

TPC190-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 1TOPS 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
- RK3568 Quad-core 64-bit Cortex-A55 core architecture, Up to 2.0GHz
- Built-in independent NPU with 1TOPS AI computing power
- Provide SDK package, Support secondary development and upgrade customization



Model

Product size	19"
Non-touch	TPC190-A500
Capacitive touch	TPC190-A510
Resistive touch	TPC190-A520

I/O Interface



Specification

Screen Parameter

Display type	19" TFT LCD screen		
MAX.resolution	1280*1024 (16:10)		
Viewing angle(H/V)	85/85/80/80 (L/R/U/D)		
Luminance (cd/m ²)	300 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)	/

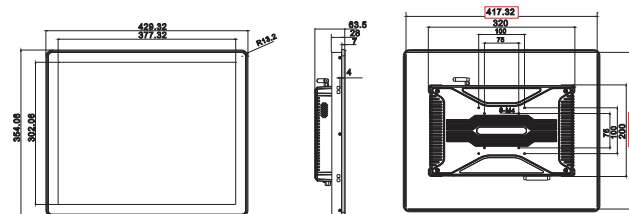
Power Parameter

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

Configuration

CPU	RK3568, Quad-Core/4-Wire 2.0GHz CPU	Wi-Fi	Wi-Fi 6 single band, 2.4G
Memory/RAM	2GB (Optional 4GB/8GB)	Bluetooth	BT5.2
Storage	32GB eMMC (Optional 64GB/128GB/256GB)	Watchdog Timer	Support
NPU	Built-in NPU with 1TOPS AI computing power	RTC real time clock	Support
Operating system	Android12/14, Linux5.10/Ubuntu20.04/Ubuntu22.04/Debian11	Timer switch	Support

Dimension



Physical Characteristic

Overall dimensions	W429.32X H354.06X D63.5MM
Installation size	W419.32X H344.06MM
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	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 4K
Ethernet	1*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