

PPC-612 12.1" Panel PC with TFT LCD and Intel® Core™ i / Celeron® Processor

Startup Manual

Packing List

Before installation, ensure that the following items are included with the product:

1. 1 x Panel PC
2. 1 x PPC-612 Startup Manual
3. 8 x Mount brackets
4. 8 x Mount screws

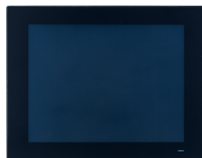
If any of the above items are missing or damaged, contact your distributor or sales representative immediately.

Software Installation

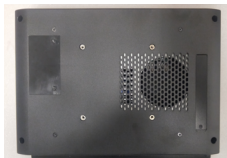
Before installing software on the panel PC, install the corresponding drivers to ensure full functionality.

All drivers can be downloaded from the Advantech website at <http://www.advantech.com>.

Appearance



Front View

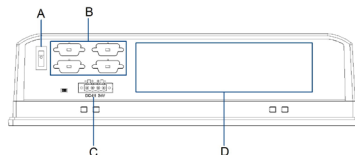


Rear View

VESA mount screws: 4 x screws

Screw depth: 8 mm (max.)

I/O Layout



A. Power Button

B. Reserved ports

C. DC-In

D. PPC-MB-XXXX I/O port

For more information about this product, visit the Advantech website at:

http://www.advantech.com/products/fanless-panel-pcs/sub_1-2jkjm3



For technical support and customer service, visit the Advantech support website at:

http://support.advantech.com/support/new_default.aspx



This manual is for the PPC-612 series.

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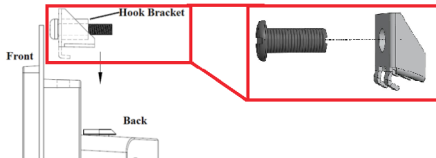
Specifications

Chassis Features		PPC-612-RTA
	Storage	1 x 2.5" SATA SSD bay
	I/O	4 x Reserved ports (DB9) 2 x WLAN antenna holes
		1 x DC inlet 1 x Power switch Reserved opening: According to the PPC-MB-series motherboard specifications
	Expansion	1 x PCIe x4 (optional) 1 x PCI (optional) 1 x PCIe x16 (optional, only for PPC-MB-6x0)
	Speaker	2 x 1W
Physical Characteristics	Fan	2 x 12V
	Dimensions	317 x 246 x 83.2mm (12.48 x 9.68 x 3.27 in)
OS Support	Weight	3.98 kg (8.76 lb)
	OS Support	According to motherboard specifications
Power Consumption	Input Voltage	DC 24V +/-20%
	Power Consumption	112W (Burn-in test 8.1 in Windows 10 64-bit)
LCD Display	Display size	12.1" TFT LCD panel
	Max. Resolution	1024 x 768
	Viewing Angle	89 (left), 89 (right), 89 (up), 89 (down)
	Luminance (cd/m2)	600
	Contrast Ratio	1000
	Backlight Lifetime	50,000 hr (min.)
Touchscreen	Touch Type	5-wire resistive
	Light Transmission	80±5%
	Controller Interface	USB interface
Environment	Operating Temperature	0 ~ 50 °C (32 ~ 122 °F) (With 35W CPU) (with SSD)
	Storage Temperature	-40 ~ 60 °C (-40 ~ 140 °F)
	Relative Humidity	10 ~ 95% @ 40 °C (non-condensing)
	Shock	Operating: 10 G peak acceleration (11 ms duration), IEC 60068-2-27 compliant
	Vibration	Operating: Random vibration test 5 ~ 500 Hz, 1 Grms @ with SSD, IEC 60068-2-64 compliant
	EMC	CE, FCC, Class A, UKCA, VCCI
	Safety	CB, CCC, UL, UKCA
	Front Panel Protection	IP66 compliant

Panel Mounting

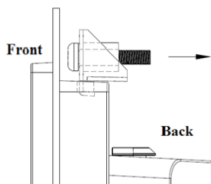
To mount the flat-bezel panel PC, follow the steps outlined below.

