

Powerful. Beautiful.

**Excellence · Innovation**

IPC22121EX



## Shanghai Panelmate Electronics Co., Ltd.

12.1" XGA Industrial ATEX-Ex Panel PC

PanelMate's ATEX products have passed  
ATEX EU explosion-proof certification



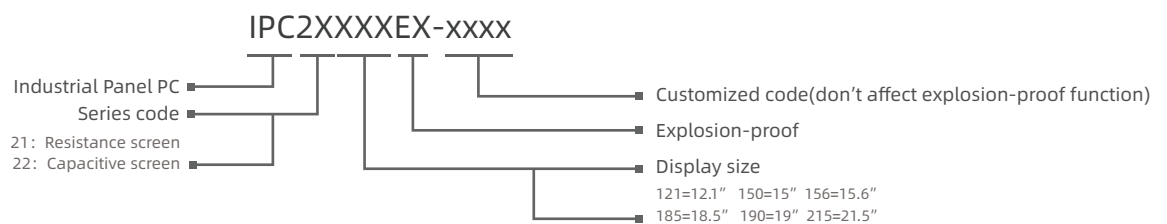
**PANELMATE**  
Creative HMI Solution



## Features

- Passed the ATEX-Ex EU protection certificate
- Display size: 12.1",15",15.6",18.5",19",21.5"
- Front panel/back cover: Aluminium-magnesium alloy
- Front panel/Rear: IP65 / IP65
- Screen Type: Multi-point capacitive touchscreen
- OS: Win7, Win8, Win10, Win11, Linux, etc
- Equipped with 2xIntel i210AT Gigabit network cards, 4xUSB ports
- Processor: Intel® Core™ 6/7/10/11/12/13th i3/i5/i7 multiple CPU optional
- Extendable WIFI/4G
- DC 9~36V

