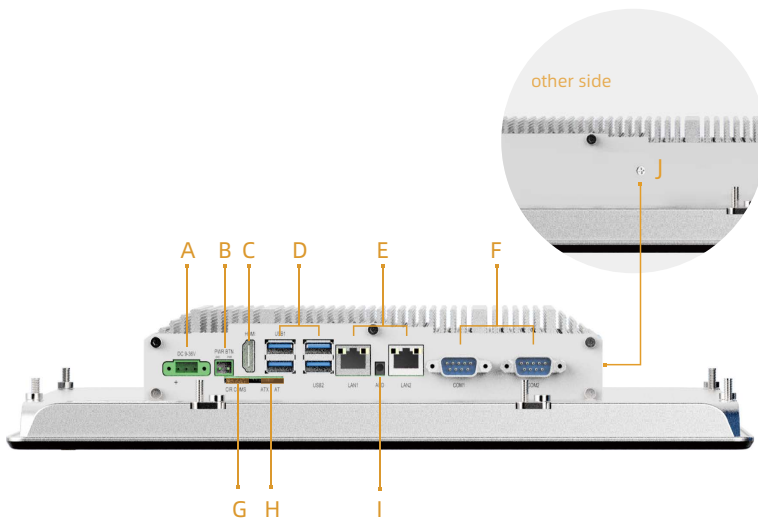
Technical Drawings unit: mm



Panel Cutout Dimensions: 295 x 248mm (11.61 x 9.76in)

External I/O View

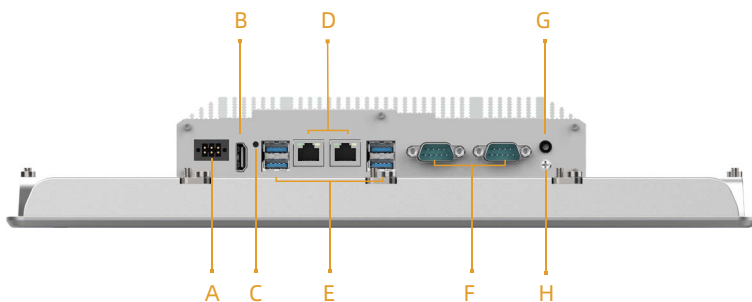
① The processor is 6th/7th Intel® Core™ i3/i5/i7 of IPC2XXXX series panel PC interface:



Interface definition:

| | |
|-----------------|----------------------|
| A: DC IN | F: 2 x COM |
| B: power switch | G: clear CMOS switch |
| C: HDMI | H: ATX/AT switch |
| D: 4 x USB | I: Audio |
| E: 2 x RJ45 | J: GND |

② The processor is Intel®Celeron® J6412 of IPC2XXXX series panel PC Interface:

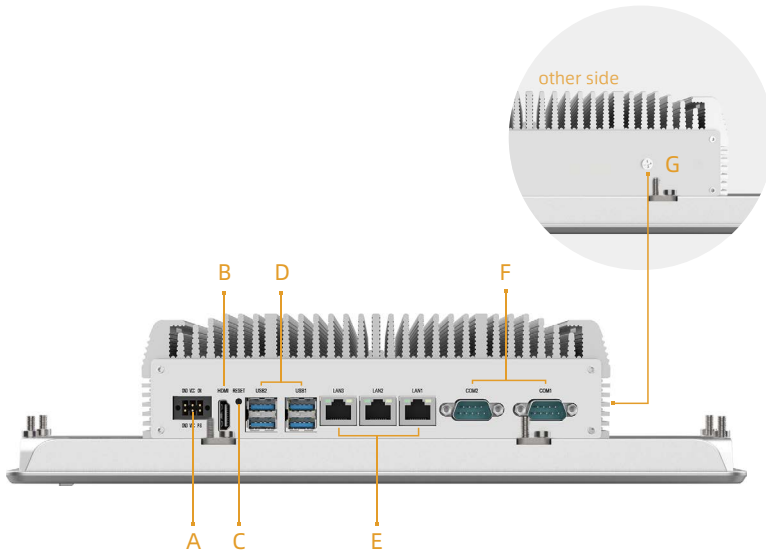


Interface definition:

| | |
|-------------|---------------|
| A: DC IN | E: 4 x USB3.0 |
| B: HDMI | F: 2 x COM |
| C: Reset | G: Audio |
| D: 2 x RJ45 | H: GND |

IPC21121 & IPC22121 & IPC24121

③ The processor is 10th/11th/12th/13th Intel® Core™ i3/i5/i7 of IPC2XXXX series panel PC interface:



Interface definition:

- A: DC IN
- B: HDMI
- C: Reset
- D: 4 x USB3.0
- E: 3 x RJ45
- F: 2 x COM
- G: GND

Ordering Information

| Part Number | Description |
|-------------------------|--|
| IPC21121-J6400K-8G-128G | 12.1" TFT LCD / Resistive touch screen / No extension button / DC12~36V Input / Resolution 1024x768 / Intel®Celeron® J6412 / 8G RAM / 128G mSATA / 2xLAN / 4xUSB / 1xHDMI |
| IPC22121-J6400K-8G-128G | 12.1" TFT LCD / Capacitive touch screen / No extension button / DC12~36V Input / Resolution 1024x768 / Intel®Celeron® J6412 / 8G RAM / 128G mSATA / 2xLAN / 4xUSB / 1xHDMI |
| IPC24121-J6400K-8G-128G | 12.1" TFT LCD / Tempered glass screen / No extension button / DC12~36V Input / Resolution 1024x768 / Intel®Celeron® J6412 / 8G RAM / 128G mSATA / 2xLAN / 4xUSB / 1xHDMI |

Optional Accessories

| | |
|----------|-------------------------|
| mSATA | 128G / 256G / 512G |
| 2.5" HDD | 512G / 1T / 2T |
| RAM | 4G / 8G / 16G |
| M.2 SATA | 128G / 256G / 512G / 1T |

Packing List

| | | |
|----------|------|---|
| terminal | 2pin | Intel®Core™ 6th/7th |
| terminal | 3pin | Intel®Core™ 6th/7th |
| terminal | 6pin | Intel®Celeron® J6412 Intel®Core™ 10th/11th/12th/13th |

Note: Package contents are subject to change without prior notice