

TPC120-A30

The device employs a self-developed industrial motherboard with a built-in independent NPU, delivering 6 TOPS of AI computing power and supporting lightweight AI application development. The unit features a sleek 2.5mm low-profile narrow bezel panel design, specifically tailored for cabinet-mounted equipment, allowing for seamless flush-mounted installation where the panel sits level with the cabinet. It boasts an IP65-rated flat front panel combined with an aluminum alloy die-cast housing, ensuring effective heat dissipation and robust protection.

Features

- Narrow bezel design, built for flush-mounted applications
- Supports wide temperature and wide voltage operation.
- Self-developed ARM architecture industrial motherboard
- RK3588 octa-core high-performance CPU
- Built-in independent NPU with 6TOPS AI computing power
- Industrial-grade EMC/ESD/Vibration Resistance Protection



Model

Product size	12"
Non-touch	TPC120-A3000
Capacitive touch	TPC120-A3010
Resistive touch	TPC120-A3020

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)	/

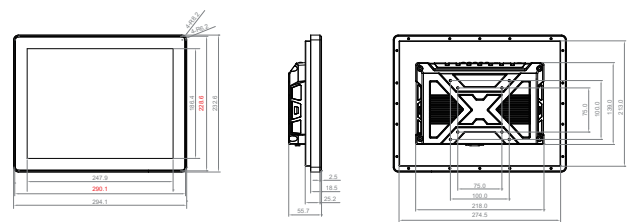
Power Parameter

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

Configuration

CPU	RK3588 2.4 GHz, Quad-Core Cortex-A76 + Quad-Core Cortex-A55	Wi-Fi	Wi-Fi 6, Dual Band 2.4GHz+5GHz
Memory/RAM	8GB (Optional 4GB/16GB/32GB)	Bluetooth	BT5.3
Storage	64GB eMMC (Optional 64GB/128GB/256GB)	Watchdog Timer	Support
NPU	Built-in NPU with 6TOPS AI computing power	RTC real time clock	Support
Operating system	Android 13.0, Linux/Ubuntu/Debian	Timer switch	Support

Dimension



Physical Characteristic

Overall dimensions	W294.1x H232.6x D55.7mm
Installation size	W290.1x H228.6mm
Material	Aluminum alloy
Color	Black, optional silve
Installation	Support Embedded installation with iron sheet/ Back-mounted Installation, etc.

Interface Parameter

PowerSW	1*PowerSW
Power interface	3.81-2P Phoenix Terminal (optional upgrade to DC 2.0*1).
Phoenix terminal	3.5-12P Phoenix terminals (2321/4851/CAN1/NC4).
USB	4*USB (2*USB2.0, 2*USB3.0)
TF	1*TF card standard interface
SIM	1*SIM card slot (should be work with 3G/4G module)
HDMI	1*HDMI output, up to 8K
Ethernet	1*LAN, 10M/100M/1000M adaptive Ethernet, 3G/4G customized
Audio	1*Audio I/O, Support audio input and output
Serial port	1*DB9 RS-232 serial port (RS-232/TTL switchable)
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