



Product Manual

21.5 inch Industrial Touch All-in-one PC



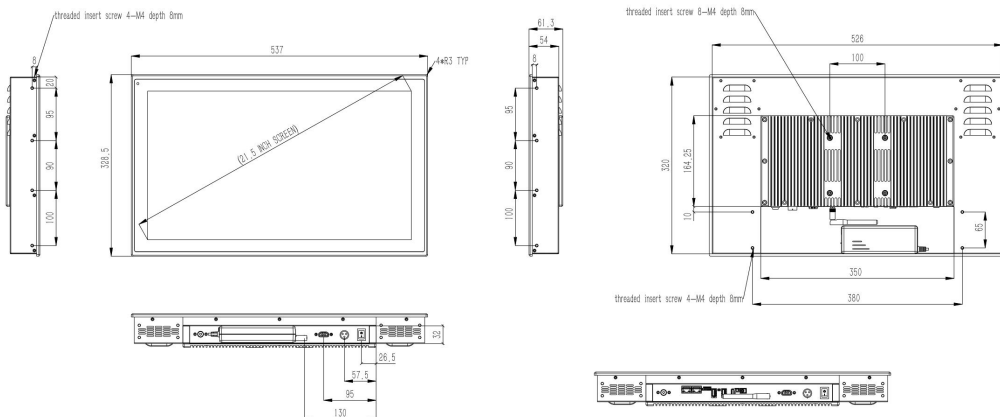
EA-XRN-7B004



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Product Description



This product is a customized industrial touch all-in-one device, which is suitable for the application of intelligent production automation, semi-outdoor advertising, self-service terminals, and customized projects.

The front frame of the product is made of 6mm anti-corrosion aluminum alloy, the rear shell is made of sheet metal, with the high-performance aluminum alloy cooling plate at rear, and the whole device are made of anti-ultraviolet paint process.

The screen of the device is made of 4mmAG anti-glare glass, anti-interference capacitive touch panel and LCD module. It has full viewing angle, wide color gamut, high brightness, and excellent performance for wide temperature working.

The device has a built-in high-performance SBC with Android operating system, which supports wireless Bluetooth, WiFi, and LAN functions.

This product has excellent overall performance, rich interfaces, and supports 24/7 uninterrupted and stable work. It is a non-standard customized product.

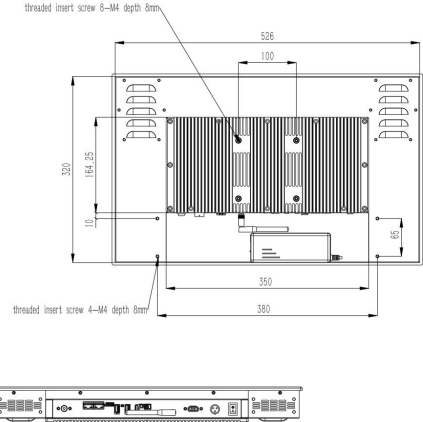
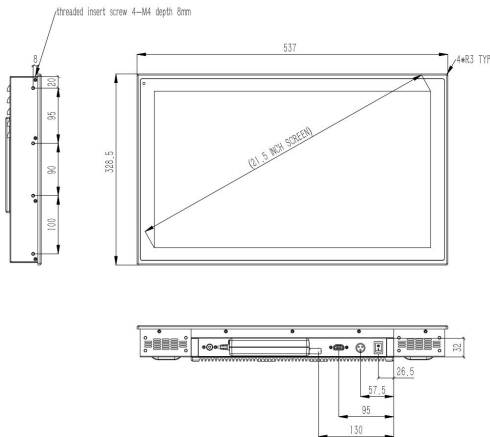
Product Specification

Motherboard	
CPU	Rockchip RK3588 (8nm LPP process) ARM octa-core 64-bit processor, up to 2.4GHz Based on quad-core Cortex-A76 (large core) + quad-core Cortex-A55 (small core)
GPU	Mali-G610 GPU MP4 Quad Core GPU Support OpenGL ES3.2, OpenVG1.1, OpenCL2.2, 450GFLOPS
Memory	LPDDR4 4GB
Storage	eMMC 32GB
HDMI	1*HDMI 2.1 supports 8K 60Hz output (customizable eDP interface output) 1*HDMI 2.0 supports 4K 60Hz input
WIFI、BT	2.4G/5G dual-band WiFi, support Wi-Fi 802.11b/g/n/ac protocol Support Bluetooth
Operating System	Android 12.0
I/O	Power button *1 12V 3pin Aviation DC IN*1, LAN RJ45*2, HDMI output*1, and input*1 USB3.0*1, USB2.0*1 TF card slot*1, Audio/MIC*1 12V DC IN*1, GND*1, Wi-Fi antenna*1
LCD Panel	
Panel size	21.5" TFT LCD screen
Back light	WLED back light

