

TPC120-A40

Adopting a self-developed industrial motherboard with a built-in independent NPU, it delivers 6 TOPS of AI computing power and supports lightweight AI application development. It is specifically designed for complex medical environments. All products have passed medical-grade tests including EMI, ESD, safety regulations, electrical fast transients (EFT), and radiated emissions. They are widely used in intelligent terminal equipment for medical treatment, medical diagnosis, and medical assistance self-service terminals.

Features

- Protective-grade PCB materials
- Utilizes first-tier brand chips and high-quality various components.
- RK3576, Octa-core 64-bit CPU, Main frequency 2.2GHz
- Internal anti-vibration and anti-interference structural design
- EMI/EMC complies with industry standards.
- Obtain Medical Industry Test Report



Model

Product size	12"
Non-touch	TPC120-A4002
Capacitive touch	TPC120-A4012
Resistive touch	TPC120-A4022

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/m²)	300 cd/m²
Contrast ratio	800:1

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)	/

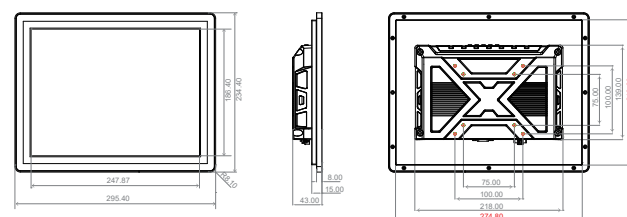
Power Parameter

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

Configuration

CPU	RK3576, Octa-core 2.2GHz CPU	Wi-Fi	Wi-Fi 6, Dual Band 2.4GHz+5GHz
Memory/RAM	4GB (Optional 8GB)	Bluetooth	BT5.3
Storage	64GB eMMC (Optional 128GB/256GB)	Watchdog Timer	Support
NPU	6T OPS AI computing power	RTC real time clock	Support
Operating system	Android14, Ubuntu/Debian/Linux	Timer switch	Support

Dimension



Physical Characteristic

Overall dimensions	W295.4x H234.4x D43mm
VESA	75x75mm, 100x100mm, M4 screw hole
Material	Aluminum alloy
Color	White
Installation	Supports Wall-mounted/Desktop/VESA mount/Suspended mounting/Folding mounting/Back hanging, etc.

Interface Parameter

PowerSW	1*PowerSW
Power interface	1*3.81-2P Phoenix Terminal (Optional upgrade to DC 2.0*1)
Phoenix terminal	1*12P Phoenix terminal (CAN*1/232*2/485*2/5V/GND)
USB	4*USB (2*USB2.0, 2*USB3.0)
TF	Supports TF Card Expansion (1*TF Card Slot)
SIM	1*SIM card slot (should be work with 3G/4G module)
HDMI	1*HDMI output, up to 4K
Ethernet	1*LAN, 10M/100M/1000M adaptive Ethernet, 3G/4G customized
Audio	1*Audio I/O, Support audio input and output
Serial port	Standard1*DB9 RS232 Serial Port (232/TTL Interchangeable)
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