

Heavy Industrial Panel PC

IEI's rugged industrial panel PCs (PPC) have a new flat bezel IP 64 or IP 65 aluminum front panels suitable for the demands of harsh industrial environments. Powerful Intel® Core™ 2 Extreme/Quad/Duo, Pentium®/Celeron® processor, and the low power Atom™ D525 dual-core processor come integrated on a wide range of feature-rich IEI embedded mother boards that drive the IEI industrial PPCs. Multi I/Os and expansion capabilities enable you to interface your system with many external devices.



PPC-27 Series



PPC-37 Series



PPC-51 Series



PPC-5152-D525



Compact Size Panel PC

- Space-saving and Cost-conscious Applications
- Reliable Fanless and Low Power Consumption System with LED Backlighting

The thin compact design is ideal for cost conscious applications. Integrated with AMD LX800 processor, the low power consumption solution is perfect for space-saving as well as operation in harsh environments.

| | LCD Size | Platform | Expansion Slot | Fanless |
|-----------|----------|------------------------|----------------|---------|
| PPC-2706G | 6.5" | AMD Geode LX800 500MHz | N/A | |
| PPC-2708G | 8.4" | | | |
| PPC-2710G | 10.4" | | | |
| PPC-2712G | 12.1" | | 1 x Mini PCI | Fanless |

Advanced Slim Size Panel PC

- Fanless Intel® Atom™ N270 Solution
- Slim Size Dual Core Intel® 945GM Solution

The slim PPC-37 series adopts the high performance Intel® 945GM chipset and Intel® dual core processor to enhance high speed processing capability. The fanless system with built-in Intel® N270 processor provides quiet and continuous operation without the possibility of fan failure.

| | LCD Size | Platform | Expansion Slot | Fanless |
|-----------|----------|---------------|----------------|---------|
| PPC-3708G | 6.5" | Intel® 945GME | - | |
| PPC-3708A | | Intel® N270 | Fanless | |
| PPC-3710G | 10.4" | Intel® 945GME | - | |
| PPC-3710A | | Intel® N270 | Fanless | |
| PPC-3712G | 12.1" | Intel® 945GME | - | |
| PPC-3712A | | Intel® N270 | Fanless | |

Performance Oriented Multi-functional Panel PC

- LGA775 Performance Oriented to Endure High Task Loading
- Expandable Function through PCI/PCIe x1 Expansion Slot

Performance oriented, scalable dual-core to quad-core CPU and Intel® G41 chipset designed for extreme graphics and performance applications.

| | LCD Size | Platform | Expansion Slot |
|-----------|----------|-------------|---|
| PPC-5150A | 15" | Intel® 945G | |
| PPC-5150A | | Intel® G41 | |
| PPC-5170A | 17" | Intel® 945G | |
| PPC-5170A | | Intel® G41 | |
| PPC-5190A | 19" | Intel® 945G | |
| PPC-5190A | | Intel® G41 | -1 x either PCI or PCIe x1 expansion slot -1 x PCIe Mini |

Ultimate Expansion Slot Panel PC

- PCI, and PCIe and PCIe Mini Slot options
- Flat bezel design with IP 64 protection

PPC-5152-D525 is our most stylish PPC design ever. Not just a PPC with good looking exterior, it also has extremely rugged front bezel IP 64 protection. Furthermore, the most feasible PCI and PCIe expansion design is included in this powerful panel pc.

| | LCD Size | Platform | Expansion Slot |
|---------------|----------|-------------------|---|
| PPC-5152-D525 | 15" | Intel® Atom™ D525 | -Either 2 x PCI expansion or 1 x PCIe by 1 plus 1 x PCI expansion -1 x PCIe Mini |

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Features for Heavy Industrial Needs

IEI's diverse line-up of industrial Panel PC, add new functions but no extra price, support ultra high brightness LED backlight TFT LCD, and supports green ErP power adapter.

Feature 1 Robust Mechanical Design

- All the PPC series are constructed with aluminum die-casting sealed front bezel and SECC rear cover. The whole housing is painted in silver gray painting for protection
- Anti-scratch
- Anti-corrosion
- Easily clean with cleanser



Feature 2 -10°C~50°C Extended Operating Temperature

- Rigorous product design quality, through 48 hours burning test
- Utilizing LED backlight TFT LCD (6.5"~12.1") allows the system to operate in low temperature environment.
- Metal casing is great for heat dissipation and can prevent casing transformation in high temperature environment



Feature 3 Flat Bezel Touch Screen

The flat-bezel touch screen panel PC helps prevent dust and water accumulation and save maintenance fee/ time in harsh operating environment.



| | |
|------------|---------------|
| Panel Size | 15" |
| Model | PPC-5152-D525 |

Feature 4 Efficient Green System



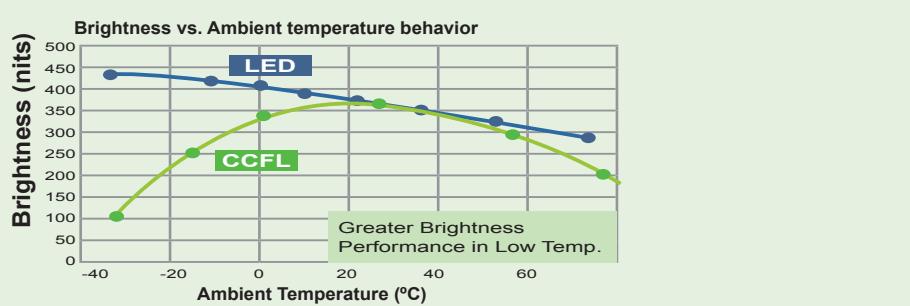
A. Upgraded 6.5"~15" PPC TFT LCD to LED Backlighting

- Inverter-free PPCs increase system reliability and lower total product maintenance cost.
- Better for the environment: LEDs are mercury free
- 50000hrs long-life backligh: LEDs have a much longer life than a traditional CCFL backlight
- 20%~30% Less Power Consumption

Compact PPC-27 and PPC-37 series upgrade to have the white light-emitting diodes (LEDs) TFT LCD, which consume less power, and hence reduced the system's overall power requirement by 20%~30% compared to conventional cold cathode fluorescent lamp (CCFL) systems.

| Model | PPC-2706GS-R10 | 60% Brightness Increased | | | | |
|------------------------------|----------------|--------------------------|----------------|----------------|----------------|----------------|
| | | PPC-2706GS-R20 | PPC-2710GS-R10 | PPC-2710GS-R20 | PPC-2712GS-R10 | PPC-2712GS-R20 |
| Brightness | 500 nits | 800 nits | 400 nits | 450 nits | 450 nits | 500 nits |
| System Power Consumption (W) | 13.8W | 20W | 20W | 15W | 27.6W | 21W |

- LED TFT LCD ensures brightness and life time performance under low temperature operation



B. Power Adapter Meets ErP Efficiency Criteria (ErP means Energy Related Products)

The new IEI power adapters included with the PPC-27 and PPC-37 R20 version comply with the ErP 2009/125/EC directive, where the power consumption of a whole system in either standby or off mode must be under 1W.



| Organization | Region | Mandatory/ Voluntary | Maximum Energy Consumption in Active Mode | | Maximum Energy Consumption in No-Load Mode | |
|--|--------|-------------------------|---|--------------|--|--------------|
| | | | 0 to < 36W | 36 to ≤ 250W | 0 to < 50W | 50 to ≤ 250W |
| ErP (Energy-related Product) European Commission | Europe | Mandatory | 0.08 x Ln (PO) + 0.585 | 87% | 0.3W | 0.5W |

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Feature 4 Great Readability with High Brightness and Better Contrast

For industrial applications, higher luminance is indispensable. Our PPCs provide high brightness that can easily adapt to indoor, outdoor or high ambient lighting conditions. The 6.5" TFT LCD of PPC-2706G adds extra low reflection coating on the surface to reduce the sunlight reflected from the surface of the panel, increase contrast ratio and image readability even when used outdoor.

| 6.5"~15" TFT LCD with Brighter and More Vivid Image | |
|---|--|
| <ul style="list-style-type: none"> • 6.5" VGA (640 x 480) • 500 nits • 450:1 • 140° (H) / 120° (V) • -10°C to 70°C Operating Temp. |  <ul style="list-style-type: none"> • 6.5" VGA (640 x 480) • 800 nits • 600:1 • 160° (H) / 140° (V) • -30°C to 80°C Operating Temp. |
|  <ul style="list-style-type: none"> • 8.4" SVGA (800 x 600) • 400 nits • 400:1 • 120° (H) / 100° (V) • -20°C to 70°C Operating Temp. |  <ul style="list-style-type: none"> • 8.4" SVGA (800 x 600) • 450 nits • 600:1 • 160° (H) / 140° (V) • -30°C to 85°C Operating Temp. |
|  <ul style="list-style-type: none"> • 10.4" SVGA (800 x 600) • 400 nits • 500:1 • 120° (H) / 100° (V) • -20°C to 70°C Operating Temp. |  <ul style="list-style-type: none"> • 10.4" SVGA (800 x 600) • 400 nits • 700:1 • 160° (H) / 140° (V) • -30°C to 85°C Operating Temp. |
|  <ul style="list-style-type: none"> • 12.1" XGA (1024x768) • 450 nits • 700:1 • 160° (H) / 160° (V) • -20°C to 70°C Operating Temp. |  <ul style="list-style-type: none"> • 12.1" XGA (1024x768) • 500 nits • 700:1 • 160° (H) / 160° (V) • -30°C to 80°C Operating Temp. |
|  <ul style="list-style-type: none"> • 15" XGA (1024x768) • 350 nits • 700:1 • 125° (H) / 140° (V) • -10°C to 70°C Operating Temp. |  <ul style="list-style-type: none"> • 15" XGA (1024x768)* • 400 nits • 500:1 • 160° (H) / 140° (V) • -20°C to 50°C Operating Temp. |
|  <ul style="list-style-type: none"> • 15" XGA (1024x768) • 350 nits • 700:1 • 125° (H) / 140° (V) • -10°C to 70°C Operating Temp. | |

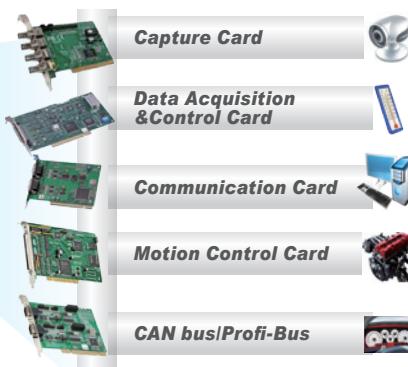
* 15" LED Panel only for PPC-5152-D525



Feature 5 Versatile Expansion Interface

The PPC series has various kinds of expansion interfaces which allow you to connect additional circuit or expansion boards to the system via IEI riser card. These expansion options provide flexible function enhancement and simplify system integration.

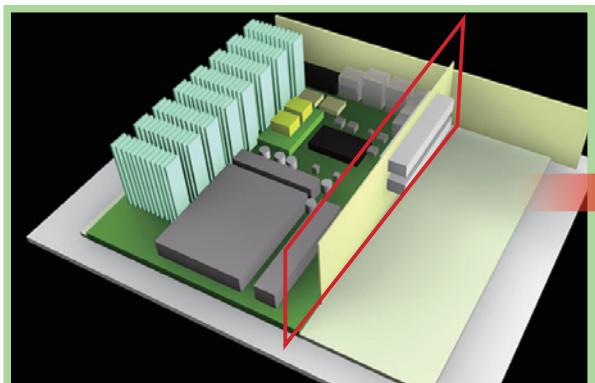
A. PCI and PCIe x1 Signal Expansion Slot (For PPC-5152-D525 only)



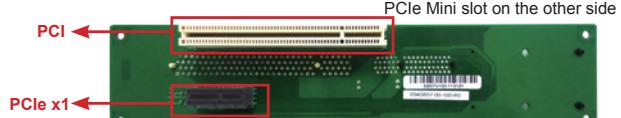
PCIe x1 and PCI Signal on Board



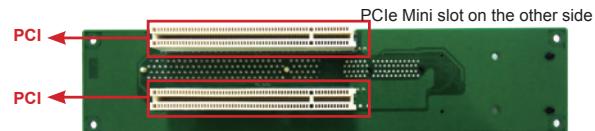
B. Two PCI/ One PCI+ One PCIe x1 Signal Modular Expansion Slot



1. One PCI and One PCIe x1 slot



2. Two PCI slots



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Feature 6 IP 65 Compliant Aluminum Front Panel for Tough Working Environments

Complete sealed front aluminum panel has the ability to withstand water jet pressure test for harsh environment applications. IEI waterproof and dustproof laboratory were found facilities, equipment and personnel needed to conduct the waterproof tests and fully witnessed by UL International. All of the industrial Panel PC products designed to be rugged, ideal for any industrial environment where dust and water is encountered.



Texture Manufacturing Control Panel



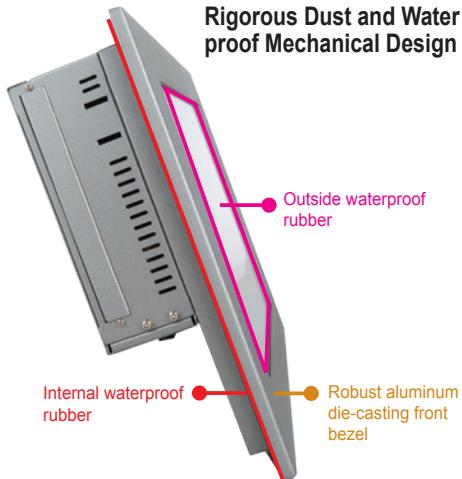
Water Treatment Plant



Water Resistance-IPx5



Dust Resistance-IP6x



IP Code Table

The IP Code (International Protection Rating) consists of the letters IP followed by two digits.

| Solids | | Liquids | |
|----------------------------|------------------|---------|----------------------------|
| First Numerical | Second Numerical | | |
| No Protection | 0 | 0 | No Protection |
| Objects Greater than 50mm | 1 | 1 | Vertically Dripping Water |
| Objects Greater than 12mm | 2 | 2 | 75o-90o Sprayed water |
| Objects Greater than 2.5mm | 3 | 3 | 30o-90o Sprayed water |
| Objects Greater than 1.0mm | 4 | 4 | Water sprayed-low pressure |
| Dust-Protected | 5 | 5 | Water jets-low pressure |
| Dust-Tight | 6 | 6 | Water jets-high pressure |
| IP 65 Compliant! | | 7 | Temporary immersion |
| | | 8 | Indefinite Immersion |

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Feature 7 Design for Reliability

Anti-shock Protection

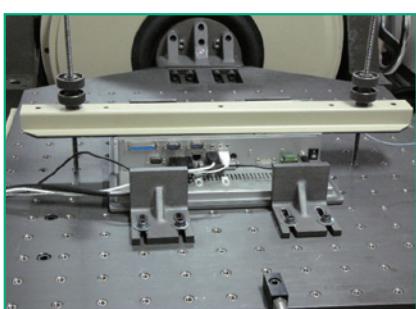
The anti-shock design enhances hard drive reliability and protects hard disks from external shocks and vibrations.



Anti-vibration protection

MIL-STD-810F 514.5C-1 Vibration Testing Procedures (Operating Random Vibration Mode)

- a) Axes: 3 axes / Vertical / Transverse / Longitudinal.
 - b) 10-500 Hz, 60min/axis.
 - c) Equivalent to Z:1.04 Grms X:0.204 Grms Y:0.74 Grms
- IEC68-2-27 Shock Testing Procedures (Operating Shock Half-Sine Wave Shock)
- 3G: 11ms: 3 shocks per axis: Vertical / Transverse / Longitudinal.
- Non-Operation Shock Half-Sine Wave Shock
- 10G: 11ms: 3 shocks per axis: Vertical / Transverse / Longitudinal.





IEI Quick Mounting Technology

DIN Mount PPC

Din-Mount design is for the compact size LCD products. It allows the LCD product to be used in various environments.



DIN Mount Kit:
DK-84MS

Wall Mount PPC

IEI quick wall mount kit allows an IEI LCD to be removed from and mounted on the wall easily. It makes the LCD product a quick installation and easy maintenance solution.



Wall Mount Kit:
WK-190MS-R10

Panel Mount PPC

IEI panel mount allows customers to mount IEI LCD products on the panel kit with IP 65 waterproof protection.



Panel Mount Bracket:
PK-170M

Rack Mount PPC

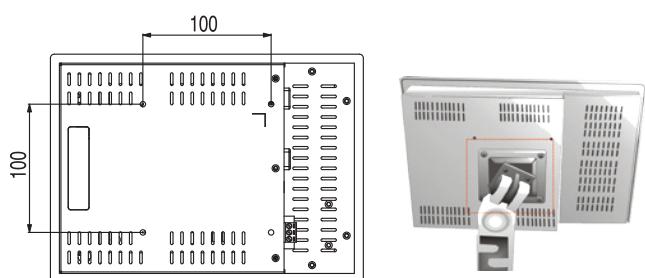
Rack-mountable equipment is mounted simply by bolting its front panel to the rack, or with a square-holed rack by clipping or some other variation on the theme.



RACK Mount Kit:
RK-170MS-R10

VESA Mount PPC

The new IEI LCD family features an easy, quick, and solid mounting kit attached to the VESA mount adapter which is attached to the computer. IEI LCD products are ready to attach to any VESA compliant mounting solution that has a 100 mm x 100 mm attachment.



Optional Item List

| LCD Size | 6.5" | 8.4" | 10.4" | 12.1" | 15" | 17" | 19" |
|-----------------|--------------|--------------|--------------|---------------------|------------------|--------------|--------------|
| Panel Mount Kit | PK-65M | PK-84M | PK-104M | | PK-170M | | PK-190M |
| Wall Mount Kit | WK-065MS-R10 | | | WK-190MS-R10 | | | |
| Rack Mount Kit | RK-065MS-R10 | RK-084MS-R10 | RK-104MS-R10 | RK-121MS-R10 | RK-150MS-R10 | RK-170MS-R10 | RK-190MS-R10 |
| Din Mount Kit | DK-84MS | | | N/A | | | |
| Stand | STAND-100-RS | | | | STAND-210-R11 | | |
| Arm | ARM-11-RS | | | ARM-11-RS/ARM-31-RS | ARM-31-ARM-31-RS | | |

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Optional Peripherals

PPC Series 6.5"~10.4" PPC Selection Guide



| LCD Size | 6.5" | 8.4" | | | 10.4" |
|------------------------|---------------------------------------|---|---|--|--|
| Model | PPC-2706GS-LX800 | PPC-2708GS-LX800 | PPC-3708GS-945 | PPC-3708A-N270 | PPC-3710GS-945 |
| Display | LCD Size | 6.5 " | 8.4 " | 8.4 " | 10.4 " |
| | Max Resolution | 640(W) x 480(H) | 800(W) x 600(H) | 800(W) x 600(H) | 800(W) x 600(H) |
| | Brightness (cd/m ²) | 800 Sunlight Readable! | 450 | 450 | 400 |
| | Contrast Ratio | 600:1 | 600:1 | 600:1 | 700:1 |
| | LCD Color | 262K | 262K | 262K | 262K |
| | Pixel Pitch (mm) (HxV) | 0.207(H) x 0.207(V) | 0.213(H) x 0.213(V) | 0.213(H) x 0.213(V) | 0.264(H) x 0.264(V) |
| | Viewing Angle (V/H) | 140°/160° | 140°/160° | 140°/ 160° | 140°/ 160° |
| | Backlight MTBF (hrs) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) |
| Motherboard | CPU | AMD Geode LX800 500MHz processor | AMD Geode LX800 500MHz processor | Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB | Intel® Atom™ N270 1.6GHz CPU |
| | Chipset | AMD Geode LX800 + AMD CS5536 | AMD Geode LX800 + AMD CS5536 | Intel® 945GM + ICH7M | Intel® 945GSE + ICH7M |
| | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB |
| I/O Ports and Switches | 1 x RS-232 | 1 x RS-232 | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 |
| | 2 x USB Port | 2 x USB Port | 1 x RS-232 (Alternative to RS-422/485) | 1 x RS-232 (Alternative to RS-422/485) | 1 x RS-232 (Alternative to RS-422/485) |
| | 1 x PS/2 mouse and keyboard interface | 1 x PS/2 mouse and keyboard interface | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port |
| | 2 x RJ-45 for 10/100Mbps LAN | 2 x RJ-45 for 10/100Mbps LAN | 2 x USB 2.0 | 2 x USB 2.0 | 2 x USB 2.0 |
| | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port |
| | Line-out | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in |
| | 1 x 12VDC input Power Jack | 1 x 12VDC input Power Jack | 1 x PS/2 mouse and keyboard interface | 1 x PS/2 mouse and keyboard interface | 1 x PS/2 mouse and keyboard interface |
| | 1 x Power Switch | 1 x Power Switch | 1 x 12VDC input Power Jack | 1 x 12VDC input Power Jack | 1 x 12VDC input Power Jack |
| | | | 1 x Power Switch | 1 x Power Switch | 1 x Power Switch |
| | | | | | |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II | CF Type II | CF Type II | CF Type II |
| | CD-ROM Driver Bay | N/A | N/A | N/A | N/A |
| Expansion Slot | | N/A | N/A | 1 x PCIe Mini card | 1 x PCIe Mini card |
| System Cooling | | Fanless | Fanless | Active with Fan | Fanless |
| Environment | Operation Temperature | -10°C~50°C with CF or SSD -10°C~40°C with HDD | -10°C~50°C with CF or SSD -10°C~40°C with HDD | -10°C~50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C |

