

TPC120-A4

The whole machine adopts aluminum alloy flat panel, fanless fully enclosed integrated design, self-developed ARM architecture industrial motherboard, supporting a variety of installation methods, low power consumption, with good scalability, practicality and EMC compatibility and other performance. Widely used in industrial control, military, communication, power and network automation fields.

Features

- Industrial aesthetic design, stylish and simple appearance, independent molding
- RK3588 octa-core CPU, main frequency up to 2.4GHz
- Built-in independent NPU with 6TOPS AI power
- Conforms to EMC anti-electromagnetic interference standards
- Provide SDK package, support secondary development and upgrade customization



Model

Product size	12"
Non-touch	TPC120-A401
Capacitive touch	TPC120-A411
Resistive touch	TPC120-A421

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 ²)	500 cd/m ²
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)	/

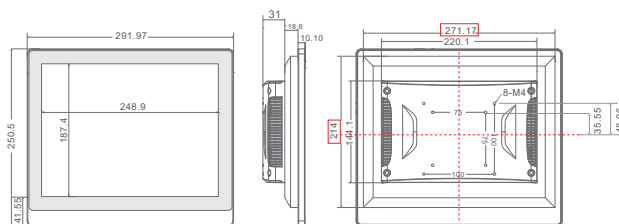
Power Parameter

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	W291.97x H250.5x D59.7mm
Installation size	W273.17x H216mm
Material	Aluminum alloy
Color	Silve, optional black
Installation	Support Desktop/Wall-mounted/Folding mounting/VESA mount/Suspended mounting/Back hanging

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