# **User Manual**



#### To users of this product

Thank you for purchasing our panel PC. This product adopts high-performance embedded computer hardware components and a combination of the X86 architecture. It is designed for operations under relatively severe environments of Multimedia advertising / industrial automation equipment / instrumentation / security / intelligence products and other fields and featuring such as anti-vibration, anti-jamming, wide power supply input, etc. The delicately optimized design meets the requirements of all users in its applications to various conditions and occasions. This product is small in shape, easily installed. Moreover, the mini Panel PC is easily adaptable to a professional electronic equipment of industry personal controlling as well as its ease of extensive use such as multimedia ad/instruments/military affairs/intelligent product field. With its excellent quality and exquisite manufacturing technology, your product will bring limitless entertainment and enjoyment to you.

In order to ensure the correct installation and the most efficient service, please read this user manual carefully.

#### **Notice: Electric Safety**

- In order to prevent electric shock and possible severe damage to the unit, please temporarily remove the PC power adapter from the power socket before moving the Car PC.
- In order to prevent voltage fluctuations from damaging your purchase and the possibly to the vehicle's battery, please switch the computer's power switch to the "off" position or use wide voltage box while starting the vehicle.
- Once the computer's power has been put into the "on" position do not switch the computer's power to the "off" position until the computer is fully booted. When shutting down the computer follow the guidelines in this user guide.
- Please make sure that the power voltage setting has been adjusted to the standard voltage value of the location where the product is being used.
- No owner/user-serviceable components exist in this unit. Allow only qualified technical service personnel to service or open this unit. Contact our factory service department. Unauthorized tampering may void the product warranty.

#### **Operational Security**

- Before using this product, please first make sure that all external wires and power adapters have been correctly connected. If you suspect any defects, please contact your sales agent or factory personnel immediately.
- To prevent electric short-circuiting, it is forbidden to leave any metal stuffs in the PC mainframe.
- Dust, humidity and dramatic temperature changes will affect the usage life of this computer. Please keep the machine away from these hazards.
- Although an anti-vibration mechanism is adopted inside the computer, please avoid traumatic movement, jolting or dropping of the unit.

 Please do not use chemical detergents to clean the device. Remove dust with a soft cloth to ensure brightness. If any technical problems occur while using this unit, please refer to our sales agents or related technicians. We will correct any problem as rapidly as possible. Please refer to your warranty.

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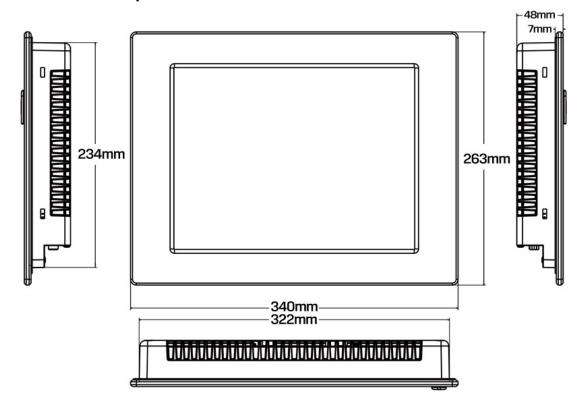
#### 1. Product introduction

The product is the use of a high-performance CPU module and expansion module I / O carrier board used in combination, highly reliable, industrial-grade finless Panel. Customers can choose with different chipset, different performance CPU control module according to the application requirements. The main functions are as follows:

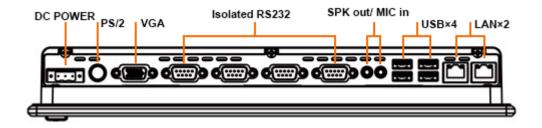
- CPU operating system for optional: Intel Atom D525 【1201】 / Intel Core i5-430UM 【1202】.
- Standard or onboard DDR3 system memory (depending on the CPU module);
- Supports 4 USB2.0 high speed interface;
- Onboard two 10/100 / 1000Mbps adaptive network interface, support for network boot (PXE), Wake on LAN (WOL) function;
- Support a 2W amplifier SPK-Out output interface, one MIC input interface:
- Supports CRT, LVDS display output;
- ➤ 1×2.5" SATA slot, 1×m SATA slot、1×m PCIE slot;
- 4 x using magnetic iCoupler isolation design realizing 3-wire (RX, TX, GND) isolation, with 2500VDC isolation voltage protection serial port (COM1 ~ 4), COM3 port Pin9 provides + 5V or + 12V power supply for optional; 1 x PS / 2 mouse / keyboard interface, 1 x SIM card interface (optional), 1 x LPT interface (optional), 1 x 16 digital input / output interface (optional);
- 256-level watchdog timer;
- > Provide an external 3-pin 5.08mm pitch terminal DC power socket;
- Inner plate aside 2 \* 2P 4.2mm pitch spacing 5.5mm 180 ° white DC power socket (optional);
- Support hardware-enforced power auto switch settings;
   Support DC 12V ~ 24V power input, support ACPI power management functions;

