



深圳市华源显控技术股份有限公司

Shenzhen Huayuan Display Control Technique Co., Ltd.

深圳市芯云显控技术有限公司

Shenzhen Chiloud Display Control Co., Ltd

21.5 inch Industrial Android all-in-one machine

HYA21.5-A02(A40)

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Catalogue

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1. Product introduction

Users can easily achieve human-computer interaction through Android intelligent display terminals, and realize various personalized needs of users through Android general APP, such as WIFI/4G Internet access, Ethernet Internet access, web browsing, cloud interconnection, remote control, remote data transmission, playing music, playing videos, playing advertisements, etc. It can also communicate with external devices through serial ports such as RS232 and RS485.



2.Product characteristics

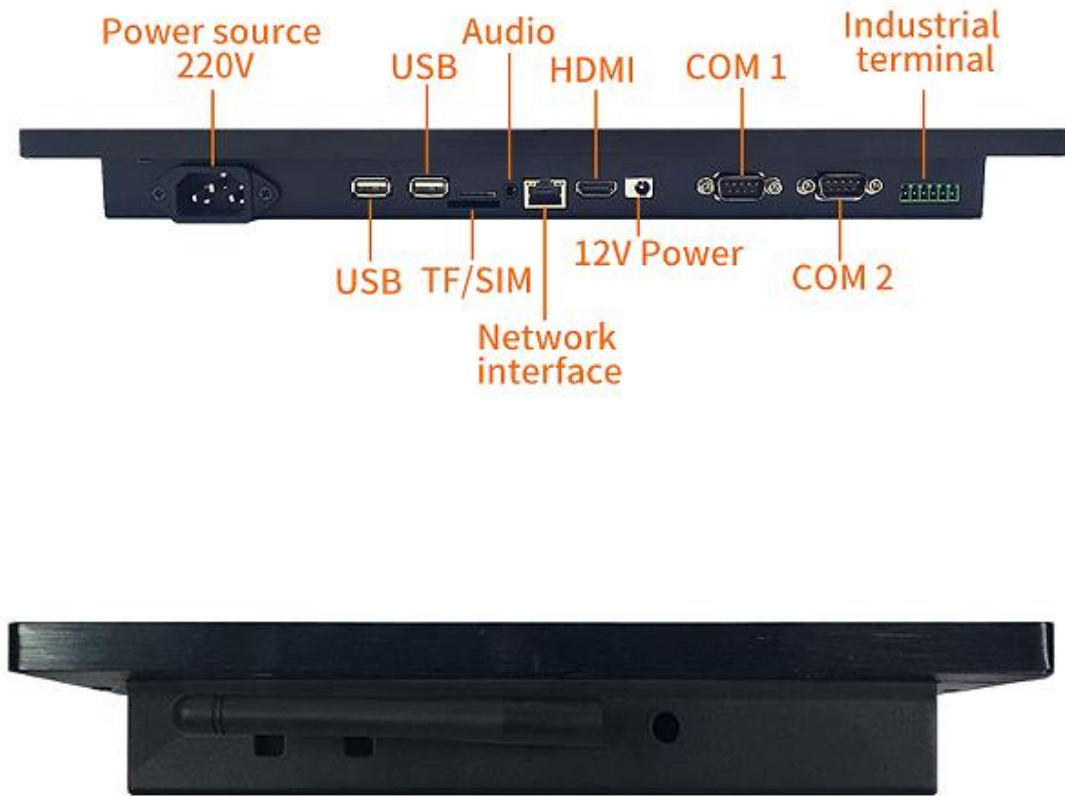
1. It can realize capacitive touch and display functions, realize human-computer interaction, and achieve various personalized needs through APP.
2. Support WIFI/4G/ Ethernet and other networking methods, can achieve remote data transmission, cloud interconnection.
3. Multiple interfaces, support multiple RS232, RS485 and other different serial port communication, to achieve the exchange of communication with external devices.
4. Supports voice and video playback.
5. Industrial embedded design, easy to install.

