

PPC-3150-XE4BE/PPC-3170-XE4BE/PPC-3190-XE4BE 15/17/19" Panel PC with TFT LCD and Intel® Atom™ E3845 Processor Startup Manual

Packing List

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

- 1 x Panel PC
- 1 x PPC-3150/3170/3190-XE4BE startup manual
- 1 x PCIe x1-to-PCIe x1 riser card
- 2 x Phoenix connectors
- 10/12 x Mount brackets (12 for PPC-3190-XE4BE and 10 for PPC-3150-XE4BE and PPC3170-XE4BE)
- 10/12 x Mount screws (12 for PPC-3190-XE4BE and 10 for PPC-3150-XE4BE and PPC3170-XE4BE)

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

Software Installation

Before installing software onto the panel PC, make sure to install the corresponding drivers for full functionality.

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

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

http://www.advantech.com/products/fanless-panel-pcs/sub_1-2/kjm3



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-3150/3170/3190-XE4BE series.

Part No. 2043315001
Printed in China

Edition 2
March 2021

Appearance



Front View

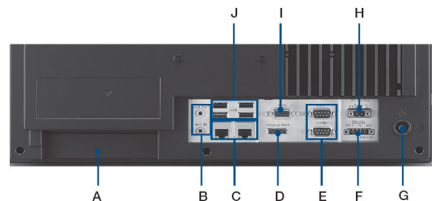


Rear View

VESA mount screws: 4 x M4 screws

Screw depth: 8 mm max.

I/O Layout



A. 1 x Expansion slot (PCI or PCIe x1)

B. 1 x Mic-In/Line-Out

C. 2 x Intel Gigabit Ethernet

D. 1 x DisplayPort

E. 2 x RS-232

F. 1 x Isolated RS-422/485

G. 1 x Power button

H. 1 x DC input and AT/ATX switch

I. 1 x VGA

J. 1 x USB 3.0, 3 x USB 2.0

Specifications

Model	PPC-3150-XE4BE	PPC-3170-XE4BE	PPC-3190-XE4BE
Display Type	15" TFT LCD (with LED backlight)	17" TFT LCD (with LED backlight)	19" TFT LCD (with LED backlight)
Max. Resolution	1024 x 768	1280 x 1024	1280 x 1024
Color	16.7M	16.7M	16.7M
Dot Matrix	0.297 x 0.297 mm	0.264 x 0.264 mm	0.294 x 0.294 mm
Viewing Angle	80 (left), 80 (right), 70 (up), 70 (down)	80 (left), 80 (right), 60 (up), 80 (down)	85 (left), 85 (right), 80 (up), 80 (down)
Brightness	500 cd/m ²	350 cd/m ²	350 cd/m ²
Contrast	2500	800	1,000
Backlight Lifetime	70,000 hours	50,000 hours	50,000 hours
Weight	5.3 kg/11.68 lb	6.3 kg/13.89 lb	7.0 kg/15.4 lb
Dimensions (W x H x D)	396.5 x 317.6 x 65.3 mm/ 15.6 x 12.5 x 2.57 in	437 x 357 x 563.5 mm/ 17.2 x 14 x 2.22 in	454 x 379.8 x 62.1 mm/ 17.8 x 14.9 x 2.4 in
Chipset	Intel® Atom™ E3845 processor		
Memory	1 x 204-pin DDR3L (up to 8 GB)		
Primary Storage	1 x 2.5" SATA bay		
Optional Storage and I/O	Either 1 x Full-size mSATA 1 x CFast card (optional module) 1 x CF card (optional module) 1 x Internal USB connector for a USB dongle (optional module) 2 x DB9 for 2 x RS-232 or 1 x RS-232 and 1 x GPIO (optional module)		
Network (LAN)	2 x Gigabit Ethernet (Intel® I210)		
I/O	1 x Isolated RS-422/485 4 x RS-232 (2 x internal RS-232 for an optional COM module) 1 x GPIO (8 x channels, TTL level, reserved) 1 x USB 3.0, 3 x USB 2.0 2 x Gigabit Ethernet 1 x D-Sub VGA port 1 x DP1.1a port 1 x Line-Out, 1 x Mic-In, 2 x 1-W speakers (internal)		
Expansion Slot	Either 1 x PCI (standard) 1 x PCIe x1 (in the accessory box)		
Other Expansion Options	1 x Full-size mini PCIe slot		
Operating System	Microsoft® Windows 7(32/64 bit)/10 (64 bit), WES7P, WEC7, Win 10 LTSC, Linux, Android 6.0		
Power Consumption*	30 W	34 W	27 W
Output Power	50 W		
Input Voltage	10 ~ 95% @ 40 °C/104 °F (non-condensing)		
Operating Temperature	0 ~ 50 °C/32 ~ 122 °F with 2.5" SATA SSD -20 ~ 60 °C/-4 ~ 140 °F with -40 ~ 85 °C/-40 ~ 185 °F mSATA or 2.5" SATA SSD		
Storage Temperature	-40~ 60 °C/-40 ~ 140 °F		

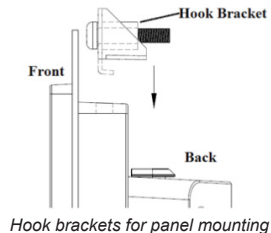
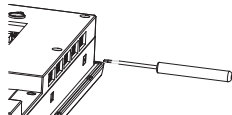
Specifications (Cont.)