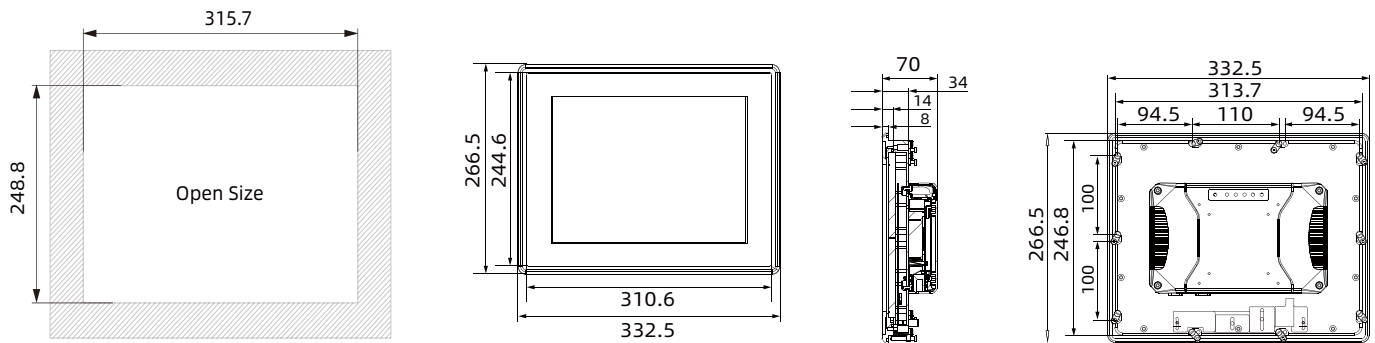
## Namely Rule



## Specifications

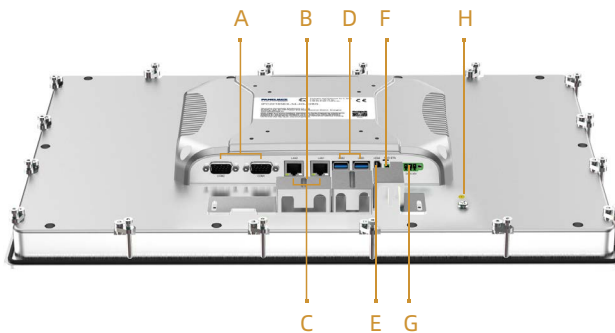
Model	IPC22121EX				
Processor	CPU	Intel®Celeron® processor 3855U/3865	Intel®Core™i3 processor	Intel®Core™i5 processor	Intel®Core™i7 processor
	Frequency	Dual Core 1.6GHZ	Dual Core 2.3GHZ	Dual Core 2.8GHZ	Dual Core 3.1GHZ
	Cache	2MB	3MB	3MB	4MB
	Memory	DDR4-1866/2133 Max: 32GB	DDR4-2133 Max: 32GB	DDR4-2133 Max: 32GB	DDR4-2133 Max: 32GB
	Storage	1x2.5" SATA 3.0 +1 x mSATA			
I/O	Network (LAN)	2xIntel i210 1000Mbps RJ45 with surge protection			
	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	1xHDMI/2xGLAN/4xUSB/2xCOM/AUDIO/DC IN/Power Switch			
Routine	Product Attribute	Built-in aluminium magnesium explosion-proof control display			
	Housing	Front panel & back cover:Aluminium-magnesium alloy			
	Mounting	Embedded, VESA 100 with waterproof nut			
	Video port	HDMI			
Power	Input Voltage	DC 9~36V input			
	Power	34W			
Physical	Dimension (WxHxD)	332.5mm x 266.6mm x 70mm ( 13.09" x 10.49" x 2.76)			
	Open Size (WxH)	315.7mm x 248.8mm ( 12.43" x 9.80")			
	Net Weight(kg)	3.6kg			
LED	Display Type	12.1" XGA TFT			
	Resolution	1024 x 768			
	Colors	16.7M			
	Active Area (WxH)	304.1mm x 228.1mm ( 11.97" x 8.98")			
	Backlight	LED			
	MTBF (hour)	50000hrs			
	Pixel Pitch (HxV)	0.24 x 0.24			
	Luminance(cd/m2)	350cd / m2			
	Contrast Ratio	800:1			
Touchscreen	Viewing Angle	(L)75 / (R)75 / (U)75 / (D)75			
	Touch Type	Multi-point capacitive touchscreen			
	Light Transmission	>85%			
	Controller	USB interface			
	Driver Support	Windows7, Window8, Windows10, Windows11, Linux, etc			
	Multi-touch	10 points			
Environment	Surface Hardness	Capacitive touchscreen: Mohs' Number 7H			
	Operating Temperature	0~55°C			
	Storage Temperature	-20~60°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			
Certification	Protection	IP65			
		II 3 G Ex ec IIC T4 Gc			
		II 3 D Ex tc IIIC T135°C Dc			
		EN 60079-0:2018			
		EN 60079-7:2015			
	EN 60079-31:2014				

## Technical Drawings unit: mm



Panel Cutout Dimensions: 315.7x 248.8mm (12.43 x 9.80in)

## External I/O View



### Interface definition:

- A: 2 x COM (RS232/RS485)
- B: Audio output
- C: 2 x LAN
- D: 4 x USB
- E: 1 x HDMI
- F: Power switch
- G: DC IN
- H: GND

## Ordering Information

Part Number	Description
IPC22121EX	12.1" TFT LCD / ATEX Capacitive touch panel PC / DC9~36V Input / Resolution 1024x768 / Intel®Celeron®3855U / 4G RAM / 128G / mSATA / 2xLAN / 4xUSB / 1xHDMI

## Optional Accessories

mSATA	128G / 256G / 512G / 1T
2.5" HDD	512G / 1T / 2T
RAM	4G / 8G / 16G / 32G

## Packing List

Terminal	2-pin terminal
Terminal	3-pin terminal

Note: Package contents are subject to change without prior notice