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PPC Series 10.4"~12.1" PPC Selection Guide



| LCD Size | 10.4" | | 12.1" | | | | |
|------------------------|---|--|---|--|--|---|---|
| Model | PPC-3710A-N270 | PPC-2710GS-LX800 | PPC-3712GXS-945 | PPC-3712A-N270 | PPC-3712B-N270 | PPC-2712GS-LX800 | |
| Display | LCD Size | 10.4 " | 10.4 " | 12.1 " | 12.1 " | 12.1 " | 12.1 " |
| | Max Resolution | 800(W) x 600(H) | 800(W) x 600(H) | 1024(W) x 768(H) | 1024(W) x 768(H) | 1024(W) x 768(H) | 1024(W) x 768(H) |
| | Brightness (cd/m²) | 400 | 400 | 500 | 500 | 500 | 500 |
| | Contrast Ratio | 700:1 | 700:1 | 700:1 | 700:1 | 700:1 | 700:1 |
| | LCD Color | 262K | 262K | 262K | 262K | 262K | 262K |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | 0.3075(H) x 0.3075(V) | 0.3075(H) x 0.3075(V) | 0.3075(H) x 0.3075(V) | 0.3075(H) x 0.3075(V) |
| | Viewing Angle (V/H) | 140°/ 160° | 140°/ 160° | 160°/ 160° | 160°/ 160° | 160°/ 160° | 160°/ 160° |
| | Backlight MTBF (hrs) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) | 50000 (LED backlight) |
| Motherboard | CPU | Intel® Atom™ process N270 1.6GHz CPU | AMD Geode LX800 500MHz processor | Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB | Intel® Atom™ process N270 1.6GHz CPU | Intel® Atom™ process N270 1.6GHz CPU | AMD Geode LX800 500MHz processor |
| | Chipset | Intel® 945GSE + ICH7M | AMD Geode LX800 + AMD CS5536 | Intel® 945GM + ICH7M | Intel® 945GSE + ICH7M | Intel® 945GSE + ICH7M | AMD Geode LX800 + AMD CS5536 |
| | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB |
| I/O Ports and Switches | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 | 2 x RS-232 |
| | 1 x RS-232 (Alternative to RS-422/485) | 2 x RJ-45 for 10/100Mbps LAN | 1 x RS-232 (Alternative to RS-422/485) | 1 x RS-232 (Alternative to RS-422/485) | 1 x RS-232 (Alternative to RS-422/485) | 2 x RJ-45 for 10/100Mbps LAN | |
| | 2 x RJ-45 for LAN Port | 2 x USB 2.0 | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 4 x USB 2.0 | |
| | 2 x USB 2.0 | 1 x VGA Port | 2 x USB 2.0 | 2 x USB 2.0 | 4 x USB 2.0 | 1 x VGA Port | |
| | 1 x VGA Port | Line-out | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | Line-out | |
| | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x PS/2 mouse and keyboard interface | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x PS/2 mouse and keyboard interface | |
| | 1 x PS/2 mouse and keyboard interface | 1 x 12VDC input Power Jack | 1 x PS/2 mouse and keyboard interface | 1 x PS/2 mouse and keyboard interface | 1 x PS/2 mouse and keyboard interface | 1 x 12VDC input Power Jack | |
| | 1 x 12VDC input Power Jack | 1 x Power Switch | 1 x 12VDC input Power Jack | 1 x 12VDC input Power Jack | | 1 x Power Switch | |
| | 1 x Power Switch | 1 x Reset Button | 1 x Power Switch | 1 x Power Switch | | 1 x Reset Button | |
| | | | | | | | |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" IDE HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" IDE HDD bay with anti-shock |
| | SSD | CF Type II | CF Type II | CF Type II | CF Type II | CF Type II | CF Type II |
| | CD-ROM Driver Bay | N/A | N/A | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | N/A |
| Expansion Slot | | 1 x PCIe Mini card | 1 x Mini PCI card | 1 x PCIe Mini card | 1 x PCIe Mini card | 1 x PCIe Mini card | 1 x Mini PCI card |
| System Cooling | | Fanless | Fanless | Acitve with Fan | Fanless | Fanless | Fanless |
| Environment | Operation Temperature | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C |

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Optional Peripherals

PPC Series

15" PPC Selection Guide



| LCD Size | | 15" | | | |
|------------------------|------------------------|---|--|---|---|
| Model | | PPC-5150A/9455 | PPC-5150A-G41 | PPC-5152-D525 | WIDS-515A/9455 |
| Display | LCD Size | 15 " | 15 " | 15 " | 15 " |
| | Max Resolution | 1024(W) x 768(H) | 1024(W) x 768(H) | 1024(W) x 768(H) | 1024(W) x 768(H) |
| | Brightness (cd/m²) | 350 | 350 | 400 | 350 |
| | Contrast Ratio | 700 : 1 | 700 : 1 | 500 : 1 | 700 : 1 |
| | LCD Color | 16.2M | 16.2M | 16.2M | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | 0.297(H) x 0.297(V) | 0.1095(H) x 0.1095(V) | 0.297(H) x 0.297(V) |
| | Viewing Angle (V/H) | 125°/ 140° | 125°/ 140° | 160° / 140° | 125o/ 140o |
| Motherboard | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support | Intel® Atom™ D525 1.8GHz dual core processor | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz |
| | Chipset | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 | Intel® ICH8M | Intel® 945G + ICH7R |
| | RAM | Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | Two 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB | One 204-pin DDR3 SO-DIMM slot (system max.4GB) | Two 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB |
| I/O Ports and Switches | | 4 x RS-232 | 4 x RS-232 | 2 x RS-232 (DB-9 connector) | 4 x RS-232 |
| | | 1 x RS-232/422/485 | 1 x RS-232/422/485 | 1 x RS-232 or RS-422/485 (DB-9 connector) | 1 x RS-232/422/485 Port |
| | | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RS-422/485 (RJ-45 connector) | 2 x RJ-45 for LAN Port |
| | | 4 x USB 2.0 | 4 x USB 2.0 | 2 x USB 2.0 connector | 6 x USB 2.0 (2 waterproof USB in the front of the panel) |
| | | 1 x VGA Port | 1 x VGA Port | VGA port (DB-15 connector) | 1 x VGA Port |
| | | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 2 x Audio jacks (Line-out, MIC) | 1 x Line-in, 1 x Line-out, 1 x Mic-in |
| | | 2 x PS/2 mouse and keyboard interface | 2 x PS/2 mouse and keyboard interface | AT/ATX switch | 1 x LPT |
| | | 1 x Power Switch | 1 x Power Switch | 2 x USB 3.0 connector | 2 x PS/2 mouse and keyboard interface |
| | | AT / ATX Switch | AT / ATX Switch | 2 x Combo (SFP / RJ-45) Gigabit LAN | 1 x Power Switch |
| | | 1 x LPT | 1 x LPT | 4-channel video / audio capture (optional) | 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 2.5" SATA HDD bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II | CF Type II | CF Type II socket | CF Type II |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | N/A | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI or PCIe x1 expansion slot (optional) | Either 1 x PCI or PCIe x1 expansion slot (optional) | Two PCI slots or one PCI slot plus one PCIe x1 slot | Either 1 x PCI or PCIe x1 expansion slot (optional) |
| | | 1 x PCIe Mini card | 1 x PCIe Mini card | 1 x PCIe Mini card for wireless module (802.11 b/g/n) | 1 x PCIe Mini card for wireless module (802.11 b/g/n) |
| System Cooling | | Active with Fan | Active with Fan | Fanless | Active with Fan |
| Environment | Operation Temperature | -10°C~50°C | -10°C~50°C | -20°C ~ 50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C ~ 70°C | -20°C~60°C |

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Optional Peripherals

PPC Series 17"~19" PPC Selection Guide



| LCD Size | | 17" | | | | 19" | |
|------------------------|------------------------|---|--|---|--|---|--|
| Model | | PPC-5170A/9455 | PPC-5170A-G41 | WIDS-517A/9455 | WIDS-517A-G41 | PPC-5190A/9455 | PPC-5190A-G41 |
| | LCD Size | 17 " | 17 " | 17 " | 17 " | 19 " | 19 " |
| Display | Max Resolution | 1280(W) x 1024(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) | 1280(W) x 1024(H) |
| | Brightness (cd/m²) | 300 | 380 | 380 | 380 | 300 | 450 |
| | Contrast Ratio | 800 : 1 | 1000 : 1 | 1000 : 1 | 1000 : 1 | 700 : 1 | 1000 : 1 |
| | LCD Color | 16.7M | 16.7M | 16.7M | 16.7M | 16.7M | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | 0.294(H) x 0.294(V) | 0.294(H) x 0.294(V) |
| | Viewing Angle (V/H) | 160° / 160° | 160°/170° | 160°/170° | 160°/170° | 160° / 170° | 160° / 170° |
| | Backlight MTBF (hrs) | 50000 | 50000 | 50000 | 50000 | 50000 | 50000 |
| Motherboard | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support |
| | Chipset | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 |
| | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB |
| I/O Ports and Switches | | 4 x RS-232 | 4 x RS-232 | 4 x RS-232 | 4 x RS-232 | 4 x RS-232 | 4 x RS-232 |
| | | 1 x RS-232/422/485 Port | 1 x RS-232/422/485 Port | 1 x RS-232/422/485 Port | 1 x RS-232/422/485 Port | 1 x RS-232/422/485 Port | 1 x RS-232/422/485 Port |
| | | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port | 2 x RJ-45 for LAN Port |
| | | 4 x USB 2.0 | 4 x USB 2.0 | 6 x USB 2.0 (2 waterproof USB in the front of the panel) | 6 x USB 2.0 (2 waterproof USB in the front of the panel) | 6 x USB 2.0 | 6 x USB 2.0 |
| | | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port | 1 x VGA Port |
| | | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in | 1 x Line-in, 1 x Line-out, 1 x Mic-in |
| | | 2 x PS/2 mouse and keyboard interface | 2 x PS/2 mouse and keyboard interface | 1 x LPT | 1 x LPT | 2 x PS/2 mouse and keyboard interface | 2 x PS/2 mouse and keyboard interface |
| | | 1 x Power Switch | 1 x Power Switch | 2 x PS/2 mouse and keyboard interface | 2 x PS/2 mouse and keyboard interface | 1 x Power Switch | 1 x Power Switch |
| | | AT / ATX Switch | AT / ATX Switch | 1 x Power Switch | 1 x Power Switch | AT / ATX Switch | AT / ATX Switch |
| | | 1 x LPT | 1 x LPT | AT / ATX Switch | AT / ATX Switch | 1 x LPT | 1 x LPT |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II | CF Type II | CF Type II | CF Type II | CF Type II | CF Type II |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay |
| Expansion Slot | | Either 1 x PCI or PCIe x 1 expansion slot (optional) | Either 1 x PCI or PCIe x 1 expansion slot (optional) | Either 1 x PCI or PCIe x 1 expansion slot (optional) | Either 1 x PCI or PCIe x 1 expansion slot (optional) | Either 1 x PCI or PCIe x 1 expansion slot (optional) | Either 1 x PCI or PCIe x 1 expansion slot (optional) |
| | | 1 x PCIe Mini card | 1 x PCIe Mini card | 1 x PCIe Mini card for wireless module (802.11 b/g/n) | 1 x PCIe Mini card for wireless module (802.11 b/g/n) | 1 x PCIe Mini card | 1 x PCIe Mini card |
| System Cooling | | Active with Fan | Active with Fan | 452 x 356 x 115 | 452 x 356 x 115 | Active with Fan | Active with Fan |
| Environment | Operation Temperature | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C |

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Optional Peripherals

6.5" Industrial Panel PC

PPC-2706GS-LX800

AMD Geode LX800 500MHz Processor

Fanless800nits Sunlight
Readable**Features**

1. 6.5" 800nits high brightness TFT LCD with LED backlight
2. AMD Geode LX800 500MHz processor
3. Fanless system
4. 14W Ultra low power consumption
5. Dual 10/100Mbps Ethernet
6. Internal 2.5" HDD and CF slot as a storage device
7. Robust aluminum front bezel and metal casing
8. IP 65 compliant front panel
9. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity suggested)

**Specifications**

| Model | | PPC-2706GS-LX800 |
|------------------------|---------------------------------|---|
| Display | LCD Size | 6.5 " |
| | Max Resolution | 640(W) x 480(H) |
| | Brightness (cd/m ²) | 800 |
| | Contrast Ratio | 600:1 |
| | LCD Color | 262K |
| | Pixel Pitch (mm) (HxV) | 0.207(H) x 0.207(V) |
| | Viewing Angle (V/H) | 140° / 160° |
| Motherboard | Backlight MTBF (hrs) | 50000 (LED Backlight) |
| | SBC | WAFER-LX-800 |
| | CPU | AMD Geode LX800 500MHz processor |
| | Chipset | AMD Geode LX800 + AMD CS5536 |
| I/O Ports and Switches | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB |
| | | 1 x RS-232 2 x USB Port 1 x PS/2 mouse and keyboard interface 2 x RJ-45 for 10/100Mbps LAN 1 x VGA Port 1 x Line-out 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay |
| | SSD | CF Type II |
| Physical | Construction Front Panel | Aluminum die-casting |
| | Chassis Construction | Heavy-duty steel (SECC) |
| | Mounting | Wall, Rack, Stand and Arm (VESA 100mm x 100mm) |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 183 x 143 x 62.6 |
| | Cut Out Dimensions (WxH) (mm) | 180 x 140 |
| System Cooling | | Fanless |
| Environment | Net/Gross Weight | 1.5 Kg / 3.4 Kg |
| | Operation Temperature | -10°C ~ 50°C with CF or SSD -10°C ~ 40°C with HDD |
| | Storage Temperature | -20°C ~ 60°C |
| | Relative Humidity | 5%~95% @ 60°C, non-condensing |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak " |
| | Shock | 10G acceleration part to part (11ms) |
| Touch Screen | | Resistive Type 4-Wire with RS-232 interface |
| Power | Power Adapter | P/N: 63040-010060-040-RS -60W Power Adapter -Input: 90VAC~264VAC, 50/60Hz -Output: 12VDC |
| | Power Consumption | 14W |

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Optional Peripherals

800 nits Super High Brightness PPC Improves Readability

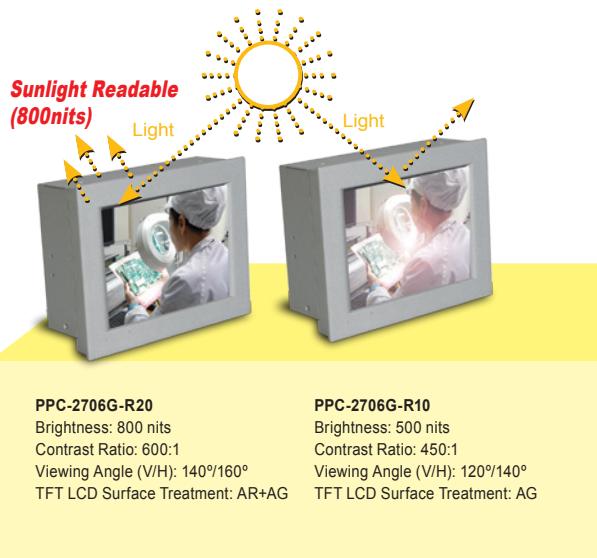
The PPC-2706G has a super high brightness TFT LCD with LED backlighting and 800 cd/m² with a 600:1 contrast ratio. This high brightness Panel PC provides an excellent image quality under tough ambient light conditions or outdoor sunlight.

TFT LCD with AR and AG enhancement:

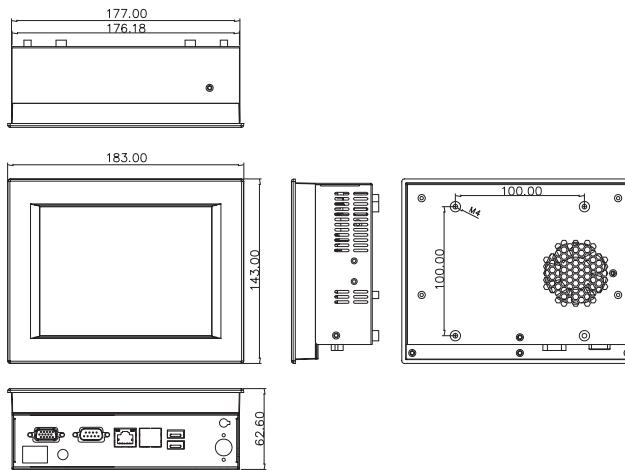
- Anti-reflective minimizes mirror image and maximizes transmittance
- Anti-glare scatters light directed on the surface and softens the image of direct light sources visible in the reflection of the viewing area

Compact Lightweight Design

The PPC-2706GS is a powerful and compact industrial panel PC ideally designed for device operational environments with space limitations such as HMI or thin clients.



PPC-2706 Dimensions (Unit: mm)



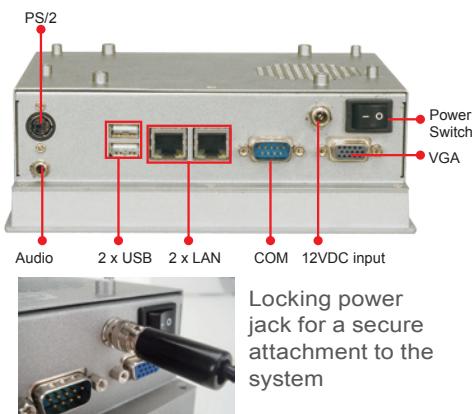
Ordering Information

| Part No. | Description |
|--------------------------|---|
| PPC-2706GS-LX/R/256M-R20 | 6.5" 800 cd/m ² VGA TFT Fanless Panel PC with WAFER-LX-800, Silver, Touch screen, 256MB DDR RAM, R20, RoHS |

Packing List

| Item | Part No. | Description |
|-------------------------|-------------------------|--|
| Fan Module | 19FRDL5010B5-000001-RS | +5V, 50*50*10MM (Please install the fan under -10°C~50°C with HDD operating environment) |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Power Adapter | 63000-FSP060DBAB1552-RS | 60W, 90V~264V, 12V@5A |
| PS/2 Cable | 32006-000300-100-RS | |
| Panel Mounting Kit | 19Z00-000040-RS | |
| Monitor Bracket | 41020-016402-00-RS | |
| Din Mount Kit | 19Z00-000025-RS | |
| Touch Pen | | |
| User Manual & Driver CD | IEI-7B000-000519-RS | FOR PPC-27xxG-LX SERIES |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |

Fully Integrated I/O

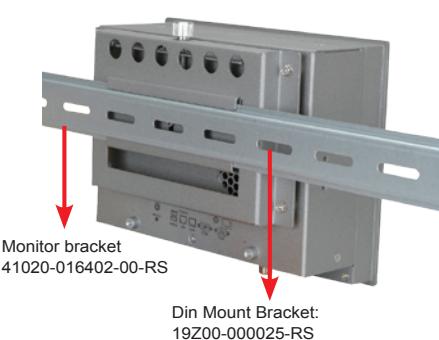


IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-065MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

Options

| Item | Part No. | Description |
|---------------|-----------------|-------------------|
| HDD IDE Cable | 32200-074700-RS | 200MM, IDE 44-pin |



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Optional Peripherals

8.4" Industrial Panel PC

PPC-2708GS-LX800

AMD Geode LX800 500MHz Processor

Fanless**PPC-3708A-N270**

Intel® Atom™ N270 Processor

Fanless**PPC-3708GS-945**

Intel® Core™2 Duo Processor with Intel® 945GME Platform

**Specifications**

| Model | | PPC-2708GS-LX800 | PPC-3708A-N270 | PPC-3708GS-945 | |
|------------------------|-------------------------------|--|---|---|--|
| Display | LCD Size | | 8.4 " | | |
| | Max Resolution | | 800(W) x 600(H) | | |
| | Brightness (cd/m²) | | 450 | | |
| | Contrast Ratio | | 600:1 | | |
| | LCD Color | | 262K | | |
| | Pixel Pitch (mm) (HxV) | | 0.213(H) x 0.213(V) | | |
| | Viewing Angle (V/H) | | 140°/160° | | |
| Motherboard | Backlight MTBF (hrs) | | 50000 (LED Backlight) | | |
| | SBC | WAFER-LX-800 | NANO-945GSE-N270 | NANO-9452 | |
| | CPU | AMD Geode LX800 500MHz processor | Intel® Atom™ process N270 1.6GHz CPU | Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB | |
| | Chipset | AMD Geode LX800 + AMD CS5536 | Intel® 945GSE + ICH7M | Intel® 945GME + ICH7M | |
| I/O Ports and Switches | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB | |
| | | 1 x RS-232 2 x RJ-45 for 10/100Mbps LAN 2 x USB Port 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | |
| | Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay | | |
| | SSD | | CF Type II | | |
| | Expansion Slot | N/A | 1 x PCIe Mini card | 1 x PCIe Mini card | |
| | Construction Front Panel | | Aluminum Die-casting | | |
| | Chassis Construction | | Heavy-duty Steel (SECC) | | |
| Physical | Mounting | | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | | |
| | Front Panel Color | | Silver (Pantone 8001C) | | |
| | Dimensions (WxHxD) (mm) | 244 x 178 x 67 | 244 x 178 x 80.2 | 244 x 178 x 80.2 | |
| | Cut Out Dimensions (WxH) (mm) | 233 x 167 | 233 x 167 | 233 x 167 | |
| | Net /Gross Weight | 2.2 Kg / 4.4 Kg | 2.2 Kg / 4.4 Kg | 2.2 Kg / 4.4 Kg | |
| | System Cooling | Fanless | Fanless | Active with Fan | |
| | Operation Temperature | -10°C ~ 50°C with CF or SSD -10°C ~ 40°C with HDD | -10°C~50°C | -10°C~50°C | |
| Environment | Storage Temperature | | -20°C~60°C | | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | | | |
| | Shock | | 10G acceleration part to part (11ms) | | |
| Touch Screen | | Resistive Type 4-Wire with RS-232 interface | | | |
| Power | Power Adapter | P/N: 63000-FSP060DBAB1552-RS | P/N: 63000-FSP060DBAB1554-RS | P/N: 63000-FSP084DMBA1308-RS | |
| | Power Consumption | 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | |

