

# TPC238-A200

The whole machine adopts the independently developed industrial motherboard, with various configuration schemes to meet different application requirements, 3MM ultra-thin front frame, seamless fitting of various cabinet equipment, aluminum alloy structure, fanless fully closed design, front panel pure flat wire drawing process, dust prevention and waterproof, and the whole machine has good scalability, practicability and EMC compatibility.

## Features

- 3mm Super Thin Front Bezel, Best for Embedded Cabinet.
- Pure flat panel IP65 dust-proof and waterproof.
- Self-developed ARM architecture industrial motherboard
- Comply with EMC anti-electromagnetic interference standard
- Industrial-grade protection, Suitable for various environments
- Provide SDK package and support secondary development



## Product Model

Product Size	23.8"
Non-touch	TPC238-A200
Capacitive touch	TPC238-A210
Resistive touch	TPC238-A220

## Product Interface



## Product Specifications

### Screen Parameters

LCD size	23.8" TFT LCD
Resolution	1920*1080
Viewing angle	89/89/89/89 (L/R/U/D)
Colour	16.7M
Brightness	250 cd/m <sup>2</sup>
Contrast ratio	1000:1

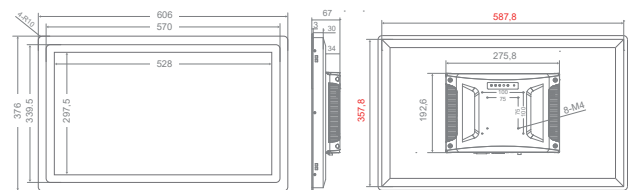
### Touch Parameters

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	RK3399, dual-core Cortex-A72 1.8GHz+quad-core Cortex-A53 1.4GHz	WiFi	2.4GHz
Memory	4G DDR3 (Optional: 8G/16G)	Bluetooth	BT5.0
Storage	32G eMMC (Optional: 64G)	Operating system	Android 7.1/9.0/Ubuntu18.04/Debian10.0/Linux4.4+QT
GPU	Mali-T860MP4	Other	Support RTC real-time clock and timing switch

## Product Size



### Physical Characteristics

Overall dimensions	W606x H376x D67mm
Size of opening	W589.8x H359.8mm

### Interface Parameters

Power interface	1*DC2.1, Supporting 12V-36V power input
USB	1*USB HOST, 1*USB OTG
TF	1*TF card standard interface
SIM	1*SIM, Supporting various formats (Depending on 3G/4G module)
HDMI	1*HDMI, Supporting HDMI data output, Up to 4K
Network interface	1*LAN, 10M/100M/1000M adaptive Ethernet
Audio interface	1*Audio I/O, Support audio input and output
Reset key	Support (1*UBOOT)
COM	2*RS232
WiFi antenna	1*WiFi antenna
Grounding column	Support (1*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