Resolution	1920*1080 (16 : 9 aspect ratio)
Support Color	16.7m 72% ntsc
Brightness (cd/m ²)	1000 nits
Contrast ratio	1000 : 1 (Typ.)
View angle	89/89/89/89 (Typ.)(CR>=10)
Frequency	60Hz
Response Time	17 (Typ.)(g to g) ms
Environment	Operating Temp.: -20 ~ 85°C; Storage Temp.: -20 ~ 85°C
Others	Optical Bonding Technology
	4mm Anti-glare Glass
	Light sensor
Touch Panel	
Touch type	EETI 10 Points Project Capacitive Touch
Response time	5ms
Surface Hardness	7H (4mm AG Glass)
Touch Interface	USB (RS232 optional)
WIFI、BT	2.4Ghz Wi-Fi, support Wi-Fi 802. 11b/g/n, Support Bluetooth
Enclosure	
Waterproof	Front panel IP65
Material	Aluminum alloy
Color	black
VESA mounting	75mm*75mm/100mm*100mm
Working Environment	
Power Adapter	Input: AC 100 - 240V , 50-60Hz; Output: 12V DC, 7A
Device working voltage	DC 12V, 5A
Power consumption	≤50W
Temperature Range	operating: -20 to 70°C, storage :-20 to 80°C
Relative humidity	operating: 10% to 80% , storage :5% to 90%
Size and Packing	

Product Dimension	537*328.5*54mm
Packing Dimension	640*160*460mm
Gross Weight	11KGs
Accessories	Power Adapter*1, Installation screws, WiFi antenna*1
Other	
Mounting	Embedded mounting , Wall mounting brackets, Desk stand holder

Product Drawing



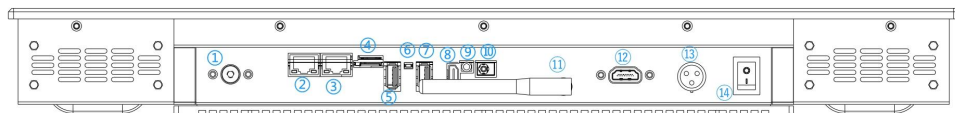
BDR+EDR : 2402MHz-2480MHz 0.80dBm (Conducted)

BLE: 2402MHz-2480MHz 2.64dBm (Conducted)

2.4G Wifi: 2412MHz-2472MHz 14.39dBm (Conducted)

5G Wifi: 5180MHz-5825MHz 11.62dBm (Conducted)

Product Interface Description



- | | | | | |
|---------------------|------------|---------------------|----------------|---------------|
| ① GND | ② LAN RJ45 | ③ LAN RJ45 | ④ SD/TF slot | ⑤ USB OTG |
| ⑥ OS upgrade button | ⑦ USB | ⑧ HDMI IN | ⑨ Audio/Mic | ⑩ 12Vdc input |
| ⑪ Wifi antenna | ⑫ HDMI in | ⑬ 3-pin 12Vdc input | ⑭ Power switch | |

Operation Instructions

1. Turn on the device. Use the power adapter provided by us, connect the plug end to the 110/220Vac socket, and then connect the 3pin 12Vdc connector of the adapter output end into the 3pin 12Vdc input port of the device. After the power is turned on, the device will automatically enter the operating system. If you need to use WiFi, please install the WiFi antenna on the device.
2. The device has M4 VESA mounting holes and mounting screws on the back. During installation, please handle with care and ensure that all screws are tightened to avoid

accidental scratches or damage caused by falling off the machine.