Features

1. 8.4" 450 nits high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing
5. IP 65 compliant front panel
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity suggested)



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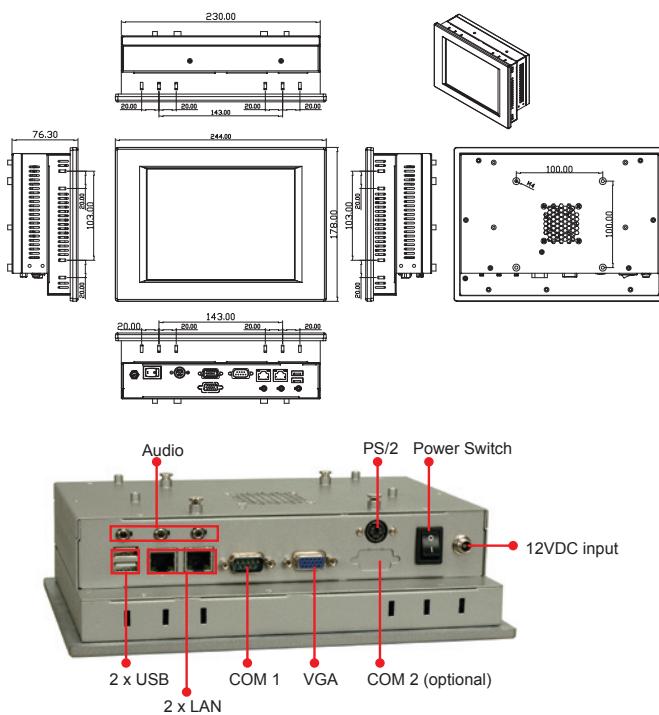
PACSmate Medical Solutions

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Optional Peripherals

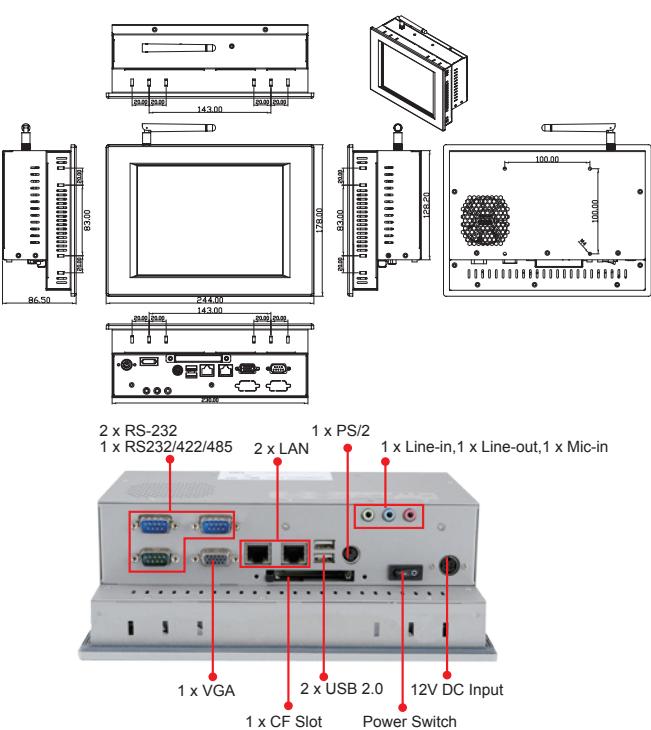
PPC-2708GS

Dimensions (Unit: mm)



PPC-3708A / PPC-3708GS

Dimensions (Unit: mm)



Versatile Mounting Method



Packing List

| Item | Part No. | Description |
|------------------------------------|-------------------------|---|
| Fan Module | 19FRDL5010B5-000001-RS | +5V, 50*50*10MM, FOR PPC-2708GS-LX800 (Please install the fan under -10°C~50°C with HDD operating environment) |
| Screw Kit | 19600-000205-RS | |
| 2.5" SATA HDD Installation Kit | 19A00-000023-00-RS | FOR PPC-2708GS-LX800 |
| Power Cord | 63040-010060-040-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR (10A 250V) |
| Power Adapter | 63000-FSP060DBAB1552-RS | 60W, 90VAC~264VAC for PPC-2708GS-LX800 |
| Power Adapter | 63040-010060-050-RS | 84W, 90VAC~264VAC for PPC-3708GS-945 |
| | 63000-FSP060DBAB1554-RS | 60W, 90VAC~264VAC , DIN 4 PIN for PPC-3708A-N270 |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE |
| Panel Mounting Kit | 19Z00-000026-RS | |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | IEI-7B000-000519-RS | FOR PPC-27xxG-LX SERIES |
| User Manual & Driver CD | IEI-7B000-000520-RS | FOR PPC-37xxG-945, PPC-37xxA-N270 SERIES |

Ordering Information

| Part No. | Description | |
|-------------------|----------------------------|--|
| AMD LX800 | PPC-2708GS-LX/R/256M-R20 | 8.4" 450 cd/m ² SVGA Fanless Panel PC with WAFER-LX-800, Silver, Touch screen, 256MB DDR RAM, R20, RoHS |
| | PPC-2708GS-LX/R/512M-R20 | 8.4" 450 cd/m ² SVGA TFT Panel PC with WAFER-LX-800 Silver color and Touch screen,512MB DDR RAM, R20, RoHS |
| Intel® Atom™ N270 | PPC-3708A-N270/R/1G-R30 | 8.4" 450 cd/m ² SVGA Panel PC with Intel® Atom™ N270 1.6GHz/ 512KB L2 cache processor,1GB DDR2 RAM, touch screen,12VDC input, R30, RoHS |
| Intel® 945GME | PPC-3708GS-945-C4/R/1G-R30 | 8.4" 450 cd/m ² SVGA TFT Panel PC with NANO-9452,C-M 1.86GHz, Silver color,T/S,1GB DDR2 RAM,R30,RoHS |
| | PPC-3708GS-945-T5/R/1G-R30 | 8.4" 450 cd/m ² SVGA TFT Panel PC with NANO-9452, Intel® Core™ Duo 1.66GHz T5500, Silver color,T/S,1GB DDR2 RAM,R30,RoHS |

10.4" Industrial Panel PC

PPC-2710GS-LX800

AMD Geode LX800 500MHz Processor

Fanless**PPC-3710A-N270**

Intel® Atom™ N270 Processor

Fanless**PPC-3710GS-945**

Intel® Core™2 Duo Processor with Intel® 945GM Platform

**Features**

1. 10.4" 400 nits high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing compliant front panel
5. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

**Specifications**

| Model | | PPC-2710GS-LX800 | PPC-3710A-N270 | PPC-3710GS-945 |
|------------------------|-------------------------------|--|--|--|
| Display | LCD Size | 10.4 " | | |
| | Max Resolution | 800(W) x 600(H) | | |
| | Brightness (cd/m²) | 400 | | |
| | Contrast Ratio | 700:1 | | |
| | LCD Color | 262K | | |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) | | |
| | Viewing Angle (V/H) | 140°/160° | | |
| Backlight MTBF (hrs) | | 50000 (LED Backlight) | | |
| Motherboard | SBC | AFLMB-LX-800 | NANO-945GSE-N270 | NANO-9452 |
| | CPU | AMD Geode LX800 500MHz processor | Intel® Atom™ N270 1.6GHz CPU | Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB |
| | Chipset | AMD Geode LX800 + AMD CS5536 | Intel® 945GSE + ICH7M | Intel® 945GME + ICH7M |
| | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB |
| I/O Ports and Switches | | 2 x RS-232 2 x RJ-45 for 10/100Mbps LAN 2 x USB 2.0 1 x VGA Port 1 x Line-out 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch 1 x Reset Button | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" IDE HDD Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | | CF Type II | |
| Expansion Slot | | 1 x Mini PCI card | 1 x PCIe Mini card | 1 x PCIe Mini card |
| Physical | Construction Front Panel | Aluminum Die-casting | | |
| | Chassis Construction | Heavy-duty Steel (SECC) | | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | | |
| | Front Panel Color | Silver (Pantone 8001C) | | |
| | Dimensions (WxHxD) (mm) | 311.5 x 242 x 57 | 311.5 x 242 x 77.8 | 311.5 x 242 x 77.8 |
| | Cut Out Dimensions (WxH) (mm) | 291 x 221 | 291 x 221 | 291 x 221 |
| Net /Gross Weight | | 2.8 Kg / 5.5 Kg | 3.4 Kg / 5.8 Kg | 3.4 Kg / 5.8 Kg |
| System Cooling | | Fanless | Fanless | Active with Fan |
| Environment | Operation Temperature | -10°C~50°C | | |
| | Storage Temperature | -20°C~60°C | | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | | |
| | Shock | 10G acceleration part to part (11ms) | | |
| Touch Screen | | Resistive Type 5-Wire with RS-232 interface | | |
| Power | Power Adapter | P/N: 663000-FSP050DBAB1405-RS 50W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC |

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Optional Peripherals

802.11 b/g/n Wireless LAN Module

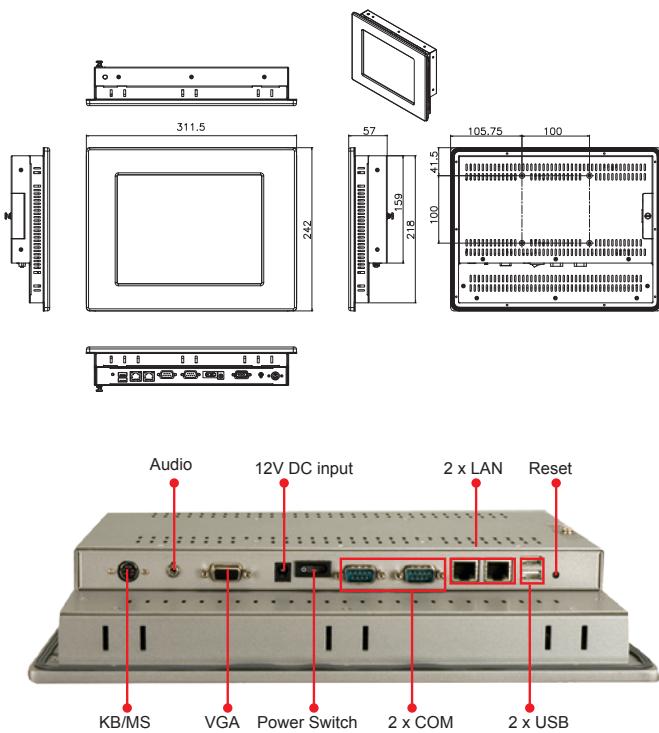
The PPC 37 series is equipped with a high speed wireless module that enables larger data transmission in real time. The Wireless LAN facilitates applications that require data transmission over large distances, such as in a large warehouse. (By Project Base)



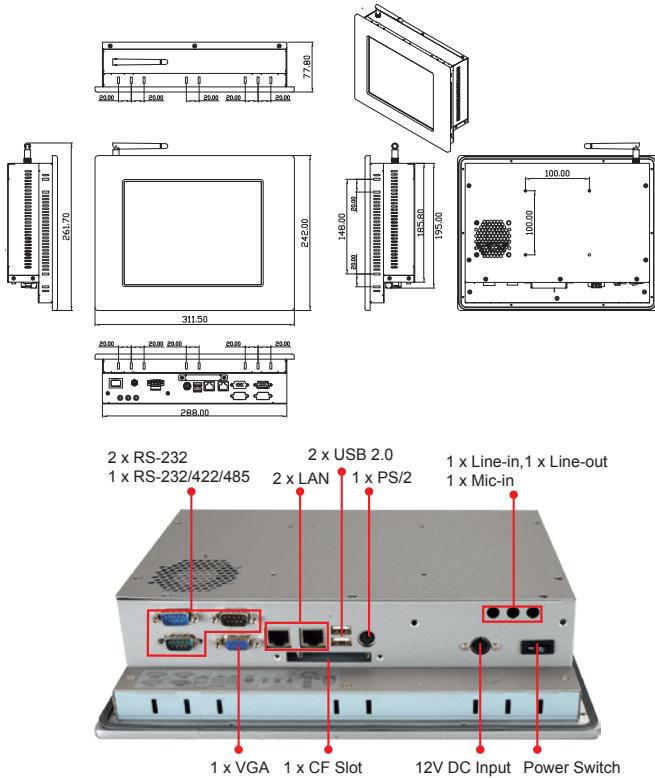
Fanless System

The PPC-2710G and PPC-3710A are designed with a low power consumption platform featuring an Intel® ATOM™ N270 and AMD LX-800 platform. The fanless system generates less heat while maintaining above-average performance. A fanless design eliminates the possibility of fan failure and extends the operation life of the device.

PPC-2710GS Dimensions (Unit: mm)



PPC-3710A / PPC-3710GS Dimensions (Unit: mm)



Packing List

| Item | Part No. | Description |
|------------------------------------|-------------------------|--|
| Screw Kit | 19600-000205-RS | |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Power Adapter | 63040-010060-050-RS | 50W, 90VAC~264VAC for PPC-3710A-N270, PPC-2710GS-LX |
| | 63000-FSP060DBAB1554-RS | 60W, 90VAC~264VAC for PPC-3710GS-945 BGA Type |
| | 63000-FSP084DMBA1308-RS | 84W, 90VAC~264VAC for PPC-3710GS-945 Socket Type |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE |
| Panel Mounting Kit | 19Z00-000026-RS | |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-TB000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | IEI-TB000-000519-RS | FOR PPC-27xxG-LX SERIES |
| User Manual & Driver CD | IEI-TB000-000520-RS | FOR PPC-37xxG-945, PPC-37xxA-N270 SERIES |

Ordering Information

| Part No. | Description |
|-------------------|--|
| AMD LX800 | PPC-2710GS-LX/R/256M-R20 |
| Intel® Atom™ N270 | PPC-3710A-N270/R/1G-R30 |
| | 10.4" 400 cd/m² SVGA TFT Fanless Panel PC with AFLMB-LX-800,Silver color & Touch screen,256MB RAM,R20,RoHS |
| Intel® 945GME | PPC-3710GS-945-C4/R/1G-R30 |
| | 10.4" 400 cd/m² SVGA TFT Panel PC with NANO-9452,C-M 1.86GHz,Silver color,T/S,1GB DDR2 RAM,R30,RoHS |
| | PPC-3710GS-945-T5/R/1G-R30 |
| | 10.4" 400 cd/m² SVGA TFT Panel PC with NANO-9452,Intel® Core™ Duo 1.66GHz T5500,Silver color,T/S,1GB DDR2 RAM,R30,RoHS |

IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-104MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

Options

| Item | Part No. | Description |
|------------------|-----------------|--|
| RS-422/485 Cable | 32200-075202-RS | (A) D-SUB 9PIN MALE (B) DU PONT 27P P=2.0 FEMALE |

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Optional Peripherals

12.1" Industrial Panel PC

PPC-2712GS-LX800

AMD Geode LX800 500MHz Processor

Fanless**PPC-3712A/B-N270**

Intel® Atom™ N270 Processor

Fanless**PPC-3712GXS-945**

Intel® Core™2 Duo Processor with Intel® 945GM Platform



Specifications



| Model | PPC-2712GS-LX800 | PPC-3712A-N270 | PPC-3712B-N270 | PPC-3712GXS-945 | |
|------------------------|---|--|--|--|--|
| Display | LCD Size | 12.1" | | | |
| | Max Resolution | 1024(W) x 768(H) | | | |
| | Brightness (cd/m²) | 500 | | | |
| | Contrast Ratio | 700:1 | | | |
| | LCD Color | 262K | | | |
| | Pixel Pitch (mm) (HxV) | 0.3075(H) x 0.3075(V) | | | |
| | Viewing Angle (V/H) | 160°/160° | | | |
| Motherboard | Backlight MTBF (hrs) | 50000 (LED Backlight) | | | |
| | SBC | AFLMB-LX-800 | NANO-945GSE-N270 | NANO-945GSE-N270 | NANO-9452 |
| | CPU | AMD Geode LX800 500MHz processor | Intel® Atom™ N270 1.6GHz CPU | Intel® Atom™ N270 1.6GHz CPU | Socket M Intel® Core™2 Duo, Core Duo, Core Solo with 667MHz FSB Intel® Celeron® M 533MHz FSB |
| | Chipset | AMD Geode LX800 + AMD CS5536 | Intel® 945GSE + ICH7M | Intel® 945GSE + ICH7M | Intel® 945GME + ICH7M |
| I/O Ports and Switches | RAM | 1 x 200-pin SO-DIMM socket, supporting DDR 333/400MHz modules for up to 1GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 533MHz modules for up to 2GB | 1 x 200-pin SO-DIMM socket, supporting DDR2 400/533/667MHz modules for up to 2GB |
| | 2 x RS-232 2 x RJ-45 for 10/100Mbps LAN 4 x USB 2.0 1 x VGA Port Line-out | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port | 2 x RS-232 1 x RS-232 (Alternative to RS-422/485) 2 x RJ-45 for LAN Port 2 x USB 2.0 1 x VGA Port |
| | 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch 1 x Reset Button | 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch | 1 x Line-in, 1 x Line-out, 1 x Mic-in 1 x PS/2 mouse and keyboard interface 1 x 12VDC input Power Jack 1 x Power Switch |
| | HDD Driver Bay | 1 x 2.5" IDE HDD Bay | 1 x 2.5" SATA HDD Bay | | |
| | SSD | CF Type II | | | |
| | CD-ROM Driver Bay | N/A | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay | SATA Slim Type CD-ROM Bay |
| | Expansion Slot | 1 x Mini PCI card | 1 x PCIe Mini card | 1 x PCIe Mini card | 1 x PCIe Mini card |
| Physical | Construction Front Panel | Aluminum Die-casting | | | |
| | Chassis Construction | Heavy-duty Steel (SECC) | | | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | | | |
| | Front Panel Color | Silver (Pantone 8001C) | | | |
| | Dimensions (WxHxD) (mm) | 340 x 260 x 62 | 340 x 277 x 73.4 | 340 x 260 x 74.8 | 340 x 277 x 73.4 |
| | Cut Out Dimensions (WxH) (mm) | 313 x 233 | 313 x 233 | 313 x 233 | 313 x 233 |
| | Net/Gross Weight | 2.8 Kg / 5.7 Kg | 6 Kg / 8 Kg | 6 Kg / 8 Kg | 6 Kg / 8 Kg |
| System Cooling | System Cooling | Fanless | Fanless | Fanless | Active with Fan |
| | Operation Temperature | -10°C~50°C | | | |
| | Storage Temperature | -20°C~60°C | | | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | | | |
| Environment | Shock | 10G acceleration part to part (11ms) | | | |
| | Touch Screen | Resistive Type 5-Wire with RS-232 interface | | | |
| | AC Input | P/N: 663000-FSP050DBAB1405-RS 50W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: 63040-010060-050-RS 60W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC | P/N: ACE-890A-RS 86W Power Supply Input: 90VAC~264VAC Output: 12VDC | P/N: 63000-FSP084DMBA1308-RS 84W Power Adapter Input: 90VAC~264VAC, 50/60Hz Output: 12VDC |
| | DC Input | - | - | P/N: ACE-709TX-RS 90W Power Supply Input: 36VDC ~ 72VDC Output: 12VDC | - |

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Optional Peripherals

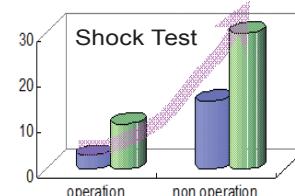
2.5" SATA Hard Drive with anti-vibration protection

Anti-Shock Protection

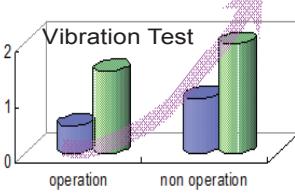
All new anti-shock design enhances protection performance of hard drives dramatically in terms of shock and vibration tests.