3.Product photos

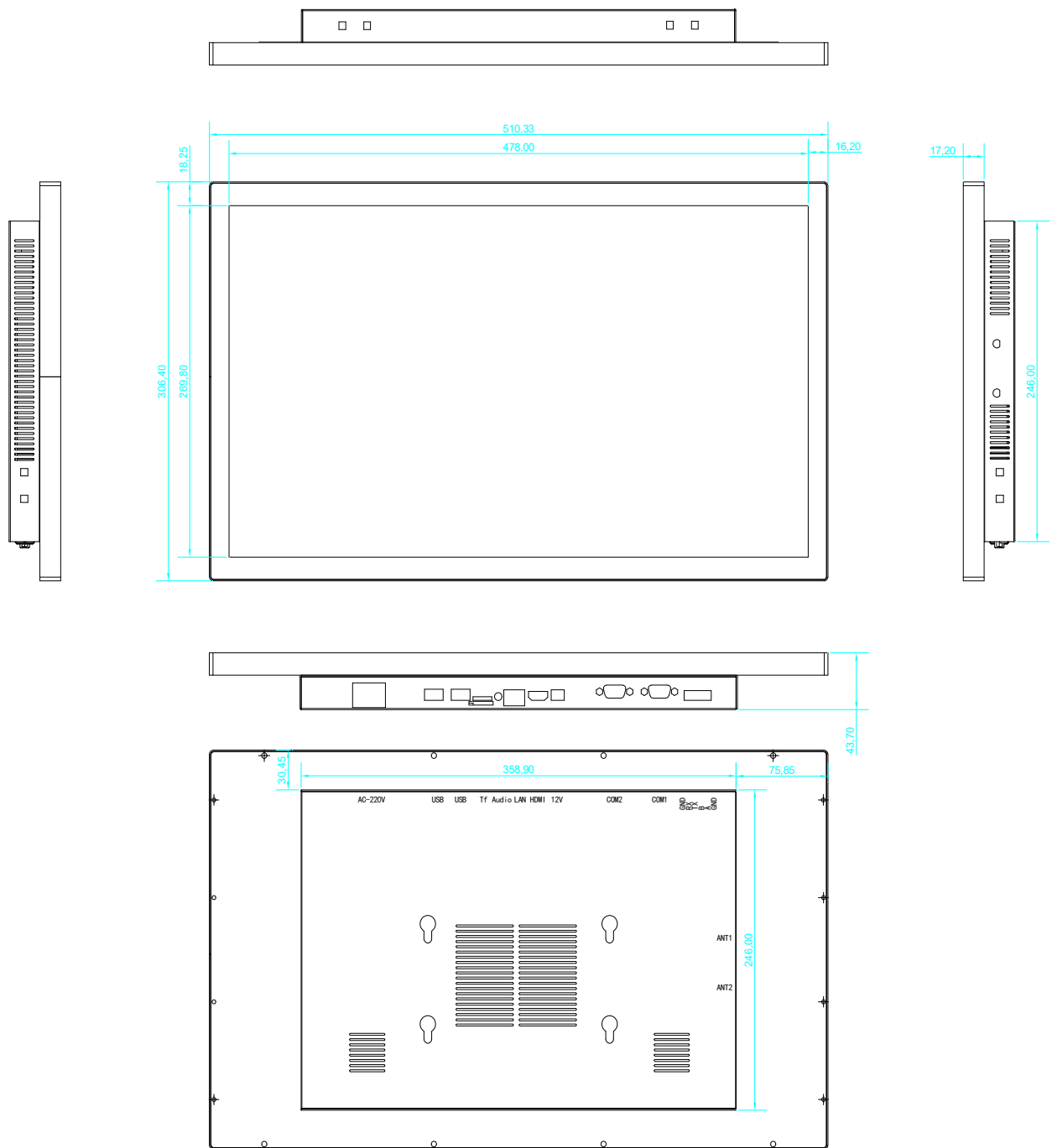
3.1 Overall product photos



3.2 Product interface photos



3.3 Product structure drawing



4.Product parameters

4.1 Display parameters

| Parameters | Data | Instructions |
|--------------------------|--|--|
| Display size | 21.5 inch | 16: 9 |
| Resolution | 1920*1080 | |
| Colors | 16.7M | - |
| Display size | 478(H)*269.8(W) mm | |
| Backlight brightness | 250 nit | The brightness can be adjusted by software |
| Backlight lifetime (Hrs) | 50000Hrs | LED backlight |
| Viewing direction(CR>10) | Wide view angle | |
| Touch type | Capacitive touch panel | Support single or 10 point touch |
| Working life | Single point can affordable≥50 million times | |
| Response time | 8ms | |
| Case size | 510.33*306.4*43.7 mm | |

4.2 Hardware parameters

| Item name | Content |
|------------------|--|
| CPU | ALLWINNRETECH A40I, Cortex-A7, main frequency 1.2G |
| Memory | DDR3 1G |
