

# TPC120-A5

The machine is made of aluminum alloy material, strong structure, fully closed without fan design, efficient heat dissipation, designed for a variety of complex harsh environment. built-in independent NPU, with 6TOPS AI computing capability, and supports lightweight AI application development. With a fanless fully enclosed, and front IP65 dustproof & waterproof design. The whole panel PC has high scalability, practicality, and EMC compatibility.

## Features

- Industrial aesthetic design, independent mold opening
- Aluminum alloy - body die casting, efficient heat dissipation
- Self-developed ARM architecture industrial motherboard
- RK3588 Octa-core with 6 TOPS NPU
- Wide Temperature Adaptation Efficient Heat Dissipation.
- Provide SDK package, Support secondary development and upgrade customization



## Model

Product size	12"
Non-touch	TPC120-A500
Capacitive touch	TPC120-A510
Resistive touch	TPC120-A520

## I/O Interface



## Specification

### Screen Parameter

Display type	12" TFT LCD screen
MAX.resolution	1024*768 (4:3)
Viewing angle(H/V)	85/85/85/85 (L/R/U/D)
Luminance (cd/m <sup>2</sup> )	500 cd/m <sup>2</sup>
Contrast ratio	1000:1

### Touch Parameter

Touchscreen	Projection capacitive touch 10-point multi touch	Resistive touch single point	Non-touch
Light transmission	≥88%	≥78%	≥92%
Controller	USB ( COM customized)	USB ( COM customized)	/

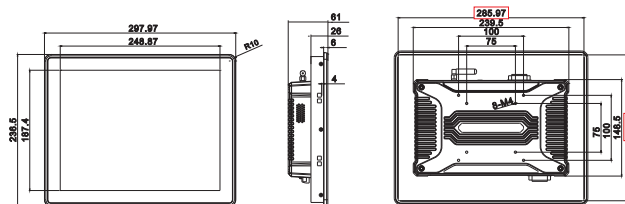
### Power Parameter

Power input	DC 12V-36V
Power adapter	24V/2.5A

### Configuration

CPU	RK3588 Octa-core 64-bit, 2.4GHz, 4*Cortex-A76+4*Cortex-A55	Wi-Fi	Wi-Fi 6, Dual Band 2.4GHz+5GHz
Memory/RAM	8GB DDR4 (Optional 4GB/16GB/32GB, Supports up to 32GB)	Bluetooth	BT5.0
Storage	64GB eMMC (Optional 128GB/256GB, Supports up to 256GB)	Watchdog Timer	Support
NPU	Built-in NPU with 6TOPS AI computing power	RTC real time clock	Support
Operating system	Android 13.0, Linux5.10/Ubuntu20.04/Ubuntu22.04/Debian11	Timer switch	Support

## Dimension



### Physical Characteristic

Overall dimensions	W297.97X H236.5X D61MM
Installation size	W287.97X H226.5MM
Material	Aluminum alloy
Color	Black, optional silve
Installation	Support Embedded/Wall-mounted/Desktop/Folding mounting/VESA mount/Suspended mounting

### Interface Parameter

PowerSW	1*PowerSW
Power interface	1*Threaded DC connector (Diameter 5.5*2.1mm)
Phoenix terminal	1*12P Phoenix terminal (DC/RS232*1/RS485*1/CAN*1/GPIO*3)
USB	1*USB, 1*OTG
TF	1*TF card standard interface
SIM	1*SIM card slot (should be work with 3G/4G module)
HDMI	1*HDMI output, up to 4K
Ethernet	2*LAN, 10M/100M/1000M adaptive Ethernet, 3G/4G customized
Audio	1*Audio I/O, Support audio input and output
Serial port	1*COM (The default is RS232, optional RS485/RS422)
UBOOT	1*UBOOT
Wi-Fi antenna	1*Wi-Fi antenna
Grounding	1*GND
Speaker	2*(8Ω2W)

### Reliability Parameter

Operating temperature	-10°C~60°C (-20°C~70°C can be customized)
Storage temperature	-20°C~70°C
Relative humidity	95% non-condensing