Unit: G



Unit: G



■ W/O Anti-shock ■ W Anti-shock

■ W/O Anti-shock ■ W Anti-shock

High Performance & Compact Size



High performance and compact size allow users to set up the PPC-3712GXS in a wide range of applications

Function



Dual Display



SATA Transmission



High Performance

PPC-3712BA Supports More Features:

Built-in 85~264 V AC power supply means no need for an external power adapter



PPC-3712BA-N270/890/
R/1G-R20

ACE-890A
86 W AC-DC Open Frame AT Power Supply



No External Power Adapter!



| Input Type | 85 ~ 264 VAC Full Range | | |
|----------------|--|-------|------|
| Output Voltage | +5 V | +12 V | -12V |
| ACE-890A | 10A | 2.5 A | 0.5A |
| Efficiency | 70% | | |
| Temperature | Operating : 0 °C~ 50°C, Storage : -20 ~ 85°C | | |
| MTBF (hrs) | 268,000 | | |

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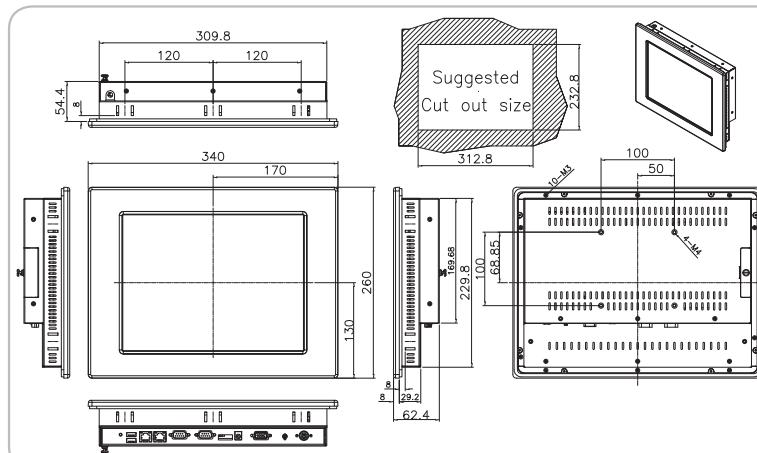
RISC-based Solutions

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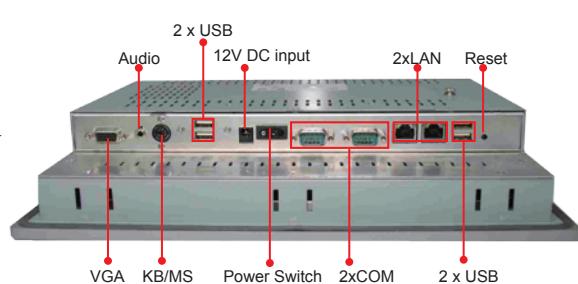
PACSmate Medical Solutions

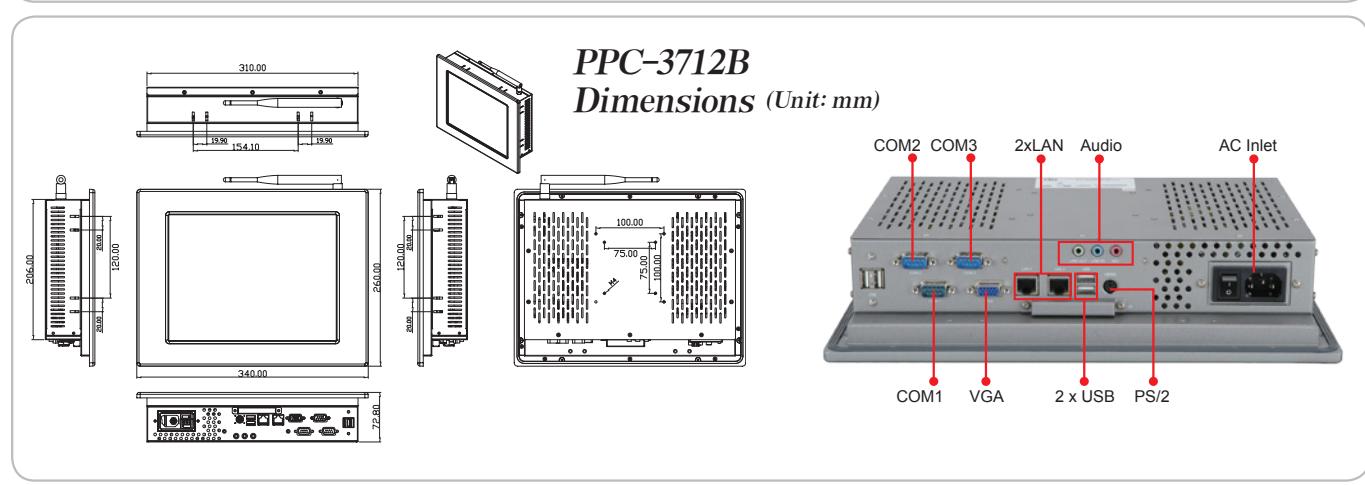
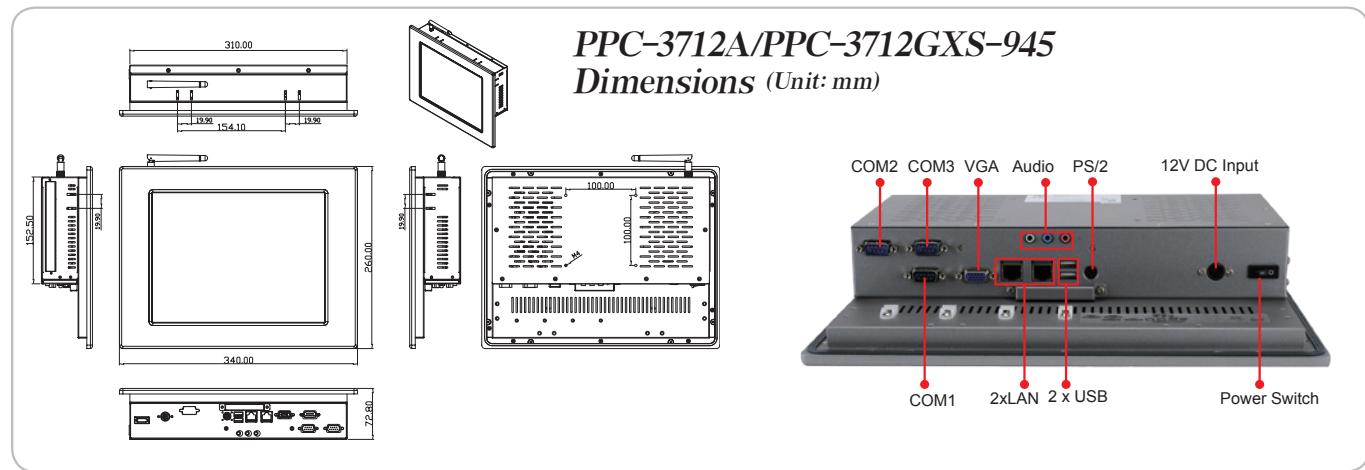
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Optional Peripherals



PPC-2712GS
Dimensions (Unit: mm)





Packing List

| Item | Part No. | Description |
|------------------------------------|--------------------------|--|
| Screw Kit | 19600-000207-RS | |
| SATA CD-ROM Cable | 32801-006300-100-RS | SATA 7+6P FEMALE 180°;SATA 7P FEMALE 90°+LOCK;DU PONT 2*4P P=2.54 FEMALE |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| | 63040-010060-050-RS | 50W, 90VAC~264VAC for PPC-2712G |
| Power Adapter | 63000-FSP060DDBAB1554-RS | 60W, 90VAC~264VAC for PPC-3712A |
| | 63000-FSP084DMBA1308-RS | 84W, 90VAC~264VAC for PPC-3712G |
| PS/2 Cable | 32006-000300-100-RS | 1 x MINI DIN 6PIN MALE; 2 x MINI DIN 6PIN FEMALE |
| Panel Mounting Kit | 19Z00-000024-RS | |
| Wall Mounting Kit | 41014-057602-00-RS | ULTRA SET PLATE |
| | 41020-016102-00-RS | WALL MOUNT BRACKET |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Screen Driver CD / Touch Pen | | |
| User Manual & Driver CD | IEI-7B000-000519-RS | FOR PPC-27xxG-LX SERIES |
| | IEI-7B000-000520-RS | FOR PPC-37xxG-945/N270 SERIES |



IQ Mounting Options

| Item | Part No. |
|----------------|--------------|
| Rack Mount Kit | RK-121MS-R10 |
| ARM | ARM-11-RS |
| STAND | STAND-100-RS |

Options

| Item | Part No. | Description |
|---------------------------|-----------------|--|
| RS-422/485 Cable | 32200-075202-RS | (A) D-SUB 9PIN MALE (B) DU PONT 2*7P P=2.0 FEMALE |
| IDE CD-ROM Installing Kit | 19Z00-000112-RS | 50-pin CD ROM connector to 44-pin IDE connector transfer board |
| HDD IDE Cable | 32200-000037-RS | 250MM, IDE 44-pin |

Ordering Information

| Part No. | | Description |
|-------------------|-----------------------------|---|
| AMD LX800 | PPC-2712GS-LX/R/256M-R20 | 12.1" 500 cd/m ² XGA fanless panel PC with AFLMB-LX-800, Silver Color & Touch Screen, 256MB DDR RAM, R20, RoHS |
| Intel® Atom™ N270 | AC Power Adapter | 12.1" 500 cd/m ² XGA fanless panel PC, Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Silver Color, R30, RoHS |
| | AC Power Supply Built-in | 12.1" 500 cd/m ² XGA fanless panel PC, Intel® Atom™ N270 1.6GHz/ 512KB, 1GB DDR2, Res T/S, Silver Color, w/ACE-890A, R30, RoHS |
| Intel® 945GME | PPC-3712GXS-945-C4/R/1G-R30 | 12.1" 500 cd/m ² XGA TFT panel PC with NANO-9452, C-M 1.86GHz, Silver color, T/S, 1GB DDR2 RAM, R30, RoHS |
| | PPC-3712GXS-945-T5/R/1G-R30 | 12.1" 500 cd/m ² XGA TFT panel PC with NANO-9452, Intel® Core Duo 1.66GHz T5500, Silver color, T/S, 1GB DDR2 RAM, R30, RoHS |

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IEI Mobile Solutions

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Automation Panel Solutions

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RISC-based Solutions

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Optional Peripherals

PPC-5152-D525

15" Flat-bezel Industrial Panel PC

**Combo Gigabit LAN
(SFP Fiber/RJ-45)**

New

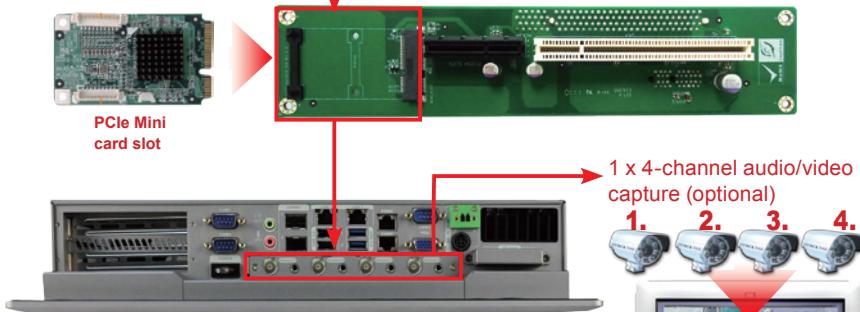
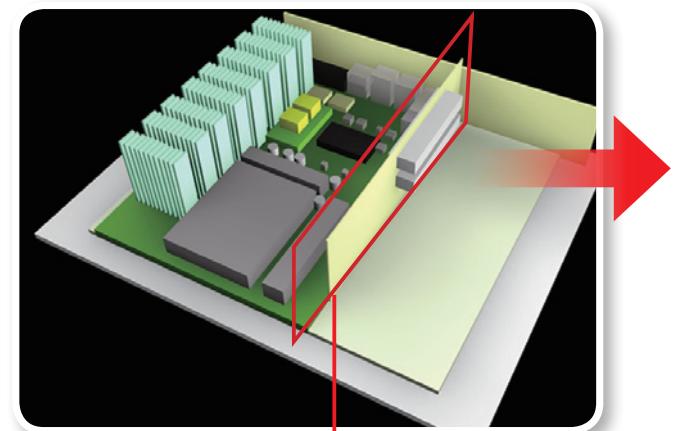
Features:

- Robust aluminum with IP 64 compliant front bezel design
- 5-wire resistive touch
- Intel® Atom™ D525 1.8GHz dual-core with fan-less design
- 15" 400 nits LED backlight panel with 1024 x 768 resolution
- Two USB 3.0, two USB 2.0 and five COM ports available
- Flexible expansion interface (two PCI slots or one PCI slot + one PCIe slot)
- Optional 4-channel video/audio capture card and Wi-Fi (802.11 b/g/n) available
- Built-in 1.3M pixels webcam with autofocus and auto enhancement and auto white balance
- Dual combo (10/100/1000 baseT(X) or 1000 baseSFP slot) gigabit LAN ports



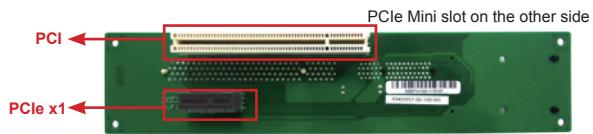
Flexible Expansion Interface

Compared to the PPC-5150, the PS2 power supply unit has been removed in order to maximize expansion ability for customers who need rich I/O connect feasibility for their using scenarios. By out a PS2, this system is able to provide three more extended connections for customers.

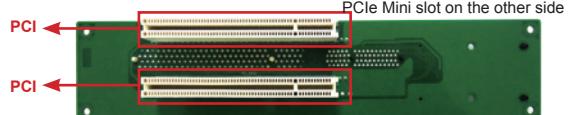


This expansion slot can be connected to any standard PCIe Mini card. We also build a specific 4-channel audio/video capture card for the back side PCIe Mini card slot.

1. One PCI and One PCIe x1 + One PCIe Mini card slot.



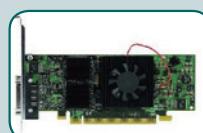
2. Two PCI slots + One PCIe Mini card slot



Supports PCI card size up to 200mm x 100mm x 20mm



IP Communication Card
175.26mm x 100mm



PCI Graphics Card
167mm x 100mm



PCIe to USB3 Card
81mm x 100mm



VoIP Gateway Card
165mm x 100mm

Total backplane expansion slot power up to 35W

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PACSmate Medical Solutions

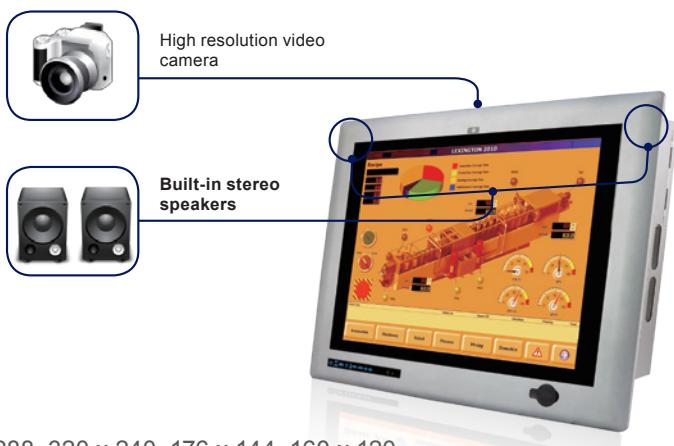
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Optional Peripherals

Rich I/O Interface with User-Friendly Design

A.1.3M Webcam and 3W Speakers

- SXGA resolution image sensor
- Frame rate: 1280x1024@ 7.5fps max. 640x480@ 24~30fps
- Auto white balance
- Auto exposure
- Auto compensation
- Focus range from 25 cm to infinity
- Flip control option
- High speed USB 2.0 interface
- Storage format of image: AVI
- Storage format of photograph: BMP, JPEG
- Video resolution: 1280 x 1024, 800 x 600, 640 x 480, 352 x 288, 320 x 240, 176 x 144, 160 x 120.



B.Super Speed USB 3.0

The SuperSpeed USB 3.0 technology supports data transfer rates up to 10 times faster than USB 2.0 with the optimized power efficiency.



F.User-accessible CF

The PPC has a CF slot on the I/O side that makes it easy to install and replace the CF card.

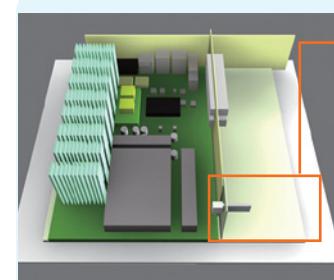
D.Selectable AT/ATX mode switch

AT power mode allows multiple panel PCs automatically start when the central power unit is connected. Applications:

- ATM
- Factory automation platform
- Self-service Kiosk

ATX power mode allows the panel PCs to be turned on/off remotely via network. Applications:

- Security surveillance
- Advertising terminal



G.Reserved internal USB

The PPC has a internal USB port reserved for an encryption card for software developers to provide intelligent software protection. The purpose of using software protection is to prevent intellectual properties from being illicitly used.

E.Reset button

The reset button forces the system to be reset when the system hangs up.



H.Front-accessible waterproof USB

The PPC provides a convenient front-accessible USB port protected with a waterproof cover for easy data update.

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Optional Peripherals

I. Dual Combo (SFP/RJ-45) Gigabit LAN

The PPC-5152 provides dual combo (SFP / RJ-45) gigabit LAN. For each pair of combo LAN, only one LAN port works at a time, and the SFP Fiber port works prior to the RJ-45 port. When a LAN port is working, the corresponding LED indicator lights up.



Flat-Bezel Touch Screen with IP 64 Protection

- Consumer outlook
- Industrial protection
- Flat design is easy to clean

Indicators

Power Switch

1. Press and hold 3 sec to power on
2. Press and hold 6 sec to power off



CPU Temperature Alert LED

The LED turns red to alert users that the CPU temperature is too high. Users at this time can lower the environment temperature or close some running programs to cool down the CPU.

Auto Dimming

Auto dimming provides more comfortable viewing, less power consumption and extends lamp life.



Applications



IR Remote Controller

Easy-to-use remote control for adjusting screen brightness and volume.



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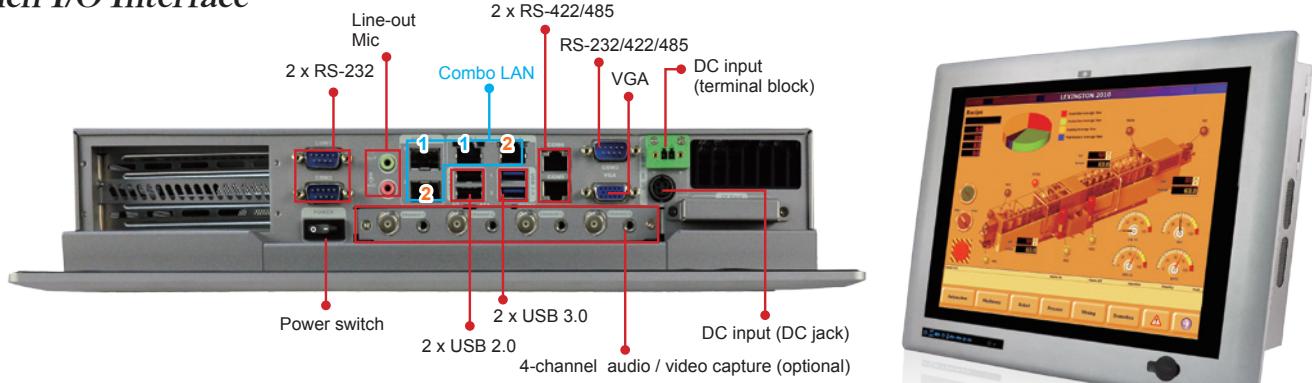
RISC-based Solutions

PACSmate Medical Solutions

Optional Peripherals



Rich I/O Interface



Specifications

| Model Name | | PPC-5152-D525-R10 |
|------------------------|---------------------------------|---|
| Display | LCD Size | 15 " |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m ²) | 400 |
| | Contrast Ratio | 500:1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.1095(H) x 0.1095(V) |
| | Viewing Angle (V/H) | 160° / 140° |
| Motherboard | Backlight MTBF (hrs) | 50000 |
| | SBC | PPCMB-5152A-D525 |
| | CPU | Intel® Atom™ D525 1.8GHz dual core processor |
| | Chipset | Intel® ICH8M |
| I/O ports and switches | RAM | One 204-pin DDR3 SO-DIMM slot (system max.4GB) |
| | | 2 x RS-232 (DB-9 connector) |
| | | 1 x RS-232 or RS-422/485 (DB-9 connector) |
| | | 2 x RS-422/485 (RJ-45 connector) |
| | | 2 x USB 2.0 connector |
| | | VGA port (DB-15 connector) |
| | | 2 x Audio jacks (line-out, Mic) |
| | | 2 x USB 3.0 connector |
| | | AT/ATX switch |
| | | 2 x Combo (SFP / RJ-45) Gigabit LAN |
| Drive Bay | | 4-channel video / audio capture (optional) |
| | HDD Drive Bay | 2.5" SATA HDD bay |
| | SSD | CF Type II socket |
| Physical | CD-ROM Drive Bay | N/A |
| | Construction Front Panel | Aluminum |
| | Chassis Construction | Heavy duty steel (SECC) |
| | Mounting | Panel, Wall, Rack, Stand and Arm (VESA 100 mm x 100 mm) |
| | Front Panel Color | Silver, Paint Tone PMS 8401C |
| | Dimensions (WxHxD) (mm) | 422 x 331 x 80 |
| | Cut Out Dimensions (WxH) (mm) | 390 x 290 |
| Expansion Slot | Net / Gross Weight | 6.5 kg/ 8.8 kg |
| | | Two PCI slots or one PCI slot plus one PCIe x1 slot |
| | | Burglar-proof internal USB 2.0 port |
| System Cooling | | Fanless |
| Environment | Operating Temperature | -20°C ~ 50°C |
| | Storage Temperature | -20°C ~ 70°C |
| | Vibration | MIL-STD-810F 514.5C-2 (with CF card or SSD) |
| | Shock | Half-sine wave shock 3G; 11ms; 3 shocks per axis |
| | IP level | Front Panel IP 64 |
| | Safety & EMC | CE / FCC |
| Power | | 90W power adapter |
| | Power Adapter | Input: 100VAC~240VAC, 50/60Hz |
| | | Output: 19V DC |
| | Power Requirement | 9~36V DC Jack 9~36V Terminal Block |
| | Consumption | 50W without add-on card |