| Storage | EMMC FLASH 16G (the maximum can be extended to 32G) |
| GPU | / |
| WIFI | Built-in WIFI or WIFI/BT mode (can choice one of the two) , 802.11b/g/n, default single WIFI mode. |
| Bluetooth | / |
| Operation system | Android 7.1.1 |
| Others | Support RTC real-time clock, 、 timing switch |
| Language | Chinese, English, French, German, Italian, Japanese, Korean, Russian, Spanish, Polish, Czech and many other languages. |

5.Interface parameters

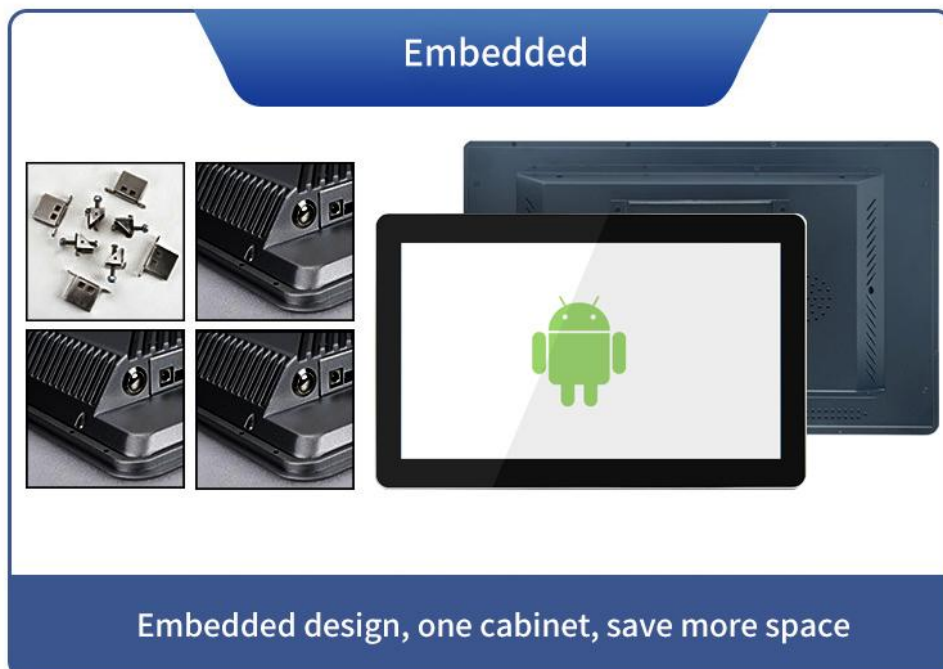
| Item name | Content |
|--------------------|---|
| Power interface | 220V |
| USB | 6*USB HOST (two external, four built-in) |
| TF card | 1*TF card standard interface |
| SIM Card | / |
| HDMI | 1*HDMI A type standard interface output |
| Net interface | One standard external RJ45 interface. |
| Audio/video output | Support left and right channel output, built-in dual 8R/5 power amplifier |
| Reset key | Support (1*UBOOT) |
| COM | 2*RS232(Optional RS485,TTL) |
| WIFI Antenna | 1*WiFi antenna |