1. Prepare a panel cutout according to the panel PC dimensions.
Cutout dimensions for 311 X 240 mm (2.44 x 9.44 in);.
2. Insert the panel PC into the cutout. Retrieve the hook brackets and M6 x 21L screws from the accessory box.

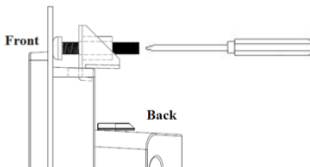


Hook brackets for panel mounting

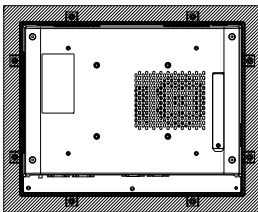
3. Insert the hook brackets into the holes in the direction of the arrow shown in the figure below. Then hang the panel PC onto the hook brackets.



4. Tighten the hook bracket screws to affix the panel PC in place.



Fasten the hook brackets.



Safety Instructions

1. Read these safety instructions carefully.
Veuillez lire attentivement ce manuel d'instructions de sécurité.
2. Retain this startup manual for future reference.
Veuillez conserver ce manuel d'instructions pour référence ultérieure.
3. Disconnect the equipment from all power outlets before cleaning. Use only a damp cloth for cleaning. Do not use liquid or spray detergents.
Débranchez l'appareil de toutes les prises de courant avant le nettoyage. Nettoyez-le uniquement à l'aide d'un chiffon humide. Ne pas utiliser de détergents liquides ou pulvérisateurs.
4. For pluggable equipment, the power outlet socket must be located near the equipment and easily accessible.
Pour les appareils enfichables, la prise de courant doit être placée près de l'appareil et facilement accessible.
5. Protect the equipment from humidity.
Protégez l'appareil contre l'humidité.
6. Place the equipment on a reliable surface during installation. Dropping or letting the equipment fall may cause damage.
Placez l'appareil sur une surface fiable pendant l'installation. L'abandon ou la chute de l'appareil pourrait causer des dommages.
7. The openings on the enclosure are for air convection. Protect the equipment from overheating. Do not cover the openings.
Les ouvertures du boîtier sont pour la convection d'air. Protégez l'appareil contre la surchauffe. Ne couvrez pas les ouvertures.
8. Ensure that the voltage of the power source is correct before connecting the equipment to a power outlet. The power outlet socket should have a ground connection. Assurez-vous que la tension de la source d'alimentation est correcte avant de connecter l'appareil à une prise de courant. La prise de courant doit avoir une bonne connexion mise à la terre.
9. Position the power cord away from high-traffic areas. Do not place anything over the power cord.
Placez le cordon d'alimentation à l'écart des zones à fort trafic. Ne placez rien sur le cordon d'alimentation.
10. All cautions and warnings on the equipment should be noted.
Attention à toutes les précautions et avertissements indiqués sur l'appareil.
11. If the equipment is not used for a long time, disconnect it from the power source to avoid damage from transient overvoltage.
Si l'appareil n'est pas utilisé pendant une longue période, déconnectez-le de la source d'alimentation pour éviter les dommages causés par une surtension transitoire.
12. Never pour liquid into an opening. This may cause fire or electrical shock.
Ne versez jamais de liquide dans une ouverture. Sinon, cela pourrait provoquer un incendie ou un choc électrique.
13. Never open the equipment. For safety reasons, the equipment should only be opened by qualified service personnel.
N'ouvrez jamais l'appareil. Pour des raisons de sécurité, l'appareil ne doit être ouvert que par un technicien qualifié.

Safety Instructions (Cont.)