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Optional Peripherals

Ordering Information

| | Part No. | Description |
|--------------------------|-----------------------------|--|
| Converter card (HPE-2S1) | PPC-5152-D525/R/1G/2P-R10 | 15" 400 cd/m ² XGA Fanless Panel PC with two PCI expansion slots, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 1.3M camera, microphone, touch screen, R10 |
| Converter card (HPE-2S2) | PPC-5152-D525/R/1G/1P1E-R10 | 15" 400 cd/m ² XGA Fanless Panel PC with one PCI and one PCIe x1 expansion slot, Intel® Atom™ D525 1.8GHz CPU, 1GB DDR3 RAM, 1.3M camera, microphone, touch screen, R10 |

Options

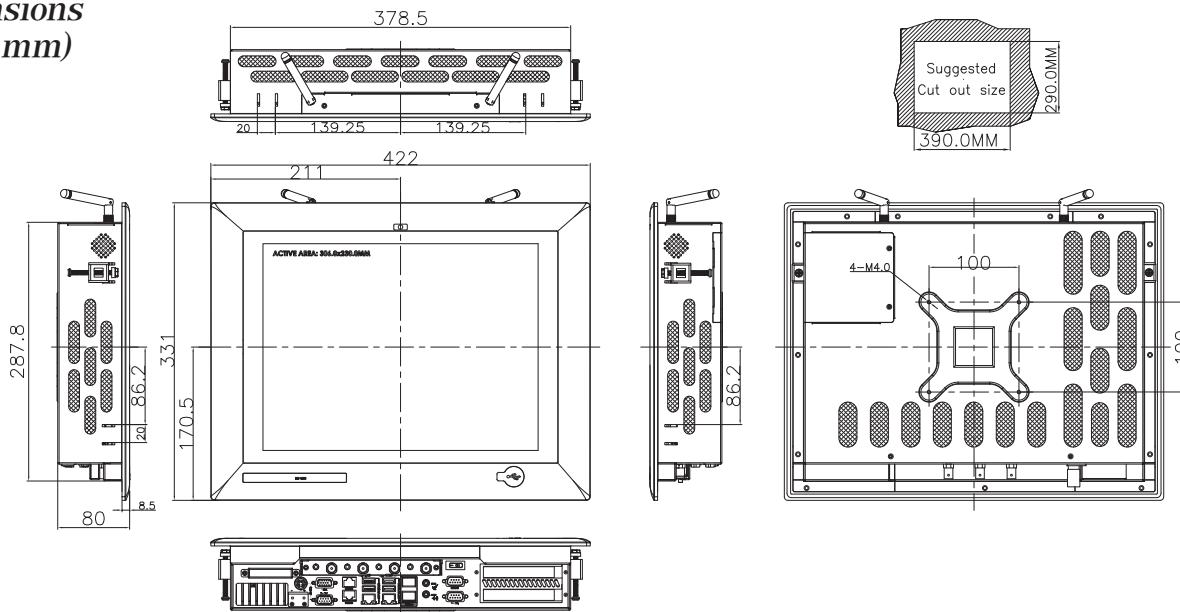
| Item | P/N | Description |
|----------------------------------|-----------------------------------|--|
| Panel Mounting Kit | PK-170M | |
| Wall Mounting Kit | WK-190MS-R10 | |
| Rack Mounting Kit | RK-150MS2-R10 | |
| ARM | ARM-11-RS/ARM-31-RS | |
| Stand | STAND-A19/STAND-B19/STAND-210-R11 | |
| Wi-Fi Module Kit | PPC-WL-KIT01-R10 | Wi-Fi module with RF cable and antennas, 2T2R, 802.11 b/g/n. |
| Capture Card Kit | PPC-CP-KIT01-R10 | 4-channel video/audio capture card with input panel and cable, PCIe Mini interface, NTSC/PAL |
| Gigabit Ethernet SFP Module | SFP1G-SX/-I | 1Gbps SFP optical transceiver, multi-mode / 550m, 850nm (0 ~ 70°C) /industrial grade (-20 ~ 85°C) |
| | SFP1G-MLX/-I | 1Gbps SFP optical transceiver, multi-mode / 2Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C) |
| | SFP1G-LX10/-I | 1Gbps SFP optical transceiver, single-mode / 10Km, 1310nm (0 ~ 70°C) /industrial grade (-40 ~ 85°C) |
| | SFP1G-XD70/-I | 1Gbps SFP optical transceiver, single-mode / 50Km, 1550nm (0°C ~ 70°C) / industrial grade (-40°C ~ 85°C) |
| Fiber Cord | FPC-LCLC-MM3M | Optical connector LC/LC, multi-mode, diameter 62.5/125 μm, length 3m. |
| | FPC-LCLC-SS3M | Optical connector LC/LC, single-mode, diameter 9/125 μm, length 3m. |
| OS: Win CE 6.0 (128MB CF Card) | PPCCF-5152-D525-CE060-128M-R10 | |
| OS: Win XPE (2GB CF Card) | PPCCF-5152-D525-XPE-2G-R10 | |
| OS: Win XPE (4GB CF Card) | PPCCF-5152-D525-XPE-4G-R10 | |
| OS: Linux (2GB CF Card) | PPCCF-5152-D525-LNX-2G-R10* | |
| OS: Win 7 Embedded (4GB CF Card) | PPCCF-5152-D525-WES7E-4G-R10 | |

(*it doesn't include video/audio capture card's driver)

Packing List

| Item | P/N | Q'ty | Description |
|--------------------------------|---------------------|------|---|
| Utility CD | 7B000-000732-RS | 1 | Drivers and user manual |
| One Key Recovery CD | | 1 | |
| VESA Mounting Screw | 44033-040062-RS | 4 | M4*6 for securing stand bracket |
| Chassis Screw | 44013-030041-RS | 4 | M3*4 chassis screw for backup |
| Capture Card Screw | 44003-030062-RS | 4 | M3*5 capture card screw for backup |
| VESA Fastener | 19Z00-000024-RS | 6 | |
| HDD Screw | 44043-030051-RS | 4 | |
| Pluggable DC-in Terminal Block | 33101-000897-RS | 1 | |
| RJ-45 to DB9 COM port Cable | 32005-000700-100-RS | 2 | |
| Touch pen | 43125-0002C0-00-RS | 1 | |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 | |
| Power Adapter | 63040-010090-020-RS | 1 | FSP090-D2BA1:90~264VAC input;90W;19VDC output |
| Power Cord | 32702-000401-100-RS | 1 | 1500 mm, European Standard |
| Power Transfer Cord | 32702-000300-100-RS | 1 | |

Dimensions (Unit: mm)



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Optional Peripherals

15" Industrial Panel PC

PPC-5150A/9455**PPC-5150A-G41**

Intel® Core™ 2 Duo Processor with Intel® 945G Platform

Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

Features

1. 15" XGA Industrial Panel PC with touch screen
2. One PCI and optional PCIe x1 expansion slot
3. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
4. One slim type CD-ROM drive bay
5. One internal 2.5" SATA HDD and CF slot
6. Robust aluminum front bezel and metal casing
7. IP 65 compliant front panel
9. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

**Specifications**

| Model | PPC-5150A/9455 | PPC-5150A-G41 | |
|------------------------|-------------------------------|--|--|
| Display | LCD Size | 15 " | |
| | Max Resolution | 1024(W) x 768(H) | |
| | Brightness (cd/m²) | 350 | |
| | Contrast Ratio | 700 : 1 | |
| | LCD Color | 16.2M | |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | |
| | Viewing Angle (V/H) | 125° / 140° | |
| | Backlight MTBF (hrs) | 50000 | |
| Motherboard | SBC | POS-9455 | |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | |
| | Chipset | Intel® 945G + ICH7R | |
| | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | |
| I/O Ports and Switches | | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x LPT 1 x Power Switch 1 x AT / ATX Switch 1 x CMOS reset button | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x LPT 1 x Power Switch 1 x AT / ATX Switch 1 x CMOS reset button |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA/IDE HDD bay with anti-shock | |
| | SSD | CF Type II | |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | |
| Expansion Slot | | Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card) 1 x PCIe Mini card | Either 1 x PCI or PCIe x1 expansion slot (Optional PCI and PCIe x1 riser card) 1 x PCIe Mini card |
| Physical | Construction Front Panel | Aluminum die-casting | |
| | Chassis Construction | Heavy-duty steel (SECC) | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 410 x 309 x 110.5 | |
| Environment | Cut Out Dimensions (WxH) (mm) | 383.6 x 285.6 | |
| | Net Gross Weight | 7 Kg / 11 Kg | |
| | Operation Temperature | -10°C~50°C | |
| | Storage Temperature | -20°C~60°C | |
| Touch Screen | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| | | Resistive Type 5-Wire with RS-232 interface | |
| Power Supply | AC Input | P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@14A, 12V@0.5A | |
| | DC Input | P/N: ACE-4520C-RS, 200W power supply - Input: 24 VDC(18~36 VDC) - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A | |

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Optional Peripherals

15" Industrial Panel PC

WIDS-515A-945G**WIDS-515A-G41**

Intel® Core™2 Duo Processor with Intel® 945G Platform

Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

**WIDS-515A-G41 Features**

1. Embedded PIFA antenna and built-in Mini PCIe 802.11b/g/n interface wireless module
2. Powered by high performance Intel® Core™2 Extreme/Quad/Duo and Celeron® processor supports up to 1333MHz FSB with Intel® G41 chipset
3. System memory supports dual-channel DDR3 DIMM up to 4 GB
4. Offers one expansion slot for PCI or PClex1 add-on cards
5. Dual gigabit Ethernet
6. Heavy-duty design with anti-rust chassis with aluminum IP 65 compliant front panel

**Specifications**

| Model | WIDS-515A-945G | WIDS-515A-G41 |
|------------------------|-------------------------------|---|
| Display | LCD Size | 15 " |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m²) | 350 |
| | Contrast Ratio | 700 : 1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) |
| | Viewing Angle (V/H) | 125° / 140° |
| Motherboard | Backlight MTBF (hrs) | 50000 |
| | SBC | POS-9455 |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz |
| | Chipset | Intel® 945G + ICH7R |
| I/O Ports and Switches | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB |
| | | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 6 x USB 2.0 (2 waterproof USB in front of the panel) 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x LPT Power Switch AT / ATX Switch CMOS reset button Front USB switch |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay |
| Wireless | | Wireless 802.11 b/g/n module (PCIe Mini interface) |
| Expansion Slot | | Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card) |
| | | 1 x PCIe Mini card |
| Physical | Construction Front Panel | Aluminum Die-casting |
| | Chassis Construction | Heavy-duty Steel (SECC) |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 410 x 309 x 110.5 |
| Environment | Cut Out Dimensions (WxH) (mm) | 383.6 x 285.6 |
| | Net/Gross Weight | 7 Kg / 11 Kg |
| | Operation Temperature | -10°C~50°C |
| | Storage Temperature | -20°C~60°C |
| Touch Screen | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak |
| | Shock | 10G acceleration part to part (11ms) |
| | | Resistive Type 5-Wire with RS-232 interface |
| Power Supply | AC Input | P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3A@14A, 5V@16A, 12V@14A, -12V@0.5A |
| | DC Input | P/N: ACE-A622A-RS-R11 -220W power supply -Input: 90VAC~264VAC, 50/60Hz -Output (max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A |

Upgrade to the Quad Core CPU without Additional Rebuilding Costs

1. Upgradeable Performance

Upgrade from the existing Intel® 945G 65nm dual-core processor to an Intel® 65nm/45nm quad core extreme performance platform to meet the needs of a wide range of intensive applications. There's no need to rebuild the board in the process, thus saving costs.



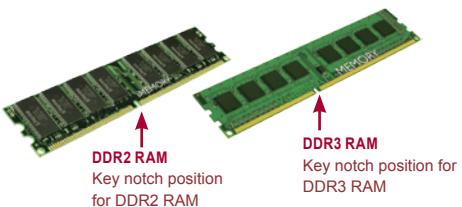
Based on Original Mechanical Design

| 2008 Dual Core | | 2010 Quad Core | |
|--------------------------------|--|--|-----------|
| Transition to New Generation | | | |
| | PPC-51xxA-945 | PPC-51xxA-G41 | |
| Upgrade Functions | | | |
| Chipset | Intel®945G | Intel®G41 | Quad Core |
| CPU FSB | 1066MHz 65nm | 1333MHz 45nm/65nm | |
| Graphic | Intel® Graphics Media Accelerator 950 | Intel® Graphics Media Accelerator X4500 | |
| Memory | 2 x 240-pin dual-channel DDR2 400/533/667MHz up to 4GB | 2 x 240-pin dual-channel DDR3 1333/1066MHz up to 4GB | DDR3 |
| Based on Same Mechanism | | | |
| Expansion Slot | Either one PCIe x1 or one PCI | | |
| System Dimensions (WxHxD) (mm) | 15" : 410 x 309 x 110.5 | | |

Intel® G41 Embedded CPU Support List

| Brand Name | CPU No. | Clock speed | FSB | L2 cache |
|---------------------|----------------|-------------|------|----------|
| Core 2 Quad | Q9400(Default) | 2.66G | 1333 | 6M |
| | E8400 | 3.0G | 1066 | 6M |
| Core 2 Duo | E7400 | 2.8G | | 3M |
| | E6500 | 2.93G | 1066 | |
| Pentium D Dual Core | E5300 | | | 2M |
| | 2.6G | 800 | 2M | |
| Core 2 Duo | E6400 | 2.13G | 1066 | 2M |
| | E4300 | 1.8G | 800 | 2M |
| Pentium D Dual Core | E2160 | 1.8G | 800 | 1M |
| | E3400 | | | |
| Celeron Dual Core | E1500(Default) | 2.4G | 800 | 512K |
| | 2.2G | | 512K | |
| Celeron | 440 | 2.00G | 800 | 512K |

2. Effective and Low Voltage DDR3 SDRAM Support



| Memory Type | DDR SDRAM | DDR2 SDRAM | DDR3 SDRAM |
|---------------|-----------------|---------------------|----------------------|
| Prefetch | 2-bit | 4-bit | 8-bit |
| Transfer Rate | DDR200 ~ DDR400 | DDR2-400 ~ DDR2-800 | DDR3-800 ~ DDR3-1600 |
| Core Voltage | 2.5 V | 1.8 V | 1.5 V |

Wi-Fi 802.11a/b/g/n WLAN Networking



27 times faster data transfer rate compared to 802.11b

| Protocol | Freq. | Thru. | Data | Range Indoor | Range Outdoor |
|----------|----------------------|----------|------------------------|--------------|---------------|
| 802.11 | (GHz) | (Mbit/s) | (Mbit/s) | (m) | (m) |
| a | 5 GHz | 23 | 54 Mbit/s | ~35 | ~120 |
| b | 2.4 GHz | 4.3 | 11 Mbit/s | ~38 | ~140 |
| g | 2.4 GHz | 19 | 54 Mbit/s | ~38 | ~140 |
| n | 5 GHz and/or 2.4 GHz | 74 | 300 Mbit/s (2 streams) | ~70 | ~250 |

IP 65 Security Front USB Port

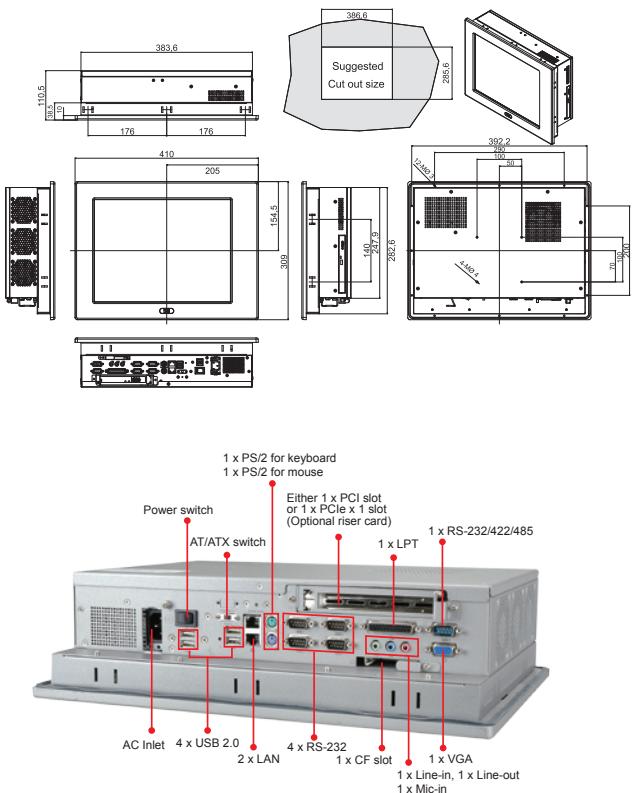
Designed for industrial use, WIDS waterproof front USB cover is based around the standard USB interface. USB performance offers data transfer up to 480Mbs.



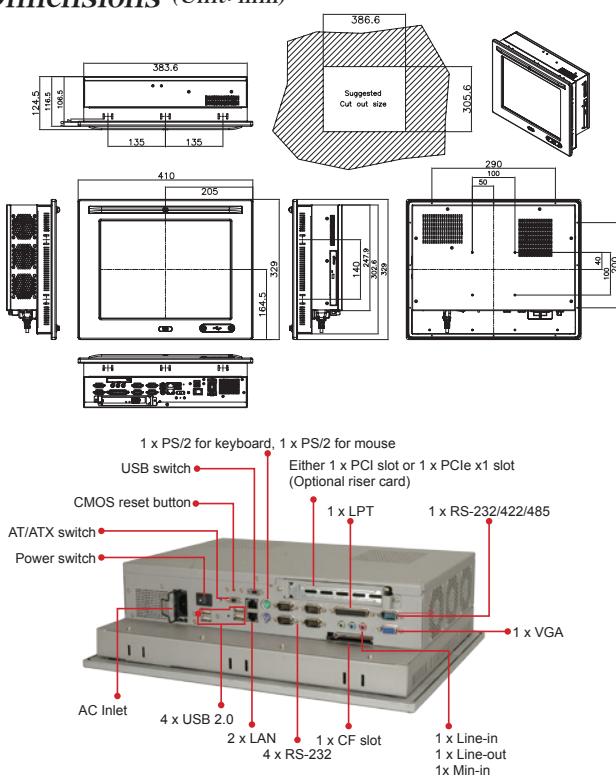
Front USB function switch allows user to enable or disable the front USB port function. Depending on the application and security demands, the system administrator can decide to release the front USB port or not.



