

# TPC190-A29

Adopting self-developed industrial motherboard, built-in independent NPU, with 1TOPS AI arithmetic, support for lightweight AI application development; the shell adopts closed aluminum alloy structure, back cover die-casting, with high strength and toughness and high heat dissipation, light weight, high strength, corrosion-resistant and heat conductive, compression and impact resistance, adaptable to multi-purpose application environments.

## Features

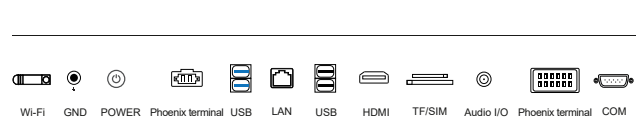
- High-precision die-cast aluminum molding with high-strength toughness and high heat dissipation effect
- Self-developed ARM architecture industrial motherboard
- RK3568, 4-core 64-bit Cortex-A55, 2.0GHz main frequency
- Built-in independent NPU with 1TOPS AI computing power
- Support secondary development and upgrade customization



## Model

Product size	19"
Non-touch	TPC190-A2900
Capacitive touch	TPC190-A2910
Resistive touch	TPC190-A2920

## I/O Interface



## Specification

### Screen Parameter

Display type	19" TFT LCD screen
MAX.resolution	1280*1024(5:4)
Viewing angle(H/V)	85/85/80/80 (L/R/U/D)
Luminance (cd/m²)	250~300 cd/m²
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)	/

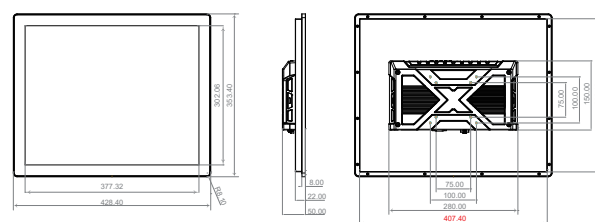
### Power Parameter

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, Dual Band 2.4GHz+5GHz
Memory/RAM	2GB (Optional 4GB/8GB)	Bluetooth	BT5.3
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	W428.4x H353.4x D50mm
VESA	75x75mm, 100x100mm, M4 screw hole
Material	Aluminum alloy
Color	Black, optional silve
Installation	Supports Back mounted/Wall mounted/Desktop/Louver/Cantilever Boom type, 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 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