14. If one of the following occurs, have the equipment checked by service personnel:
Si l'un des cas suivants se produit, demandez aide à un technicien qualifié:
- The power cord or plug is damaged.
Le cordon d'alimentation ou la fiche est endommagé.
 - Liquid has penetrated the equipment.
Le liquide a pénétré dans l'appareil.
 - The equipment has been exposed to moisture.
L'appareil a été exposé à l'humidité.
 - The equipment is malfunctioning or does not function according to the user manual.
L'appareil est défectueux ou ne fonctionne pas conformément aux instructions.
 - The equipment has been dropped or damaged.
L'appareil a été abandonné et endommagé.
 - The equipment shows obvious signs of breakage.
L'appareil montre des signes évidents de rupture.
15. Do not leave the equipment in an environment with a storage temperature below -40 °C (-40 °F) or above 60 °C (140 °F) as this may cause damage. The equipment should be kept in a controlled environment.
Ne laissez pas cet appareil dans un environnement dont la température de stockage est inférieure à -40 °C (-40 °F) ou supérieure à 60 °C (140 °F), car cela pourrait causer des dommages. L'appareil doit être surveillé dans l'environnement.
16. CAUTION: Batteries are at risk of exploding if incorrectly replaced. Replace only with the same or equivalent type as recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.
ATTENTION: Il y a danger d'explosion s'il y a un remplacement incorrect de la pile. Remplacer uniquement avec une pile du même type ou d'un type équivalent recommandé par le constructeur.
17. In accordance with the IEC 704-1:1982 specifications, the sound pressure level at the operator's position should not exceed 70 dB (A).
Conformément aux spécifications de l'IEC 704-1:1982, le niveau de pression acoustique à la position de l'opérateur ne dépasse pas 70 dB (A).
18. DISCLAIMER: These instructions are provided in accordance with IEC 704-1 standards. Advantech disclaims all responsibility for the accuracy of any statements contained herein.
AVERTISSEMENT: Ces instructions sont fournies conformément aux normes IEC 704-1. Advantech décline toute responsabilité quant à la précision de toute déclaration contenue dans le présent document.
19. WARNING for operation in an ITE environment.
This product is suitable for installation in information technology rooms in accordance with Article 645 of the National Electrical Code and NFPA 75.
Peut être installé dans des salles de matériel de traitement de l'information conformément à l'article 645 du National Electrical Code et à la NFPA 75.
20. CAUTION: This product is not intended for use by children and is not suitable for use in locations where children are likely to be present (this product is not a toy).
ATTENTION: Ce produit n'est pas un jouet et devrait être gardé hors de la portée des enfants.

PPC-612 12.1" 配备 TFT LCD 显示屏和英特尔® 酷睿™/赛扬系列处理器的平板电脑 快速入门手册

包装清单

安装系统之前，用户需确认包装中含有本设备以及下面所列各项：

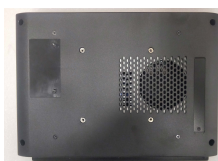
1. 1 x PPC 准系统
2. 1 x 快速入门手册
3. 8 x 挂钩铁件
4. 8 x 挂钩螺丝

如果其中任何一项缺失或损坏，请立即与经销商或销售代表联系。

产品外观



前视图



后视图

VESA 固定螺丝：4 x M4；

M4螺丝螺牙深度：8mm

如需了解有关本产品及研华其它产品的详细信息，请访问我们的网站

<http://www.advantech.com.cn>

如需技术服务与支持，请访问我们的技术支持网站

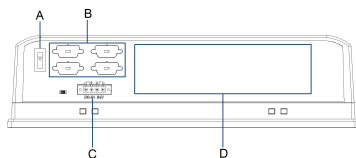
<http://support.advantech.com.cn/support/default.aspx>