PPC-5150A Dimensions (Unit: mm)



WIDS-515A Dimensions (Unit: mm)



Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|--|
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |
| User's Manual CD-ROM | | |

IQ Mounting Options

| Item | Part No. |
|----------------|---|
| Rack Mount Kit | RK-150MS-R10 (for PPC-5150A series) |
| | WIDSRK-170MS-R10 (for WIDS-517A series) |
| ARM | ARM-31-RS |
| STAND | STAND-210-R11 |

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IEI Mobile Solutions

Ordering Information

| Part No. | | | Description | |
|----------------------|-----------|------------------|--|--|
| Intel® 945G Platform | w/o Wi-Fi | AC Input | PPC-5150A-R11/9455-E2160/A618A/T-R/1GB | |
| | | 18~36 V DC input | PPC-5150A-R11/9455-E2160/4520C/T-R/1GB | |
| | Wi-Fi | AC Input | WIDS-515A/9455-E2160/A618A/WT-R/1GB | |
| | | 18~36 V DC input | WIDS-515A/9455-E2160/4520C/WT-R/1GB | |
| Intel® G41 Platform | w/o Wi-Fi | AC Input | PPC-5150A-G41-E15/R/1G-R10 | |
| | | | PPC-5150A-G41-Q94/R/1G-R10 | |
| | | 18~36 V DC input | PPC-5150AD-G41-E15/R/1G-R10 | |
| | | | PPC-5150AD-G41-Q94/R/1G-R10 | |
| | Wi-Fi | AC Input | WIDS-515A-G41-E15/R/1G-R10 | |
| | | | WIDS-515A-G41-Q94/R/1G-R10 | |
| | | 18~36 V DC input | WIDS-515AD-G41-E15/R/1G-R10 | |
| | | | WIDS-515AD-G41-Q94/R/1G-R10 | |
| Riser Card | | PCIR-01H-R10 | 1-Slot PCI riser card | |
| | | PCIER-101H-R10 | 1-Slot PCIe x1 riser card | |

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Optional Peripherals

17" Industrial Panel PC

PPC-5170A/9455

Intel® Core™2 Duo Processor with Intel® 945G Platform

PPC-5170A-G41

Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

**Features**

1. 17" high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing
5. IP 65 compliant front panel
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)

**Specifications**

| Model | PPC-5170A/9455 | PPC-5170A-G41 |
|------------------------|-------------------------------|---|
| Display | LCD Size | 17" |
| | Max Resolution | 1280(W) x 1024(H) |
| | Brightness (cd/m²) | 300 |
| | Contrast Ratio | 800 : 1 |
| | LCD Color | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) |
| | Viewing Angle (V/H) | 160°/ 160° |
| Motherboard | Backlight MTBF (hrs) | 50000 |
| | SBC | POS-9455 |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz |
| | Chipset | Intel® 945G + ICH7R |
| I/O Ports and Switches | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB |
| | | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT 1 x CMOS reset button |
| Drive Bay | I/O Ports and Switches | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 4 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface Power Switch AT / ATX Switch 1 x LPT CMOS reset button |
| | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II |
| Expansion Slot | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay |
| | | Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card)) 1 x PCIe Mini card |
| Physical | Construction Front Panel | Aluminum Die-casting |
| | Chassis Construction | Heavy-duty steel (SECC) |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 452 x 356 x 115 |
| | Cut Out Dimensions (WxH) (mm) | 424.5 x 330.5 |
| | Net / Gross Weight | 8 Kg / 12 Kg |
| Environment | IP Rating | Front IP 65 Compliant |
| | Operation Temperature | -10°C~50°C |
| | Storage Temperature | -20°C~60°C |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak |
| Touch Screen | Shock | 10G acceleration part to part (11ms) |
| | | Resistive Type 5-Wire with RS-232 interface |
| Power Supply | AC Input | P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output (max.): 3.3A@14A, 5V@16A, 12V@14A, -12V@0.5A |
| | DC Input | P/N: ACE-A622A-RS-R11 -220W power supply -Input: 90VAC~264VAC, 50/60Hz -Output (max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A |
| | | P/N: ACE-4520C-RS -200W power supply -Input: 24 VDC(18~36 VDC) -Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A |

1

IEI Mobile Solutions

2

Automation Panel Solutions

3

RISC-based Solutions

4

PACSmate Medical Solutions

5

Optional Peripherals

17" Industrial Panel PC

WIDS-517A-945G

Intel® Core™2 Duo Processor with Intel® 945G Platform

WIDS-517A-G41

Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

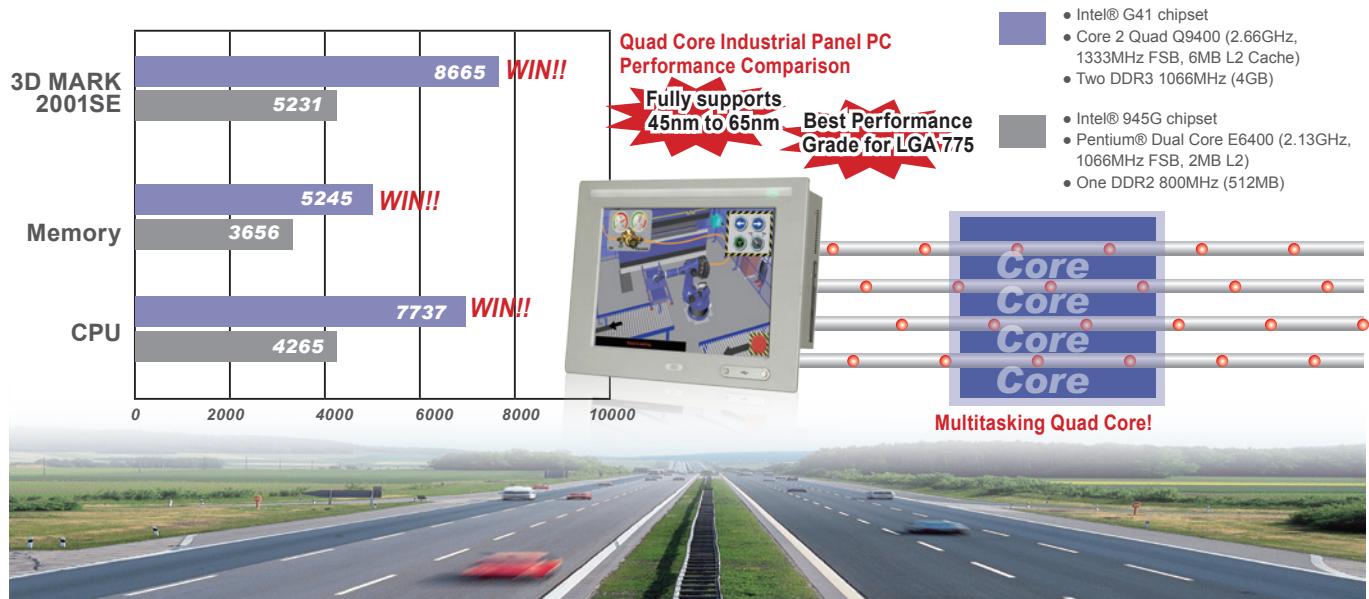
**Features**

1. Embedded PIFA antenna and built-in Mini PCIe 802.11b/g/n interface wireless module
2. Powered by high performance Intel® Core™2 Extreme/Quad/Duo and Celeron® processor supports up to 1333MHz FSB with Intel® G41 chipset
3. System memory supports dual-channel DDR3 DIMM up to 4 GB
4. Offers one expansion slot for PCI or PCIe x1 add-on cards
5. Dual gigabit Ethernet
6. Heavy-duty design with anti-rust chassis with aluminum IP 65 compliant front panel

**Specifications**

| Model | WIDS-517A-945G | WIDS-517A-G41 |
|------------------------|-------------------------------|---|
| Display | LCD Size | 17" |
| | Max Resolution | 1280(W) x 1024(H) |
| | Brightness (cd/m2) | 300 |
| | Contrast Ratio | 1000 : 1 |
| | LCD Color | 16.7M |
| | Pixel Pitch (mm) (HxV) | 0.264(H) x 0.264(V) |
| | Viewing Angle (V/H) | 160°/170° |
| Motherboard | Backlight MTBF (hrs) | 50000 |
| | SBC | POS-9455 |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz |
| | Chipset | Intel® 945G + ICH7R |
| I/O Ports and Switches | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB |
| | Serial Port | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 6 x USB 2.0 (2 waterproof USB in front of the panel) 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface Power Switch AT / ATX Switch 1 x LPT CMOS reset button Front USB switch |
| | Parallel Port | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 6 x USB 2.0 (2 waterproof USB in front of the panel) 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface Power Switch AT / ATX Switch 1 x LPT CMOS reset button Front USB switch |
| | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock |
| | SSD | CF Type II |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay |
| | Wireless | Wireless 802.11 b/g/n module (PCIe Mini interface) |
| | Expansion Slot | Either 1 x PCI or PCIe x1 expansion slot (PCI riser card built-in, optional PCIe x1 riser card)) 1 x PCIe Mini card |
| | Front Panel | Aluminum Die-casting |
| | Chassis Construction | Heavy-duty Steel (SECC) |
| Physical | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm |
| | Front Panel Color | Silver (Pantone 8001C) |
| | Dimensions (WxHxD) (mm) | 452 x 356 x 115 |
| | Cut Out Dimensions (WxH) (mm) | 425 x 331 |
| | Net/Gross Weight | 8 Kg / 12 Kg |
| | IP Rating | Front IP 65 Compliant |
| Environment | Operation Temperature | -10°C~50°C |
| | Storage Temperature | -20°C~60°C |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak |
| | Shock | 10G acceleration part to part (11ms) |
| Touch Screen | | Resistive Type 5-Wire with RS-232 interface |
| | | |
| Power Supply | AC Input | P/N: 63000-ACEA622APPC-RS, 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A |
| | DC Input | P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 50/60Hz - Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A |

Upgrade to the Quad Core CPU without Additional Rebuilding Costs!



User Friendly Design

**1**

IEI Mobile Solutions

1. User-accessible CF

PPC has a CF slot on the bottom panel that makes installing and replacing CF cards easy.

**2**

Automation Panel Solutions

2. Securing Your CF Card

PPC has a CF slot on the bottom panel. A security door on the PPC protects the CF card from being stolen in public places.

**3**

RISC-based Solutions

3. Lockable Power Cord

Power plug lock keeps power cable securely in place.

4

PACSmate Medical Solutions

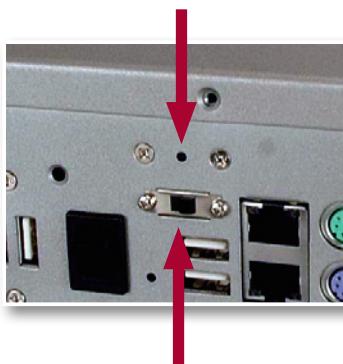
5

Optional Peripherals

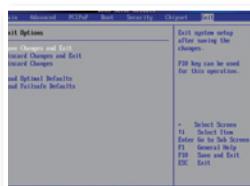
4. CMOS Reset Button

The CMOS reset button forces the BIOS to be reset to its default values for the following reasons:

- Fast BIOS updating
- Hard device conflicts or disruptions to system operation



Restoring default system settings!



5. AT/ATX Mode Switch

Select AT or ATX power mode with an easily accessible switch.

Production Line



General Ticketing Machine (GTM)



AT

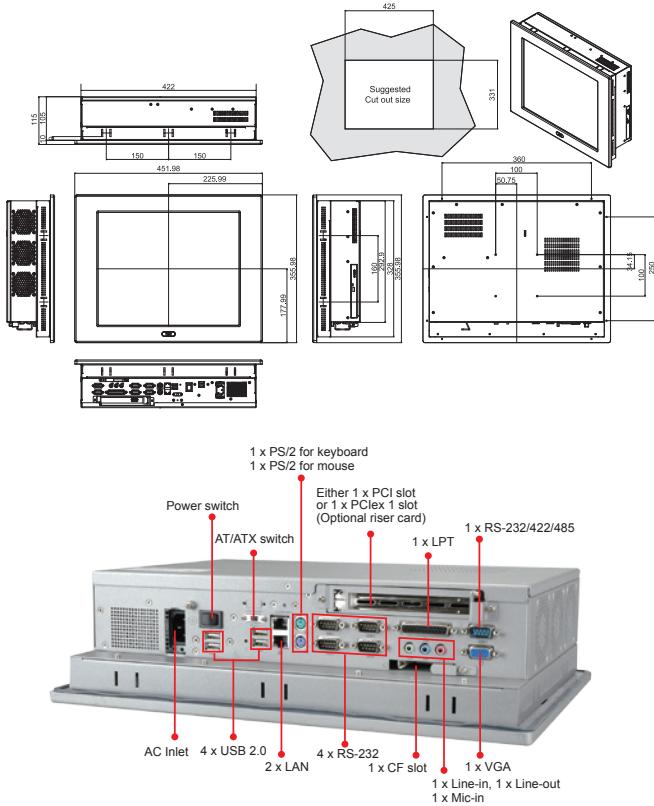
ATX

AT power mode allows multiple panel PCs to automatically start when the central power unit is connected.

The ATX power mode allows the panel PCs to be turned on/off remotely via network.

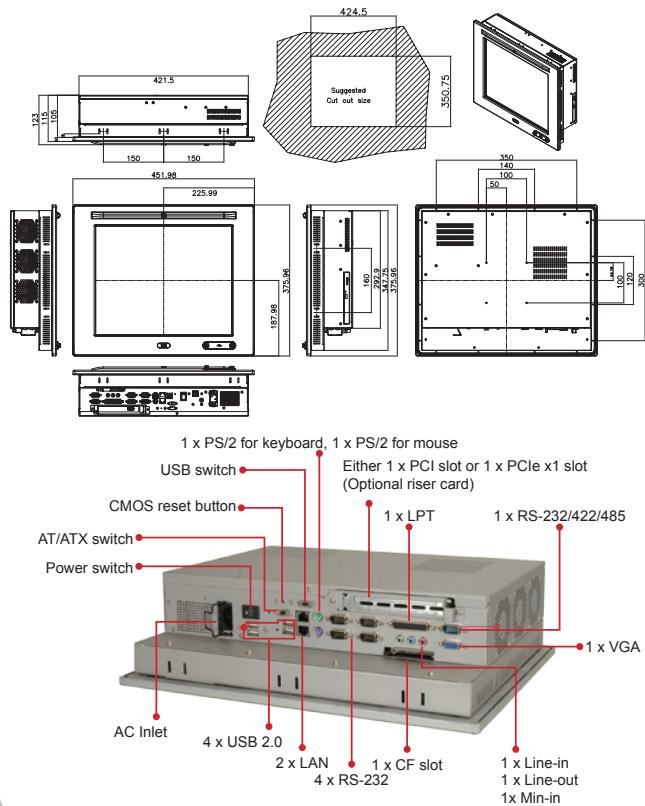
PPC-5170A

Dimensions (Unit: mm)



WIDS-517A

Dimensions (Unit: mm)



Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|--|
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |
| User's Manual CD-ROM | | |

Ordering Information

| Part No. | Description | | | | |
|----------------------|------------------|-----------------------------|--|--|--|
| Intel® 945G Platform | w/o Wi-Fi | AC Input | PPC-5170A-R11/9455-E2160/A622A/T-R/1GB | 17" 300 cd/m ² SXGA panel PC with POS-9455 R11 version, Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color, PSU ACE-A622A, touch screen, RoHS | |
| | | 18~36 V DC input | PPC-5170A-R11/9455-E2160/4520C/T-R/1GB | 17" 300 cd/m ² SXGA panel PC with POS-9455 R11 version, Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color, PSU ACE-4520C, touch screen, RoHS | |
| | Wi-Fi | AC Input | WIDS-517A/9455-E2160/A622A/WT-R/1GB | 17" 300 cd/m ² SXGA panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS | |
| | | 18~36 V DC input | WIDS-517A/9455-E2160/4520C/WT-R/1GB | 17" 300 cd/m ² SXGA panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS | |
| Intel® G41 Platform | w/o Wi-Fi | AC Input | PPC-5170A-G41-E15/R/1G-R10 | 17" 380 cd/m ² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| | | | PPC-5170A-G41-Q94/R/1G-R10 | 17" 380 cd/m ² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| | | 18~36 V DC input | PPC-5170AD-G41-E15/R/1G-R10 | 17" 380 cd/m ² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card | |
| | | | PPC-5170AD-G41-Q94/R/1G-R10 | 17" 380 cd/m ² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card | |
| | Wi-Fi | AC Input | WIDS-517A-G41-E15/R/1G-R10 | 17" 380 cd/m ² SXGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| | | | WIDS-517A-G41-Q94/R/1G-R10 | 17" 380 cd/m ² SXGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| | 18~36 V DC input | WIDS-517AD-G41-E15/R/1G-R10 | 17" 380 cd/m ² SXGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card | | |
| | | WIDS-517AD-G41-Q94/R/1G-R10 | 17" 380 cd/m ² SXGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-4520C, touch screen, w/o riser card | | |
| Riser Card | | PCIR-01H-R10 | 1-Slot PCI riser card | | |
| | | PCIER-101H-R10 | 1-Slot PCIe x1 riser card | | |

19" Industrial Panel PC

PPC-5190A/9455**PPC-5190A-G41**

Intel® Core™2 Duo Processor with Intel® 945G Platform

Intel® Core™ 2 Extreme Processor with Intel® G41 Platform

Best Performance Grade for LGA 775
Quad Core + DDR3**Specifications**

| Model | PPC-5190A/9455 | PPC-5190A/G41 | |
|------------------------|---|--|--|
| Display | LCD Size | 19" | |
| | Max Resolution | 1280(W) x 1024(H) | |
| | Brightness (cd/m²) | 300 | |
| | Contrast Ratio | 700 : 1 | |
| | LCD Color | 16.7M | |
| | Pixel Pitch (mm) (HxV) | 0.294(H) x 0.294(V) | |
| | Viewing Angle (V/H) | 160° / 170° | |
| | Backlight MTBF (hrs) | 50000 | |
| Motherboard | SBC | POS-9455 | |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | |
| | Chipset | Intel® 945G + ICH7R | |
| | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | |
| I/O Ports and Switches | | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 6 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT | 4 x RS-232 1 x RS-232/422/485 Port 2 x RJ-45 for LAN Port 6 x USB 2.0 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in 2 x PS/2 mouse and keyboard interface 1 x Power Switch 1 x AT / ATX Switch 1 x LPT |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD bay with anti-shock | |
| | SSD | CF Type II | |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | |
| Expansion Slot | | Either 1 x PCI or PCIe x1 expansion slot (optional) 1 x PCIe Mini card | |
| Physical | Construction Front Panel | Aluminum | |
| | Chassis Construction | Heavy-duty Steel | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8001C) | |
| | Dimensions (WxHxD) (mm) | 483 x 399 x 115.2 | |
| | Cut Out Dimensions (WxH) (mm) | 450 x 363 | |
| Environment | Net / Gross Weight | 12.6 Kg / 18.2 Kg | |
| | Operation Temperature | -10°C~50°C | |
| | Storage Temperature | -20°C~60°C | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Touch Screen | IP Rating | Front IP 65 Compliant | |
| | Resistive Type 5-Wire with RS-232 interface | | |
| | AC Input | P/N: 63000-ACEA622APPC-RS- 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A | |
| | | P/N: ACE-A622A-RS-R11 - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A | |
| Power Supply | DC Input | P/N: ACE-4520C-RS - 200W Power Supply - Input: 24VDC, 50/60Hz - Output (max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A | |

Features

1. 19" 300 nits/450 nits high brightness TFT LCD with LED backlight
2. Dual Ethernet provides continuous network service and allows sharing among different workgroups in two different subnets
3. One internal 2.5" SATA HDD and CF slot
4. Robust aluminum front bezel and metal casing
5. IP 65 compliant front panel
6. IEI One Key Recovery solution allows you to create rapid OS backup and recovery (Over 4GB storage capacity)



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IEI Mobile Solutions

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Automation Panel Solutions

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RISC-based Solutions

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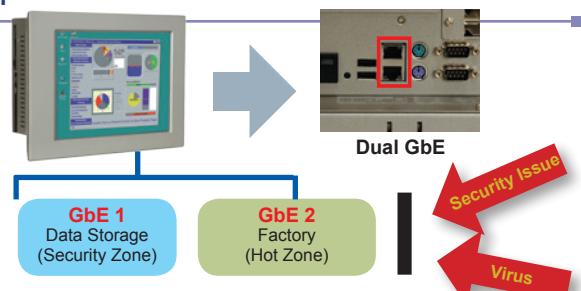
PACSmate Medical Solutions

5

Optional Peripherals

Dual 10/100/Gigabit Ethernet Support

The PPC-5170 provides dual independent gigabit LAN ports. In HMI application environments, many system integrators prefer dual independent LAN to allocate factory zone and data storage zone to reduce the possibility of the network crash or virus infection.



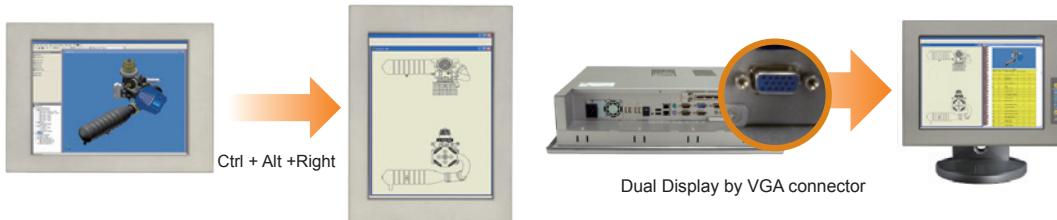
Big Screen for Multi-Display

The PPC-5190 is equipped with a 19" TFT LCD ideal for multi-display requirements such as digital surveillance or multi-operating system. With multi-display configuration, users can handle more tasks at the same time as well as saving resources and space.



Screen Rotation for More Flexibility

With the Intel® driver installed, the screen orientation can be adjusted using the GUI or hot keys. By attaching with a rotational VESA mount arm, the user can rotate the screen as needed. Add a second display for even more viewing flexibility.



PCI/PCIe Expansion Capability



Built-in AC/DC Power Supply

Built-in power supply without any external power adapter!

AC Input Directly!



