

TPC121-A210-3588G

The whole panel PC adopts a self-developed industrial motherboard, built-in independent NPU, with 6TOPS AI computing capability, and supports lightweight AI application development. Its 3mm ultra-thin front panel can seamlessly fit all kinds of cabinets. With a fanless fully enclosed, and front IP65 dustproof & waterproof design. The whole panel PC has high scalability, practicality, and EMC compatibility.

Features

- 3mm Super Thin Front Bezel, Best for Embedded Cabinet.
- Pure flat panel IP65 dust-proof and waterproof.
- RK3588 eight-core high-end CPU, Built-in NPU with 6TOPS AI computing power
- Support 8K ultra-high definition display, support double display, can be customized four display
- Provide SDK package, support secondary development and upgrade customization



Product Model

Product Size	12.1"
Non-touch	TPC121-A200-3588G
Capacitive touch	TPC121-A210-3588G
Resistive touch	TPC121-A220-3588G

Product Interface



Product Specifications

Screen Parameters

LCD size	12.1" TFT LCD
Resolution	1280*800
Viewing angle	65/65/60/65 (L/R/U/D)
Colour	16.7M
Brightness	300 cd/m ²
Contrast ratio	350:1

Touch Parameters

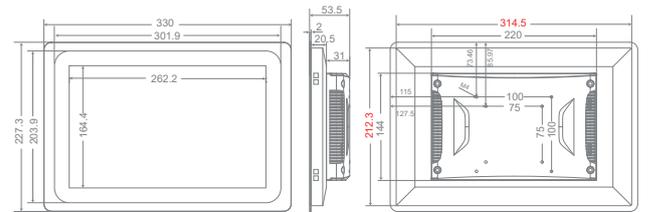
Touch type	10-point touch projection Capacitive touch screen	Single-point Resistance touch screen	Non-touch
Transmittance	≥88%	≥78%	≥92%
Input mode	Handwriting or Capacitance pen	Fingertip or stylus	/
Controller communication	USB	USB	/

Hardware Configuration

CPU	RK3588, Octa-core 64-bit (4×Cortex-A76+4×Cortex-A55) at 2.4GHz	NPU	Built-in NPU with 6TOPS AI computing power
Memory	8GB DDR4 (Optional: 16GB)	WiFi	Dual-band WiFi
Storage	64GB eMMC (Optional: 128GB)	Bluetooth	Bluetooth support
GPU	Mali-G610 MC4	Operating system	Android 12.0



Product Size



Physical Characteristics

Overall dimensions	W330x H227.3x D53.5mm
Size of opening	W316.5 x H214.3mm

Interface Parameters

Industrial terminals	1*12P Phoenix terminal (Power supply/RS232*1/RS485*1/CAN*1/GPIO*3)
Power interface	1*DC2.1, Supporting 12V-36V power input
USB	4*USB3.0
TF	1*TF card standard interface
SIM	1*SIM, Supporting various formats (Depending on 3G/4G module)
HDMI	1*HDMI OUT, 1*HDMI IN, Support 8K Ultra HD display
Network interface	2*LAN, dual Gigabit adaptive Ethernet interfaces
Audio interface	1*Audio I/O, Support audio input and output
Reset key	Support (1*UBOOT)
COM	1*RS232
WiFi antenna	1*WiFi antenna
Grounding column	1*Grounding post (GND)

Product Reliability Parameters

Working temperature	-10°C~60°C
Storage temperature	-20°C~70°C
Relative humidity	Humidity: 95% Non-Condensing
Vibration protection	IEC 60068-2-64, Random, 5~500 Hz, 1 hr/axis
Impact protection	IEC 60068-2-27, Half sine wave, Lasting for 11ms
Product certification	CCC/CE/FCC/EMC/CB/ROHS
Waterproof grade	The front panel reaches IP65 protection level

Power Parameters

Power input	DC 12V-36V
Static power	18W