3. The device is equipped with an appropriate power adapter. Ensure that the AC voltage 110V/220V during installation, and tighten the aviation power interface at the device end to maintain a good power supply environment.
4. The bottom of the machine is equipped with a power switch. After confirming the power connection, it is necessary to turn on the switch before using the device. The LED light on the switch is on for the normal power-on state of the device. Disconnect the power supply when the machine is not in use.
5. It is necessary to prevent rain water or liquid from entering the interface at the bottom of the device so as not to cause short circuit damage to the device.
6. There is a brightness sensor in the upper left corner of the screen, which automatically adjusts the brightness of the screen according to the brightness of the environment. Manual adjustment is not required.
7. The device supports 10-point touch and no driver installation is required.
8. It is recommended not to use in thunderstorm weather, so as not to damage the device.

Safety precautions

Power cord and socket

- (1) Do not overload ac power sockets and extended wires, because overloading may cause fire or electric shock.
- (2) The power cord should be properly set to avoid being trampled or squeezed by objects.

- (3) Check the plug and power cable interface of the device. Remove the power plug before moving the device to avoid damage to the AC power cable, resulting in fire or electric shock.
- (4) Fully insert the AC power plug into the AC power socket. Loose plug may cause sparks and fire.
- (5) When pulling out the AC power cable, hold the plug and do not pull the power cable.
- (6) Do not leave the machine in standby state when it is not used for a long time. Please pull out the plug from the power socket.
- (7) Use the power supply specified on the product label. The three-core power supply must be properly connected to the earth to avoid electric shock.
- (8) Caution should be exercised for emergency power sources that are generated by generators after power failure. Ensure that the voltage remains stable before they can be used. Generally speaking, the voltage in the range of 100V-240V, as long as the voltage continues to be stable, not high or low, the machine can be used normally.

Installation and use

- (1) All interfaces of the machine should be plugged and unplugged in case of power failure. Do not remove the back cover without authorization to avoid electric shock. There are no parts inside the machine that users can handle by yourself. If there is any problem, please contact the customer service center of the machine manufacturer
- (2) Do not use the unit near water, such as bathtubs, swimming pools or damp basements. Do not put water containers (vases, cups, cosmetic cases) on the machine
- (3) Do not place the unit in sunlight or near heat sources, such as radiators, heating

equipment, stoves and other heating equipment. The machine is suitable for use in the environment with relatively no electromagnetic interference. If the machine is used near the strong electromagnetic field or where the electromagnetic noise covers the input signal, the picture or sound will fluctuate or produce noise and other interference phenomena.

(4) Do not let metal or combustible objects fall into the machine, especially when children are present. If an exception occurs, do as follows: 1. Turn off the power immediately. 2. Remove the power plug from the AC power socket

Clean

(1) Before cleaning the unit, remove the power plug from the AC power socket; otherwise, electric shock may occur. Please wipe the housing with a soft dry cloth. Do not spray volatile compounds on the housing

(2) Please use neutral detergent dissolved in water to wipe and avoid touching the LCD screen if the case is dirty

(3) Do not use thinner, gasoline, alcohol and other organic solvents to wipe the machine; When wiping the LCD screen, be sure to use a special LIQUID crystal cleaning cloth, or a very soft cotton flannelette, spray a proper amount of non-ionic water, so that the cleaning cloth slightly damp, and then gently wipe; LCD screen is very "delicate", must be wiped gently, in case of broken scree.

Move the device

The machine must be moved by two or more people. When moving, do not shake or shake the whole machine too much. The whole machine may fall and damage or cause personal injury.

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Operations in the 5.15-5.35GHz band are restricted to indoor usage only.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, Human proximity to the antenna shall not be less than 20cm(8 inches)during normal operation.

The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
les dispositifs fonctionnant dans la bande de 5150 à 5250MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

ISED Statement

English: This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

The digital apparatus complies with Canadian CAN ICES-3 (B)/NMB-3(B).

French: Cet appareil contient des émetteurs/récepteurs exempts de licence qui sont conformes aux RSS exemptés de licence d'Innovation, Sciences et Développement économique Canada.

L'exploitation est soumise aux deux conditions suivantes :

- (1) Cet appareil ne doit pas provoquer d'interférences.
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.

L'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian Information

on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

This equipment complies with Canada radiation exposure limits set forth for an uncontrolled environment.

Cet équipement est conforme aux limites d'exposition aux rayonnements du Canada établies pour un environnement non contrôlé.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

This radio transmitter [30425-EAXRN7B004] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Antenna Type	Frequency Band	Antenna Gain (Max.)
External Antenna	2400MHz-2500MHz	1.09dBi
	5180MHz-5825MHz	2.51dBi