DC 24V Input



DC 48V Input



**PPC-51xxA-G41
with ACE-A622A**



| | | |
|----------------|------------|------------|
| Input Range | Voltage | 90~264 VAC |
| | Frequency | 47~63 Hz |
| Output Voltage | | 220 W |
| Temperature | Operating | 0°C~50°C |
| | Storage | -20°C~80°C |
| | Efficiency | 80% |

**PPC-51xxAD-G41
With ACE-4520C**



| | | |
|----------------|------------|-------------------|
| Input Range | Voltage | 24 VDC(18~36 VDC) |
| Output Voltage | | 200 W |
| Temperature | Operating | 0°C~50°C |
| | Storage | -20°C~80°C |
| | Efficiency | 78% |

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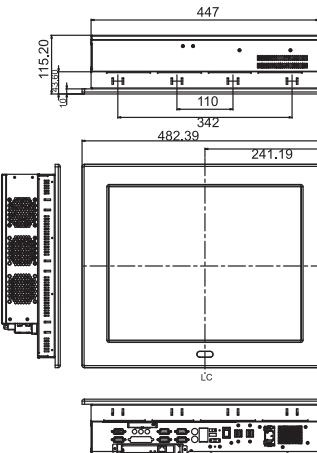
IEI Mobile Solutions

Automation Panel Solutions

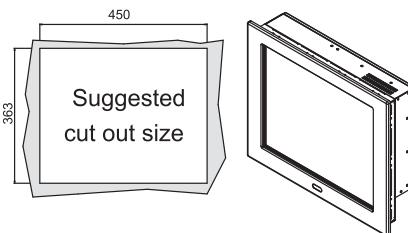
RISC-based Solutions

PACSmate Medical Solutions

Optional Peripherals



PPC-5190A
Dimensions (Unit: mm)

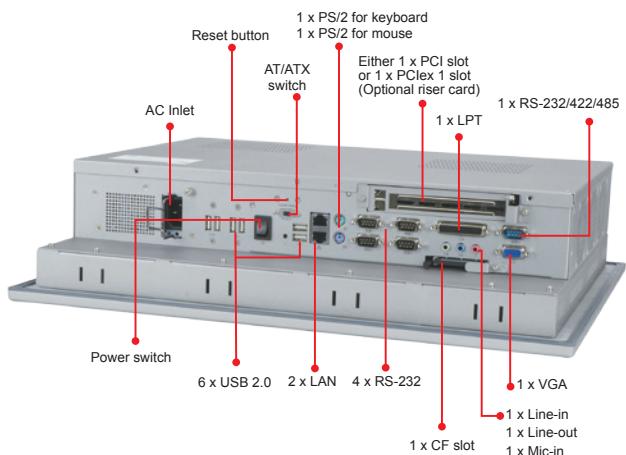


IQ Mounting Options

| Item | Part No. |
|----------------|---------------|
| Rack Mount Kit | RK-190MS-R10 |
| ARM | ARM-31-RS |
| STAND | STAND-210-R11 |

Options

| Part No. | Description |
|--------------------|---|
| 19Z00-000112-RS | IDE CD-ROM Installation Kit (W/O IDE cable) |
| 41019-0393C0-00-RS | IDE HDD Bracket |
| 32200-000037-RS | 25cm HDD IDE Cable |



Packing List

| Item | Part No. | Description |
|-------------------------|---------------------|--|
| User's Manual CD-ROM | | |
| SATA CD-ROM Cable | 32803-000300-100-RS | SLIMLINE SATA 7+6 P TO SATA 7P /4P POWER ,L=200/150mm. |
| Power Cord | 32000-000002-RS | EUROPEAN Standard ,1830MM, PLUG(16A 250V), CONNECTOR(10A 250V) |
| Panel Mount Kit | 19Z00-000024-RS | |
| Wall Mount Kit | 41020-016102-00-RS | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | |
| Touch Pen | | |

Ordering Information

| Part No. | Description | | |
|----------------------|------------------|---|--|
| Intel® 945G Platform | AC Input | PPC-5190A-R11/9455-E2160/A622A/T-R/1GB 19" 450 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color,PSU ACE-A622A, touch screen, RoHS | |
| | 18~36 V DC input | PPC-5190A-R11/9455-E2160/4520C/T-R/1GB 19" 450 cd/m² SXGA panel PC with POS-9455 R11 version,Pentium® Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, Silver color, PSU ACE-4520C, touch screen, ,RoHS | |
| Intel® G41 Platform | AC Input | PPC-5190A-G41-E15/R/1G-R10 19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| | | PPC-5190A-G41-Q94/R/1G-R10 19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card | |
| Riser Card | 18~36 V DC input | PPC-5190AD-G41-E15/R/1G-R10 19" 450 cd/m² SXGA Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM,silver color, PSU ACE-4520C, touch screen, w/o riser card | |
| | | PPC-5190AD-G41-Q94/R/1G-R10 19" 450 cd/m² SXGA Panel PC with POS-G41, Quad Core Q9400 2.66GHz, 1GB DDR3 RAM,silver color, PSU ACE-4520C, touch screen, w/o riser card | |
| PCIER-01H-R10 | | 1-Slot PCI riser card | |
| PCIER-101H-R10 | | 1-Slot PCIe x1 riser card | |



PCIe x4 slot with PCIe x1 signal riser card



One Slot PCI riser card

Industrial Vertical Market PPC Selection Guide

New

| Model | | SAILORPC-12A(SR)-N270 | UPC-V312-D525 | UPC-12AH/GM45 |
|------------------------|------------------------|---|---|--|
| Display | LCD Size | 12.1" | 12.1" | 12.1" |
| | Max Resolution | 1024 x 768 | 1024 x 768 | 1024 x 768 |
| | Brightness (cd/m2) | 400 (1000) | 600 | 450 (1000) |
| | Contrast Ratio | 500 : 1 (700 : 1) | 700 : 1 | 700 : 1 |
| | LCD Color | 262K | 16.2M | 262K |
| | Pixel Pitch (mm) (HxV) | 0.240 (H) x 0.240 (V) | 0.240 (H) x 0.240 (V) | 0.240 (H) x 0.240 (V) |
| | Viewing Angle (V/H) | 120°/100° (120°/130°) | 150° / 130° | 160°/160° (120°/130°) |
| | Backlight MTBF (hrs) | 60000 (50000) | 50000 | 50000 |
| Motherboard | CPU | Intel® Atom™ N270 1.6GHz CPU | Intel® Atom™ D525 1.8GHz dual core processor | Intel® Celeron M 575 2.0Ghz CPU/ Intel® Core 2 Duo P8400 2.26 GHz CPU / Intel® Core 2 Duo T9400 2.53GHz CPU |
| | Chipset | Intel® 945GSE + ICH7M | Intel® ICH8M | Intel® GM45+ICH9M |
| | RAM | Supports one 400/533MHz DDR2 SO-DIMM (2GB Max.) | On-board 1G DDR3 SO-DIMM (System Max. 1GB) | Supports two 667/800 MHz DDR2 SO-DIMM (4GB Max.) |
| I/O Ports and Switches | | 1 x 5-pin M12 connector for power Adapter 1 x 8-pin M12 connector for two USB 1 x 5-pin M12 connector for CAN bus and Audio line out 1 x 8-pin M12 connector for UART RS-232/422/485 1 x 8-pin M12 connector for UART RS-232 1 x 8-pin M12 connector for GbE LAN | RS-422/485 (4-pin box header) RS-232 (DB-9 connector) CAN-bus (3-pin terminal block) GbE LAN (RJ-45 connector) 4 x USB connector Audio jack (Line out, Mic) VGA port (DB-15 connector) DC-IN 1 (terminal block) / DC-IN 2 (DC Jack) Reset button AT/ATX switch | 3 x RS-232 COM Port 1 x RS-232/422/485 COM Port 2 x RJ-45 for Giga LAN 6 x USB 2.0 (2 waterproof USBs in front Panel) 1 x VGA Port 1 x Power Switch 1 x Audio Jack (Lin-out, Mic-in) 1 x Reset Button 1 x 9~28VDC Power Jack 1 x 9~28VDC Power Input Terminal Block 1 x Networking UPS Management Port by RJ-45 Ethernet 1 x UPS Remote Power Switch (2 pin terminal block) |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay with anti-shock | N/A | 1 x 2.5" SATA HDD Bay with anti-shock |
| | SSD | CF Type II | CF Type II socket / mSATA (optional) | CF Type II |
| | CD-ROM Driver Bay | - | - | - |
| Expansion Slot | | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) | Mini PCIe slot for Wi-Fi | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) |
| | | - | Mini PCIe slot for mSATA (Optional) | Either 1 x PCI or PCle x1 expansion slot |
| System Cooling | | Fanless | Fanless | Active with Fan |
| Battery | Capacity | - | - | 14.8V, 3800 mAH |
| | UPS run-time | - | - | 30~40 mins |
| Environment | Operation Temperature | -10°C ~ 50°C | -20°C ~ 60°C | -10°C ~ 50°C |
| | Storage Temperature | -20°C ~ 60°C | -40°C ~ 85°C | -20°C ~ 60°C |
| IP Rating | | IP 67 | 6-side IP 65 | Front IP 65 |

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Optional Peripherals

Industrial Vertical Market PPC Selection Guide



| Model | | WIDS-515A/9455 | WIDS-515A-G41 | WIDS-517A/9455 | WIDS-517A-G41 |
|------------------------|---------------------------------|--|---|--|---|
| Display | LCD Size | 15" | | 17" | |
| | Max Resolution | 1024(W) x 768(H) | | 1280(W) x 1024(H) | |
| | Brightness (cd/m ²) | 350 | | 380 | |
| | Contrast Ratio | 700 : 1 | | 1000 : 1 | |
| | LCD Color | 16.2M | | 16.7M | |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | | 0.264(H) x 0.264(V) | |
| | Viewing Angle (V/H) | 125°/ 140° | | 160°/170° | |
| Motherboard | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/ Quad/Duo, Celeron with a 1333/1066/800MHz FSB support | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™ 2 Extreme/ Quad/Duo, Celeron with a 1333/1066/800MHz FSB support |
| | Chipset | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 |
| | RAM | 2 x 240-pin DIMM socket, supporting DDRII 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDRII 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB |
| I/O Ports and Switches | | 4 x RS-232 COM Port 2 x RJ-45 for Giga LAN 1 x RS-232/422/485 COM Port 3 x Audio (Line-in, Line-out, Mic-in) 6 x USB 2.0 (2 waterproof USB in the front of the panel) 1 x CMOS reset button 2 x PS/2 (KB/MS) 1 x AT/ATX switch 1 x LPT 1 x USB switch 1 x VGA Port | | | |
| Drive Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay with anti-shock | | | |
| | SSD | CF Type II | | | |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | | | |
| Expansion Slot | | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) | Built-in 802.11b/g/n Wireless LAN Module (internal Mini PCIe interface) |
| | | Either 1 x PCI or PCle x1 expansion slot | | | |
| System Cooling | | Active with Fan | Active with Fan | Active with Fan | Active with Fan |
| Battery | Capacity | - | - | - | - |
| | UPS run-time | - | - | - | - |
| Environment | Operation Temperature | -10°C~50°C | -10°C~50°C | -10°C~50°C | -10°C~50°C |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C~60°C | -20°C~60°C |
| IP Rating | | Front IP 65 | | | |

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Optional Peripherals

SAILORPC-12A

12.1" Full IP 67 Panel PC

Full IP 67
Up to 1 meter of
submersion



Features:

- 12.1" 1000 nits super high brightness TFT LCD available
- IP 67 (NEMA 6) fully-enclosed aluminum die cast enclosure and IP 67 waterproof lockable I/O
- Fanless system integrated with Intel® Atom™ N270 1.6G processor for ultra low voltage
- Supports one 2.0 GB (max.) 400/533 MHz DDR2 SO-DIMM
- Built-in internal Wi-Fi antenna supports 802.11 b/g/n high standard
- CAN-Bus interface for automotive applications
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.
(Advanced Deep Dimming to Black for sunlight readable model)
- Standard VESA 75/100 compliance

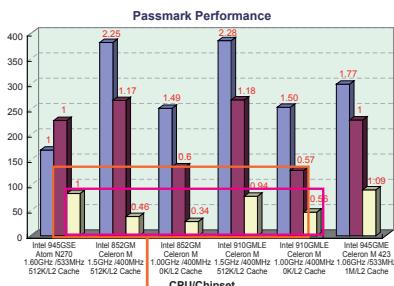


COMPUTEX TAIPEI 2009
BEST CHOICE



Rugged Panel PC with Fanless Intel® Atom™ Processor

The fanless intelligent display computer, SAILORPC-12A, uses a 45 nm Intel® Atom™ processor with up to 1.6 GHz frequency and can be used in harsh and safety-critical applications in transport, avionics, engineering or industrial automation. Better graphic performance is excellent for kiosk, self-service terminal, and digital signage applications.



Out Door Control System



National Park Guiding System



Zoo Guide

Evaluating 3D mark performance with different generation CPU and chipset combination, Intel® Atom™ processor is the best solution for low power consumption and better graphic performance choice.

Sunlight Readable

■ Super High Brightness

SAILORPC-12ASR (Sunlight Readable Model) has greatly improved luminance through edge lighting to achieve super high brightness (up to 1000 cd/m²).

■ Low Reflection through AR (Anti-Reflection) Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. SAILORPC-12ASR sunlight readable model offers special AR (anti-reflection) surface treatment to prevent reflection, which ensures excellent visibility in daylight conditions.



Super High Brightness: 1000 nits
High Contrast: 700:1
Wide Viewing Angle: 60/60 (R/L) 45/75 (U/D)

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Optional Peripherals

IP 67 Fully-Enclosed Design

The SAILORPC-A12 is front sealed and tested in the certified house chamber under UL's Witnessed Test Data Program (TDP). IEI follows IP 67 standard testing procedures. This full IP 67 touch monitor provides full IP 67 protection including connectors, cables and screen.

[IP 67] Dust-Tight

First Digit The first digit indicates the level of protection that the enclosure provides against access to hazardous parts

| Level | | Effective Against |
|-------|--|---|
| 6 | | No ingress of dust; complete protection against contact |

[IP 67] Temporary immersion under water 1m

Second Digit Protection of the equipment inside the enclosure against harmful ingress of water

| Level | | Effective Against |
|-------|--|---|
| 7 | | Ingress of water in harmful quantity shall not be possible when the enclosure is immersed in water under defined conditions of pressure and time (up to 1m of submersion) |

Sealing enclosure with all sides of IP 67 !



■ IP6X Test

• Test for protection against dust



■ IPX7 Test



• Test for protection against water

Protected against the effects of temporary immersion between 15 cm and 1m. Duration of test is 30 minutes



• Air Flow Test

Air pressure measurement is used as the IP 67 test method, the air flow tester is capable of detecting leaks in product and evaluates the pass/fail status of the watertight system.

Uninterrupted Wireless Connection

The SAILORPC-12A series features high speed Wi-Fi IEEE 802.n protocol which builds on previous 802 standards by adding multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve system performance.



27 times faster data transfer rate compared to 802.11b

| Protocol | Freq. | Thru. | Data | Range indoor | Range outdoor |
|----------|-----------------------|----------|------------------------|--------------|---------------|
| 802.11 | (GHz) | (Mbit/s) | (Mbit/s) | (m) | (m) |
| a | 5 GHz | 23 | 54 Mbit/s | ~35 | ~120 |
| b | 2.4 GHz | 4.3 | 11 Mbit/s | ~38 | ~140 |
| g | 2.4 GHz | 19 | 54 Mbit/s | ~38 | ~140 |
| n | 5 GHz and/ or 2.4 GHz | 74 | 300 Mbit/s (2 streams) | ~70 | ~250 |

802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity, compared to traditional wired LAN.

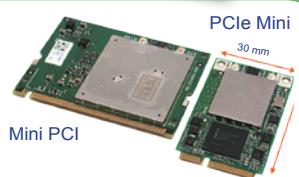
The benefits here:

- Simple configuration
- Without hinders worker movement
- Without lessens man-hour productivity
- Without additional purchase of proprietary cables for specific devices
- Without the barrier to space



Benefit

- * Half the size of Mini-PCI
- * Higher bandwidth interface
- * Rigid mechanical spec.



Access to email, instant image and the Internet



Streaming music
Streaming video



VoIP /Gaming /NAS

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Optional Peripherals

Ambient Light Sensor

The SAILORPC-12A built-in ambient light sensor automatically detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

Benefits:

- Provides comfortable viewing and prevents eye strain
- Power saving
- Extended lamp life



Day Mode:

Adjust to maximum 1000 nits
Sunlight Readable automatically

Panel brightness auto-adjustment depends on the ambient light amount to save the system power

Night Mode:

Adjust to acceptable brightness automatically in a insufficient light ambient

CAN-Bus Automotive Applications

The SAILORPC-12A is equipped with automotive applied CAN-Bus interface. The Control Area Network (CAN) is a serial bus system, originally developed by Bosch for use in automobiles, and now is increasingly being used for control in industrial and automotive applications

Controller Area Network

- 1Mb/s data rate
- High reliability bus
- CAN is an open standard with many variants
- Capable of providing real-time communication.

■ CAN in cars and truck engine

- Networking controllers for engine timing, transmission, chassis and brakes.
- Networking components of chassis electronics and electronics which make the vehicle more comfortable. Examples of such multiplex applications are lighting control, air-conditioning, central locking and seat and mirror adjustment.



Other Application Fields:



Reliable Die-Cast Aluminum Chassis

These ruggedized LCD products are designed for high reliability, shock and vibration tolerance, survival of high temperature, and corrosive environments. External materials like dust/water can be very destructive to any type of equipment over time.

■ Fanless and Completely Sealed Strong Housing

Sealed housing strictly prevents water invasion while the rugged die-cast aluminum enclosure eliminates the need for a fan as a heat dissipation device.

Fanless and Strong!



Operating Temperature: With on-board Intel® Atom™ Processor N270 1.6GHz
-10°C~50°C



Compliant with MIL-STD-810F shock and vibration protection, as well as offering IP 67 water and dust proof front panel protection.



■ Rigorous Shock/Vibration Test

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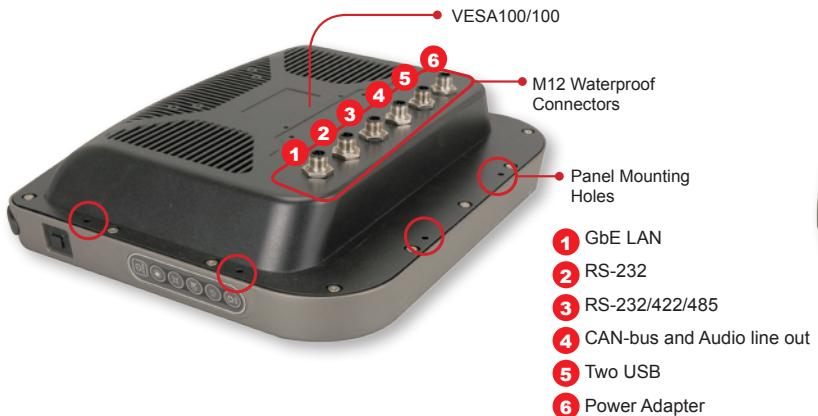
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Optional Peripherals

Fully Integrated I/O



Specifications



| Model | | SAILORPC-12A-N270 | SAILORPC-12ASR-N270 |
|------------------------|---------------------------------|--|--|
| Display | LCD Size | 12.1" | |
| | Max Resolution | 1024 x 768 | |
| | Brightness (cd/m ²) | 500 | 1000 |
| | Contrast Ratio | 700:1 | 700:1 |
| | LCD Color | 16.2M | 262K |
| | Pixel Pitch (mm) | 0.3075(H) x 0.3075(V) | 0.240(H) x 0.240(V) |
| | Viewing Angle (H-V) | 160°/160° | 130°/120° |
| | Backlight MTBF (hrs) | 50000 | 60000 |
| Motherboard | SBC Model | SAILORMB-ATOM-R10 | |
| | CPU | Intel® Atom™ N270 1.6GHz CPU | |
| | Chipset | Intel® 945GSE + ICH7M | Intel® 945GSE + ICH7M |
| | RAM | Supports one 400/533MHz DDR2 SO-DIMM(2GB Max.) | |
| I/O Ports and Switches | | 1 x 5-pin M12 connector for Power Adapter | |
| | | 1 x 8-pin M12 connector for two USB | |
| | | 1 x 5-pin M12 connector for CAN-bus and Audio line out | |
| | | 1 x 8-pin M12 connector for UART RS-232/422/485 | |
| | | 1 x 8-pin M12 connector for UART RS-232 | |
| | | 1 x 8-pin M12 connector for GbE LAN | |
| Driver Bay | HDD Driver Bay | 1 x 2.5" SATA HDD Bay | |
| | SSD | CF Type II | |
| Expansion Slot | | 1 x Wireless LAN Module (802.11 b/g/n) (internal PCIe Mini card interface) | |
| Physical | Construction Front Panel | Aluminum | |
| | Chassis Construction | Heavy-duty steel | |
| | Mounting | Panel, Rack, Stand and Arm VESA 100mm x 100mm | |
| | Front Panel Color | Silver (Pantone 8403C) | |
| | Dimensions (WxHxD) (mm) | 345.3 x 300.4 x 77 | |
| | Net/Gross Weight | 4.2 Kg / 5.3 Kg | |
| Environment | Operation Temperature (°C) | -10°C ~50°C | -10°C ~50°C |
| | Storage Temperature (°C) | -20°C ~70°C | -20°C ~70°C |
| | Vibration | 5~17Hz, 0.1" double amplitude displacement 17~640Hz, 1.5G acceleration peak to peak | |
| | Shock | 10G acceleration part to part (11ms) | |
| Touch Screen | | Resistive Type 5-Wire with RS-232 interface | |
| Optional Power Supply | | P/N: 63000-CLG60121C-RS - Input: 90VAC~264VAC, 50/60Hz - M12 waterproof connector 5P | - 60W Power Adapter - Output: 12VDC |
| Power Requirement | | 9~28VDC | |
| Front Panel Protection | | IP 67 Compliant | |
| Power Consumption | | 33W | 51W |
| Certificate | | Meets CE, FCC, CB, CCC, DNV | |