## 2. Product description

#### 2-1 Product Description

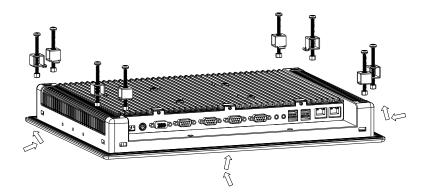


#### 2-2 Interface Introduction



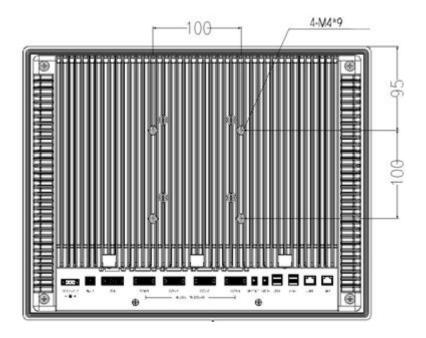
#### 2-3 Suspended installations

When mounted to cabinet, it needs to use eight-supporting suspension parts as shown below;



#### 2-4 VESA installation

Support interfaces with 100mm arm pad is mounted according to the VESA standard.



# 3. Specification

Item	Description
Display Screen	12" TFT LED backlight
Resolution	800×600
Contrast Ratio	800:1
Brightness	330cd/m <sup>2</sup>
Viewing Angle	140°/140°(H/V)
Touch Panel	Heat-resistant 5-wire resistive
	Intel ATOM D525 Processor (1M cache, 1.80GHz)
CPU	【1201】
CPU	Intel Core i5-430UM Processor (3M cache, 1.20GHz) [1202]
RAM	2G DDR3 【1201】
	4G DDR3 【1202】
Storago	m SATA SSD 32G optional up to: 512G
Storage	Optional: 2.5" SATA
Output Signal	VGA、HDMI
Expansion	2.5" SATA slot×1 (optional)
Interface	m SATA slot ×1 (optional)
Interrace	m PCIEx1 (optional)
	1 x DC12~24V
	1 x PS/2
	1 × VGA
Interface	4 × RS232
miorido	1 × Audio output
	1 × MIC input
	4 × USB 2.0
	2 × LAN RJ45
OS (optional)	Windows 7 、Windows 8、 Windows 10、 Linux
Working	-10℃- 60℃
Temperature	
Storage	-40℃- 80℃
Temperature	
Input Voltage	DC 12~24 V
Current	3A 12V 【1201】; 4A 12V【1202】
Power	≤35W 【1201】; ≤47W【1202】
Consumption	·
Dimension(LWD)	340 x 263 x 48mm
Weight	3850g

## 4. Accessories



1. Fixed screws
2.2.5" HDD bracket
3. DC power
4. PS/2 cable
5. CD drive
6. Manual
1 pair
1 piece
1 piece
1 copy

#### 5. Safety guidelines

- 1) Carefully read the safety instructions and heed all cautions and warnings indicated on the device and manual;
- 2) Keep this manual for reference;
- 3) Keep this equipment away from humid environment;
- 4) Chassis slot opening for ventilation inside the chassis components to avoid overheating, Do not cover up these openings or blockage;
- 5) Before connecting the device to the power supply, make sure that the appropriate voltage;
- 6) Place the power cord will not be trampled, and do not stacked anything over the power line;
- 7) The device should have a good grounding to prevent electrostatic damage, install, disconnect the power, otherwise it will damage the motherboard:
- 8) In order to avoid damage to components on the motherboard of static electricity, should never directly into the motherboard like a carpet, remember before touching the motherboard uses a static wrist strap or touching metal;
- 9) Hold the edge through the entire motherboard installation, do not touch the chip;
- Before plug or unplug any expansion cards or memory modules, please unplug the power cord from the power socket;
- 11) Never pour any liquid from the injection openings or will cause serious damage or even cause an electrical shock;
- 12) If the following occured please find the technical service personnel to deal with:
  - ♦ Power cord or plug is damaged;
  - → Liquid penetration inside the device;
  - → Equipment exposed to a humid environment;
  - Equipment is not working properly, or the user can not use it to work in accordance with the guidance manual;
  - ♦ Device is dropped or hit, there are obvious signs of damage.

Note: due to constant effort to improve products and product features, specifications may change without notice.