6. Reliability parameters

| | |
|-------------------------|---|
| Working temperature | -10°C~60°C |
| Storage temperature | - 20°C~70°C |
| Relative humidity | Humidity: 90%, Temperature: 50°C |
| Vibration protection | 10Hz-50Hz-10Hz Amplitude 1.5mm X、 Y、 Z each 3H |
| Certification | CCC/CE/FCC/EMC/CB/ROHS |
| Front waterproof rating | The front panel can reach IP65 protected rating |

7. Use instruction

7.1 Installation method



7.2 Care and maintenance

1. The power cable must be kept in good contact to avoid loosening, ignition, and voltage fluctuation.
2. To turn off the machine, please close current program and click "Start"- "Turn off" successively, when no signal is displayed, turn off the AC power switch.
3. If you need to turn on the machine again after turn off the machine by power switch, please wait at least 5 seconds. And the switch of the body will cause some damage to the machine and affect the service life. Please avoid frequent witching operation.
4. If not used for a long time after turn off, it is best to cut off the external power supply(turn off the power socket and pull out the power plug.)
5. Do not use the machine during thunderstorms, and remove the power cables and network cables to prevent lightning strikes.
6. After external storage devices such as USB flash drives and mobile hard disks are finished used, exit the devices according to the correct procedure and then remove them.
7. If you are not absolutely sure, do not add, delete or change computer system files and settings.
8. If there is no special need or absolute certainty, do not use third-party software to repair the system.
9. When cleaning the machine, please unplug the power plug first, and then apply the cleaning solution to the soft duster cloth and then wipe it. Pay special attention to not placing too wet duster cloth inside the machine to avoid water in machine.
10. If the light too bright, or even direct light, on the one hand, it affects the visual communication of the touch machine, and on the other hand, direct light will damage the electronic components of the screen.
11. The humidity of the environment where the machine is located should be

suitable. If the electronic equipment is too humid, it will affect the circuit condition and cause problems.

Important notes:

01. Do not place the machine in an unstable or prone to falling location.
02. Avoid exposing the machine to sunlight and other heat sources.
03. In thunderstorm weather (especially when there is lightning), please unplug the power plug and antenna plug.
04. Please place the power cable in a location where people cannot trip over it and do not cover it with any debris.
05. Before you power the device, please confirm whether the power supply voltage meets the device requirements.
06. Please do not overload the power socket to avoid fire or electric shock.
07. For equipment that uses a power cable, there must be an easily accessible power socket near the equipment.
08. Before cleaning the device, please unplug the power cable from the socket and wipe the monitor with a dry, soft cloth.
09. Please avoid (such as casings, LED screens, interfaces, components, circuits, etc.) broken rusted, damaged etc caused by insect& mouse bites or foreign matter intrusion.
010. Avoid contact or exposure to inappropriate temperatures, solvents, acids, alkalis, water immersion or moisture.
011. Please do not let any liquid flow or splash into the device, to avoid cause short circuit or fire.
012. Please do not allow organizations or personnel not authorized by our company to open the device.
013. If this device is not used for a long time, please unplug the power plug.

014. In order to avoid unnecessary damage to the product caused by frequent power on and off, you should wait at least 30 seconds after shutting down the power before turning it on.

015. Before you need to connect or unplug any signal cables, make sure all power cables have been unplugged beforehand.

016. Ensure good heat dissipation and ventilation of the system.

017. Please install it at a suitable location under the guidance of professionals.

8.Packing method

Product accessories

Multi-layer reinforced package protection, safe delivery

| | |
|---|--|
|  |  |
| It is packed in a thousand layer carton | Power adapter+ Power cable |
|  |  |
| Pearl cotton protective layer | Product mounting accessories (Fasteners) |