Relative Humidity	10 ~ 95% @ 40 °C/104 °F (non-condensing)		
Shock	Operating 10G peak acceleration (11 ms duration), compliant with IEC 60068-2-27		
Vibration	Operating random vibration test, 5 ~ 500 Hz, 1 Grms with HDD/2 Grms with SSD, compliant with IEC 60068-2-64		
Certifications	Safety: CB, UL, CCC, BSMI EMC: CE, FCC Class A, BSMI		
*Power consumption test conditions for PPC-3150			
	Test Condition	Test Configuration	Test System
Burn-In Test 7.0	Memory: 4 GB DDR3L 1333 HDD: 500 GB 2.5" SATA III mSATA: mSATA 32 GB MLC I/O: 4 x COM RS-232 loopback, 1 x USB 3.0, 4 x USB 2.0	Windows 7 (32 bit)	30
*Power consumption test conditions for PPC-3170			
	Test Condition	Test Configuration	Test System
Burn-In Test 7.0	Memory: 4 GB DDR3L 1333 HDD: 500 GB 2.5" SATA III mSATA: mSATA 32 GB MLC I/O: 4 x COM RS-232 loopback, 1 x USB 3.0, 4 x USB 2.0	Windows 7 (32 bit)	34
*Power consumption test conditions for PPC-3190			
	Test Condition	Test Configuration	Test System
Burn-In Test 7.0	Memory: 4 GB DDR3L 1333 HDD: 500 GB 2.5" SATA III I/O: 2 x COM RS-232 loopback, 1 x USB 3.0, 3 x USB 2.0	Windows 7 (32 bit)	27

Panel Mounting

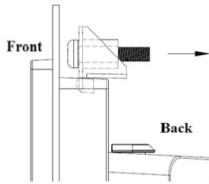
To mount the flat-bezel panel PC, follow the steps outlined below.

1. Prepare a panel cutout according to the panel PC dimensions.
(Panel cutout dimensions:
PPC-3150: 302 x 381 mm/11.89 x 15 in
PPC-3170: 347 x 427 mm/13.66 x 16.81 in
PPC-3190: 370 x 444 mm/14.57 x 17.48 in)
2. Using a long pointy tool, remove the rubber plugs from the hook holes.
3. Insert the panel PC into the cutout. Retrieve the hook brackets and M6 screws from the accessory box (12 for PPC-3190-XE4BE and 10 for PPC-3150-XE4BE and PPC3170-XE4BE).

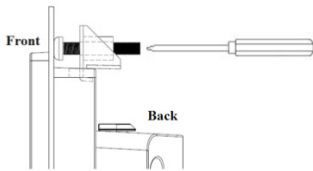


Panel Mounting (Cont.)

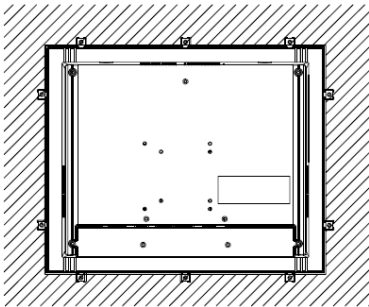
4. Insert the hook brackets into the holes following the direction of the arrow shown in the figure below. Then hang the panel PC on the hook brackets.



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



Fasten the hook bracket



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 grounded 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.

Safety Instructions (Cont.)

13. Never open the equipment. For safety reasons, the equipment should be opened only 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.
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 of 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 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 IEC 704-1:1982 specifications, the sound pressure level at the operator's position does 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).

Safety Instructions (Cont.)

18. The equipment is intended to be supplied by a UL-certified power supply (FSP090-DIEBN2 adapter) or DC power source suitable for use at a TMA of at least 40°C (104°F), with the output rated as 19 Vdc, 4.74A min. and ES1 (or SELV); or at a TMA of at least 60°C (140°F), with the output rated 9 ~ 32 Vdc, 6 ~ 2A min. and ES1 (or SELV). Contact Advantech for further information.
Le produit doit être alimenté par une alimentation certifiée UL (FSP090-DIEBN2 adaptateur) approprié pour l'utilisation à une température de 40°C (104°F) au minimum, et la sortie nominale est 19 Vdc, 4.74 A min., ES1 (ou SELV); ou pour l'utilisation à une température de 60°C (140°F) au minimum, et la sortie nominale est 9 ~ 32 Vdc, 6 ~ 2A min., ES1 (ou SELV). Pour plus d'informations, veuillez contacter Advantech.
19. 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.
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.
21. Please Keep the monitor out of direct sunlight, very strong bright lights and away from any other heat source. Lengthy exposure to this type of environment may result in discoloration and damage to the monitor. Veuillez ne pas placer les écrans dans le rayonnement solaire direct, dans la haute lumière et dans d'autres sources de chaleur. L'exposition prolongée dans cet environnement peut entraîner la décoloration et l'endommagement de l'affichage.