

# TPC170-A210-3588G

The whole panel PC adopts a self-developed industrial motherboard, built-in independent NPU, with 6TOPS Alcomputing capability, and supports lightweight AI application development. Its 3mm ultra-thin front panel canseamlessly fit all kinds of cabinets. With a fanless fully enclosed, and front IP65 dustproof & waterproof design. Thewhole 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     | 17"               |
| Non-touch        | TPC170-A200-3588G |
| Capacitive touch | TPC170-A210-3588G |
| Resistive touch  | TPC170-A220-3588G |

## Product Interface



## Product Specifications

### Screen Parameters

|                |                       |
|----------------|-----------------------|
| LCD size       | 17" TFT LCD           |
| Resolution     | 1280*1024             |
| Viewing angle  | 85/85/80/70 (L/R/U/D) |
| Colour         | 16.7M                 |
| Brightness     | 300 cd/m²             |
| Contrast ratio | 1000:1                |

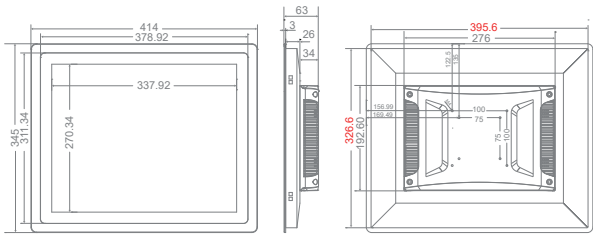
### Touch Parameters

|                          |                                                   |                                      |           |
|--------------------------|---------------------------------------------------|--------------------------------------|-----------|
| 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     | 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 | W414x H345x D63mm |
| Size of opening    | W397.6x H328.6mm  |

### 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        |