# TPC116-A2

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.
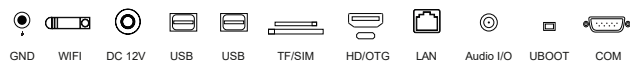
## Features

- 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

| CPU | | | | | |
|---|---|---|---|---|---|
| A64 1.5GHz | -10°C-60°C | EMI/MEC | IP65 | SDK | Android 6.0 |

## Product Model

| Product Size | 11.6" |
|---|---|
| Non-touch | TPC116-A200 |
| Capacitive touch | TPC116-A210 |
| Resistive touch | TPC116-A220 |

## Product Interface

| GND | WIFI | DC 12V | USB | USB | TF/SIM | HD/OTG | LAN | Audio I/O | UBOOT | COM |
|---|---|---|---|---|---|---|---|---|---|---|

## Product Specifications

### Screen Parameters

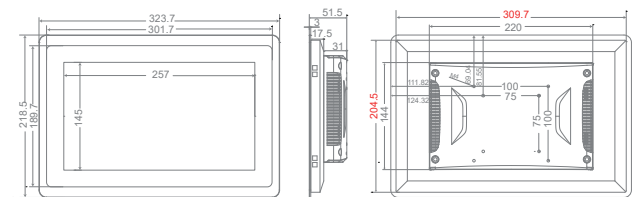| LCD size | 11.6" TFT LCD |
|---|---|
| Resolution | 1920*1080 ( Aspect Ratio 16:9 ) |
| Viewing angle | 85/85/85/85 (L/R/U/D) |
| Colour | 16.7M |
| Brightness | 300 cd/m² |
| Contrast ratio | 1000:1 |

### 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 | Quanzhi A64 Cortex-A53 quad-core 64-bit CPU, Main frequency 1.5GHz |
|---|---|
| Memory | 2G DDR3 (Optional: 4G/8G) |
| Storage | 8G eMMC (Optional: 16G/32G) |
| GPU | Mali400MP2 |

| WiFi | Support WIFI |
|---|---|
| Bluetooth | BT4.1 |
| Operating system | Android 6.0 |
| Other | Support RTC real-time clock and timing switch |

## Product Size

### Physical Characteristics

| Overall dimensions | W323.7x H218.5x D51.5mm |
|---|---|
| Size of opening | W311.7 x H206.5mm |

### Interface Parameters

| Power interface | 1*DC2.1, Supporting 12V power input |
|---|---|
| USB | 2*USB |
| 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 |
| OTG | Support (1*OTG) |
| 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 |

### 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 |
|---|---|
| Static power | 18W |