本手册适用于 PPC-612 系列。

料号：2044061200
中国印刷

第一版
2023 年 5 月

I/O 接口



A. 电源开关

C. DC 插孔

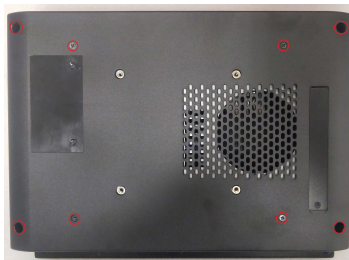
B. 预留接口

D. PPC-MB-XXXX I/O 接口

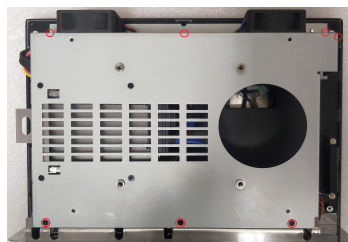
系统安装

安装 PPC-612 optimized 机箱主板

1. 移除后盖
拧开后盖螺丝（红色圈内），打开后盖。



2. 移除加强板
拧开后盖螺丝（红色圈内），打开加强板。

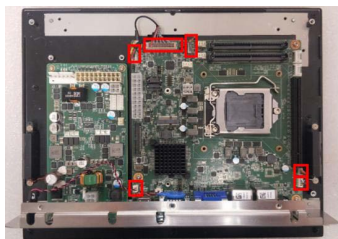


系统安装（续）

3. 安装主板

从附件盒中取出 4 颗螺丝，然后将主板固定至主板支架上。
安装主板时，请检查跳线设置，详细请参考完整版的英文说明书。

安装好主板的 I/O，根据需求拆解 DB9 端口。



4. 安装 CPU 风扇

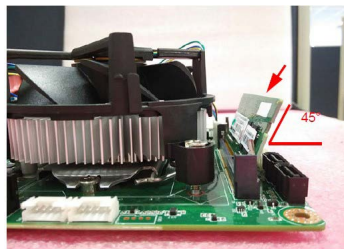
使用风扇的 4 颗螺丝将 CPU 风扇固定至主板，然后将线材接至主板。（请参考选型指南选择 CPU 风扇，CPU 风扇需单独购买。）



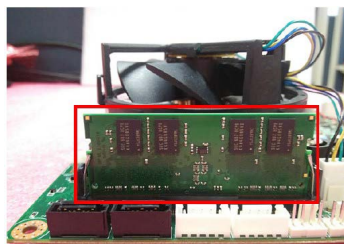
系统安装（续）

5. 安装内存

1) 将内存卡以 45 度角插入插槽，然后轻按使其充分插入插槽。请注意金手指必须完整插入至插槽以保证连接可靠。



2) 插入插槽后，确保卡扣已经固定内存卡。



3) 安装系统风扇线材、硬盘加强板以及后盖即可完成。



产品规格

机箱特性		PPC-612-RTA
	存储	1 x 2.5" SATA 磁盘盒
	I/O 接口	4 x 预留接口 (DB9) 2 x WLAN 天线孔
		1 x DC 插孔 1 x 电源开关 预留开口: 基于特定主板 PPC-MB series I/O 端口
	扩展	1 x PCIe x4 (选配) 1 x PCI (选配) 1 x PCIe x16 (选配, only for PPC-MB-6x0)
	扬声器	2 x 1 W
	风扇	2 x 12 V
操作系统	操作系统	基于PPC-MB series主板规格
功耗	输入电压	DC 24V+/-20%
	功耗	112W (Burn-in test 8.1 in Windows 10 64-bit)
显示屏	屏幕尺寸	12.1" TFT LCD
	最大解析度	1024 x 768
	视角	89 (左), 89 (右), 89 (上), 89 (下)
	亮度(cd/m2)	600
	对比度	1000
	背光寿命	50,000 hr (min.)
触摸屏	触摸类型	五线电阻式
	透光率	80±5%
	控制器	USB 接口
环境规格	工作温度	0 ~ 50 ° C (32 ~ 122 ° F) (With 35W CPU) (with SSD)
	存储温度	-40 ~ 60 ° C (-40 ~ 140 ° F)
	相对湿度	10 ~ 95% @ 40 ° C (非凝结)
	冲击	10G 峰值加速器(11 ms 持续时间), IEC 60068-2-27
	振动	随机振动测试 5 ~ 500 Hz, 1 Grms @ 搭配 SSD, IEC 60068-2-64
	EMC	CE、FCC Class A、UKCA、VCCI
	安规	CB、CCC、UL、UKCA
	前面板保护	IP66 防护等级

注：消费者若使用电源适配器供电，则应购买配套使用获得 CCC 认证并满足标准要求的电源适配器，购买符合 CCC 认证并满足标准要求的电线组件。