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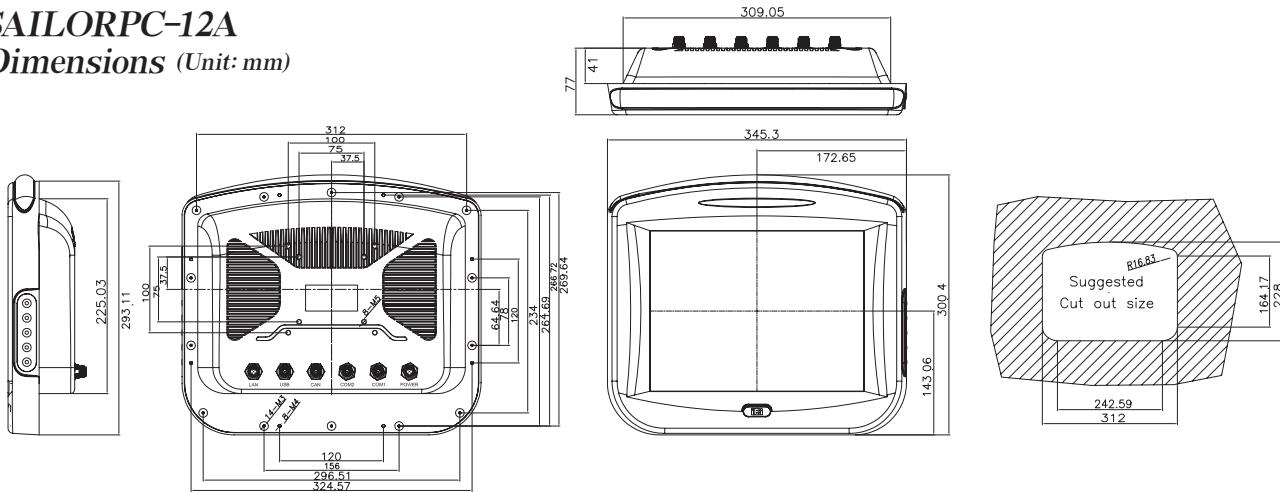
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Optional Peripherals

SAILORPC-12A

Dimensions (Unit: mm)



Ordering Information

| Brightness | OS | Part No. | Description |
|------------|--------|-----------------------------|---|
| 500 nits | CE 6.0 | SAILORPC-12A/R/1/1-C6-R30 | 12.1" 500 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operating system |
| | XPE | SAILORPC-12A/R/1/4-X-R30 | 12.1" 500 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operating system |
| | LINUX | SAILORPC-12A/R/1/16-X-R30 | 12.1" 500 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with Windows XP Embedded operating system |
| | LINUX | SAILORPC-12A/R/1/4-L-R30 | 12.1" 500 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with LINUX operating system |
| | LINUX | SAILORPC-12A/R/1/16-L-R30 | 12.1" 500 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with LINUX operating system |
| 1000 nits | CE 6.0 | SAILORPC-12ASR/R/1/1-C6-R30 | 12.1" 1000 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 1GB compact flash with Windows CE 6.0 operating system |
| | XPE | SAILORPC-12ASR/R/1/4-X-R30 | 12.1" 1000 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with Windows XP Embedded operating system |
| | LINUX | SAILORPC-12ASR/R/1/16-X-R30 | 12.1" 1000 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with Windows XP Embedded operating system |
| | LINUX | SAILORPC-12ASR/R/1/4-L-R30 | 12.1" 1000 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 4GB compact flash with LINUX operating system |
| | LINUX | SAILORPC-12ASR/R/1/16-L-R30 | 12.1" 1000 cd/m ² IP 67 panel PC with Intel® Atom™ N270 CPU 1.6GHz, 802.11 b/g/n wireless module, touch screen, 1GB DDR2 553 MHz, M12 connectors and 160GB SATA HDD with LINUX operating system |

Packing List

| Item | Part No. | Description |
|-------------------------|-----------------|---|
| Panel mount screws pack | 44013-030041-RS | |
| Power cable | 32000-127500-RS | 2000mm; 16AWG; (A) terminal block connector; (B) M12 Waterproof connector |
| Utilities CD | 7B000-000087-RS | |
| Touch Pen | XTR104-0002-RS | |
| One Key Recovery CD | | |

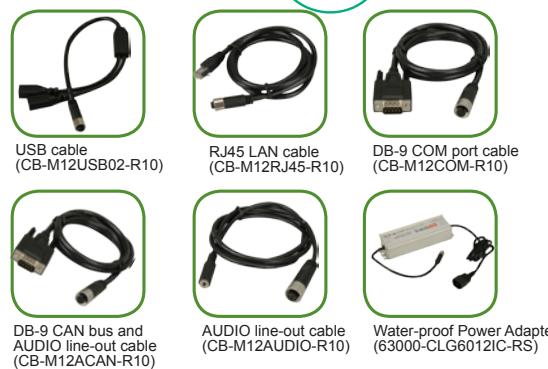
Options

| Item | Part No. |
|-------------------|--------------------------|
| Rack mounting kit | SAILORRK-12 |
| ARM | ARM-11-RS / ARM-31-RS |
| Stand | STAND-A12 / STAND-100-RS |



Optional cables and adapter

| Item | Part No. |
|---------------------------------------|--------------------|
| USB cable | CB-M12USB02-R10 |
| RJ-45 LAN cable | CB-M12RJ45-R10 |
| DB-9 COM port cable | CB-M12COM-R20 |
| DB-9 CAN bus and AUDIO line-out cable | CB-M12ACAN-R20 |
| AUDIO line-out cable | CB-M12AUDIO-R10 |
| Water-proof power adapter | 63000-CLG6012IC-RS |



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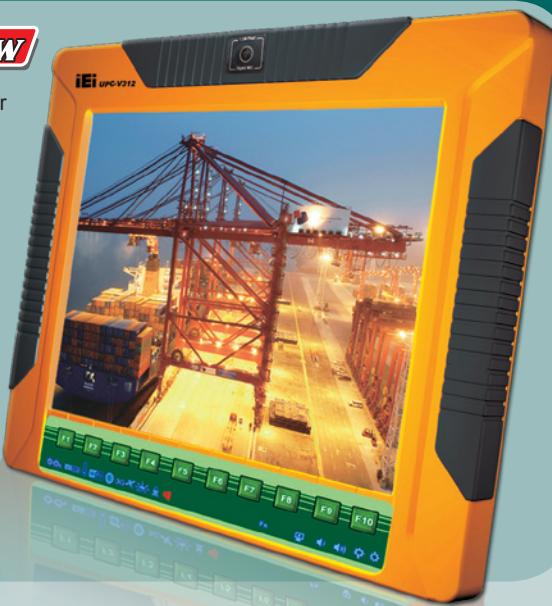
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Optional Peripherals

UPC-V312-D525 12.1" Aluminum Rugged Panel PC

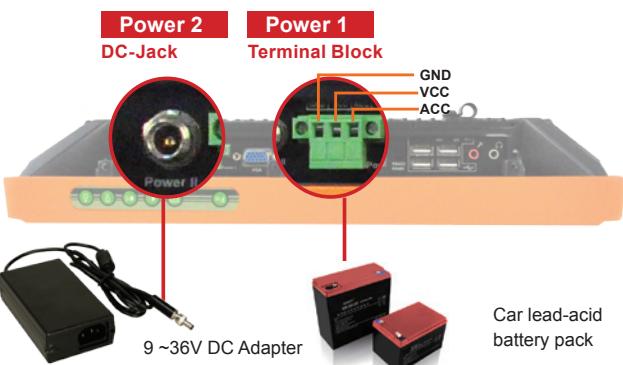
Features:

- Fully IP 65 compliant with fanless Intel® Atom™ D525 1.8GHz dual-core processor
- 12.1" 600 nits 1024 x 768 LCD with LED backlight
- TWIN-DC input, 9V ~ 36V and 10.5V ~ 36V, switch automatically
- Dual-band 2.4/5GHz Wi-Fi 802.11 a/b/g/n 3T3R MIMO design
- Reserved space for 3.75G / HSUPA USB module
- Optional GPS receiver
- Optional EM or Mifare RFID reader
- Optional Bluetooth module
- Built-in 1.3M pixels webcam with AF, AE and AWB capabilities
- CAN-bus interface with isolation
- F1 ~ F10 function keys which can be self-defined and user-friendly indicators
- Robust die-casting aluminum chassis



Redundant Dual DC Power Input

The UPC-V312-D525 is a system that supports redundant power. The redundant power input increases the reliability of the system while preventing data loss and system corruption from sudden power failure. When main power is unavailable or low voltage capacity is present, the system can switch to the second power input instantly and without interruption.



• ACC mode

Designed for vehicle systems, use Power 1 as the priority power

• Non ACC mode

Designed for non-vehicle systems, use Power 2 as the priority power

Power 1: Terminal block, voltage range: 9 ~ 36V
Power 2: DC jack, voltage range: 10.5 ~ 36V

Connection Feasibility



Dual-Band 2.4/5GHZ Wi-Fi

Dual-band 2.4G/5G 802.11 a/b/g/n 3T3R MIMO design with up to 450 Mbps speed



Bluetooth V2.1+EDR (optional)

Connect peripheral devices with Bluetooth, such as earphone, scanner, etc.



3.75G HSUPA (optional)

Compared to Wi-Fi wireless network, 3.75G HSUPA has higher mobility with long-range mobile communication and no hotspot limitation. It is also able to connect to the Internet in real time.



GPS (optional)

Travel navigation, real-time locating and path tracking

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Optional Peripherals

Variety of Antenna Layout

For the feasibility of wireless connection, we designed and installed almost all kinds of antenna without any signal interference and blocking. With the variety of use cases, we can still keep the IP 65 protection for the whole UPC set.



EM or Mifare RFID Reader (Optional)

RFID Specifications:

Frequency: 125KHz or 13.56 MHz

Reading distance: 5~7 cm

Supports ISO1443A Mifare® or EM standard

Rugged Design

- Enhanced VESA mount using M8 screws instead of standard M4 screws to ensure reliability.
- The ultra rugged metal chassis and the built-in SSD survive the continuous shocks and jolts of a forklift.
- Dust and water protection grade: IP 65 compliant
- Operating Temperature: -20°C~60°C



Auto Dimming

Built-in ambient light sensor provides comfortable viewing and power saving

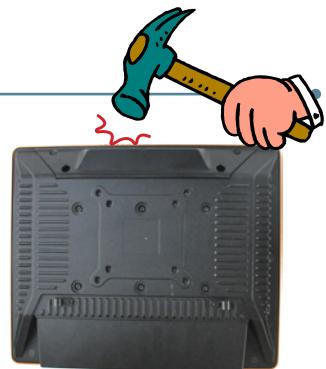
- Auto detects the amount of light in the viewing environment and auto-adjusts the screen brightness
- Low power consumption
- Extend lamp and backlight lifetime



Super high brightness: 600
High contrast : 700:1
Wide viewing angle : 150(H)/130(V)

Robust Chassis

The robust die-casting aluminum chassis can fully seal and protect the product.



Water-proof Rubber Gaskets

The rubber gaskets fit perfectly to the cable size to provide waterproof protection.



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Optional Peripherals

1.3 Megapixels Camera

Use the built-in 1.3 megapixels camera to capture image in real-time and send back to the control center immediately.



Camera

IR Remote Control

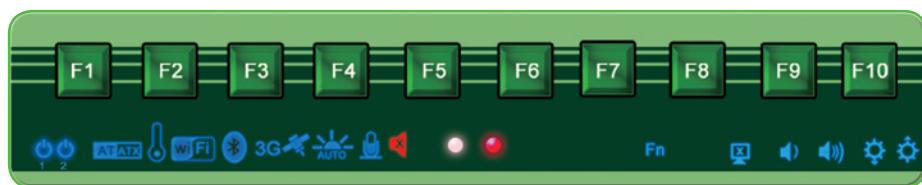
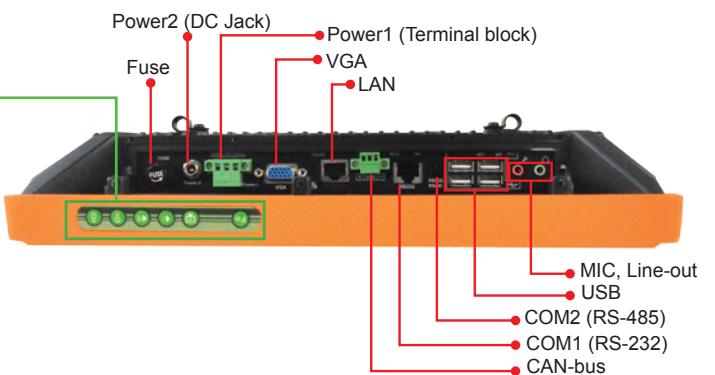
Control screen brightness, auto-dimming function, audio volume, LCD and system power remotely.



Function Keys



| | | |
|--|------------------|---|
| | Fn | |
| | Backlight On/Off | + |
| | Audio - | + |
| | Audio + | + |
| | Brightness - | + |
| | Brightness + | + |



- F1 ~ F10 physical function keys launch a specific application.
- Cold blue LED shows the status of the system and other statuses such as CPU temperature alert and wireless connection. There is also Power1 and Power2 which display online power input status.

CAN-bus Interface with Isolation

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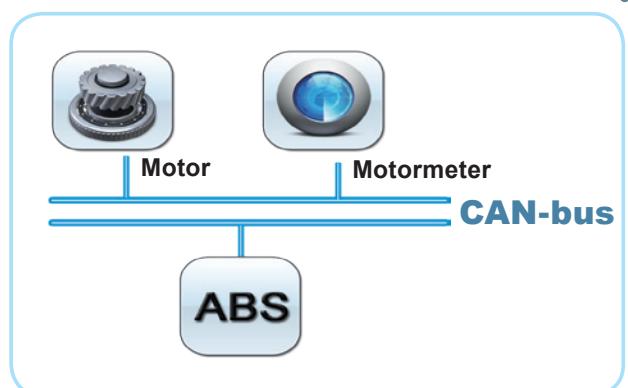
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Optional Peripherals

The Control Area Network (CAN) is a serial bus system. The UPC-V312 on-board CAN controllers provide bus arbitration and error detection with an automatic transmission repeat function. This drastically reduces the chance of data loss, ensures system reliability, and is suitable for networking intelligent I/O devices such as sensors or actuator of machines or plants

1. Isolated protection voltage 2500V/min DC protection
2. Typical transient immunity 50 kV/ms ESD protection



Applications



Specifications

| Model Name | | UPC-V312-D525-R10 |
|--|------------------------|--|
| Display | LCD Size | 12.1" |
| | Max Resolution | 1024(W) x 768(H) |
| | Brightness (cd/m²) | 600 |
| | Contrast Ratio | 700:1 |
| | LCD Color | 16.2M |
| | Pixel Pitch (mm) (HxV) | 0.24(H) x 0.24(V) |
| | Viewing Angle (V/H) | 150° / 130° |
| | Backlight MTBF (hrs) | 50000 |
| Motherboard | SBC | UPC-12AT-D525-R10 |
| | CPU | Intel® Atom™ D525 1.8GHz dual-core processor |
| | Chipset | Intel® ICH8M |
| | RAM | On-board 1G DDR3 SO-DIMM (System Max. 1GB) |
| I/O Ports and Switches | | |
| RS-422/485 (4-pin box header) | | |
| RS-232 (DB-9 connector) | | |
| CAN-bus (3-pin terminal block) | | |
| GbE LAN (RJ-45 connector) | | |
| 4 x USB connector | | |
| Audio jack (Line-out, Mic) | | |
| VGA port (DB-15 connector) | | |
| DC-IN 1 (terminal block) / DC-IN 2 (DC Jack) | | |
| Reset button | | |
| AT/ATX switch | | |
| Driver Bay | HDD Drive Bay | N/A |
| | SSD | CF Type II socket / mSATA (optional) |
| | CD-ROM Drive Bay | N/A |

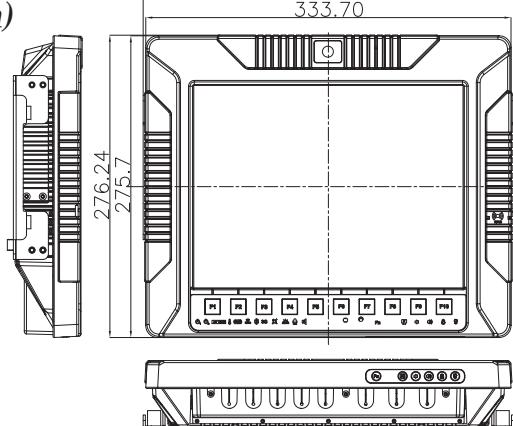
Ordering Information

| Part No. | Description |
|---------------------------|--|
| UPC-V312-D525/R-EM/1G-R10 | 12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,1.3M camera, microphone,1GB DDR3 RAM, EM card reader, R10 |
| UPC-V312-D525/R-MF/1G-R10 | 12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,1.3M camera, microphone,1GB DDR3 RAM, Mifare card reader, R10 |
| UPC-V312-D525/R/1G-R10 | 12.1" 600cd/m² XGA fanless full IP 65 panel PC with Intel® Atom™ D525 dual core 1.8GHz,802.11a/b/g/n wireless module, resistive touch screen,1.3M camera, microphone,1GB DDR3 RAM, R10 |

Options

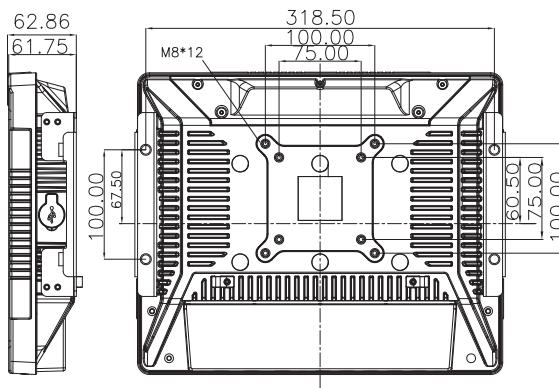
| Item | P/N |
|----------------------------------|-----------------------------------|
| ARM | ARM-11-RS/ARM-31-RS |
| Wall Mounting Kit | AFLWK-19/ AFLWK-19B/ AFLWK-12 |
| Stand | STAND-A19/STAND-B19/STAND-210-R11 |
| GPS Module Kit | UPC-GPS-KIT01-R10 |
| Bluetooth Module Kit | UPC-BT-KIT01-R10 |
| OS: Win CE 6.0 (128MB CF Card) | UPCCF-V312-D525-CE060-128M-R10 |
| OS: Win XPE (2GB CF Card) | UPCCF-V312-D525-XPE-2G-R10 |
| OS: Win XPE (4GB CF Card) | UPCCF-V312-D525-XPE-4G-R10 |
| OS: Linux (2GB CF Card) | UPCCF-V312-D525-LNX-2G-R10 |
| OS: Win 7 Embedded (4GB CF Card) | UPCCF-V312-D525-WES7E-4G-R10 |

Dimensions (Unit: mm)



Packing List

| Item | P/N | Q'ty |
|--------------------------------|---------------------|------|
| Utility CD | 7B000-000741-RS | 1 |
| One Key Recovery CD | | 1 |
| IR Remote Controller | 7Z000-SLPCB005-RS | 1 |
| RJ-45 to DB-9 COM Port Cable | 32005-000200-200-RS | 1 |
| M8 Screw | 44325-080081-RS | 8 |
| M4 Screw | 44005-040082-RS | 8 |
| Mounting Bracket | 41003-0382C2-00-RS | 2 |
| Screw Driver | 45019-001004-00 | 1 |
| Power Adapter | 63040-010065-010-RS | 1 |
| Power Cord (European Standard) | 32702-000401-100-RS | 1 |
| RS-422 Cable | 32205-002400-100-RS | 1 |
| Power Transfer Cord | 32702-000300-100-RS | 1 |
| M8 to M4 Screw | 44300-040061-RS | 8 |



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Optional Peripherals

UPC-12A

12.1" Aluminum UPS Panel PC
with Smart Battery Backup

Rugged Aluminum
Die-casting Body!

UPC-12A, a revolutionary model featuring smart battery technology, which allows users to monitor and manage battery status directly through IEI's unique user interface. The UPC-12A boasts a 12.1-inch XGA LCD screen with sunlight-readable 1000 nits options. The UPC-12A series comes equipped with battery pack for emergency power when the main power source is not available. This eliminates the risk of the system suddenly losing power and allows flexible integration into a wide variety of applications.

Features:

- 12.1" all-in-one PPC with touch technology
- 1000 nits sunlight readable panel available
- Powerful all-in-one panel PC
 - Intel® GM45 chipset and 45nm mobile Core™2 Duo processor support
- Battery backup power protects your productivity from the constant threat of power outages and loss data
- Ambient light sensor detects ambient light for automated screen adjustments to optimize viewing.
(0%~100% brightness control for sunlight readable version)
- 802.11 b/g/n Wi-Fi support
- PCI expansion slot for adding more capacity (optional PCI express expansion interface)
- Standard VESA 75/100 mounting
- Robust die-cast aluminum chassis
- IP 65 compliant aluminum compliant front panel



Waterproof USB Cover



Smart battery backup provides emergency power (14.8V, 3800 mAH)

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Optional Peripherals

UPS Panel PC Applications

- Provides temporary power after a power failure has occurred.
- Continues to provide stable power to equipment during line sags & spikes.
- Absorbs power surges & transients.
- Smooths out noisy power sources.

A. Mobile System Solution

Provides backup power to data sensitive mobile equipment, charging and battery replacement of the primary power source without shutting down the terminal.



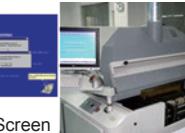
B. Power Bank Solution

Acts as a power input regulator to prevent unstable power input damage and protect against unexpected power loss.



C. Other Relative Applications

Production Line



With UPS Protection

The IEI Smart Battery is automatically enabled in the event of power failure and provides stable power so the operator can save important system parameter.



Without UPS Protection

System shuts down or hangs suddenly and all data is lost, because no backup power is available.

Smart Battery Backup

Protect your productivity from power outages and data lost

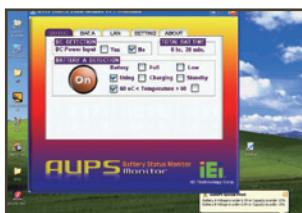
1. Rechargeable Battery



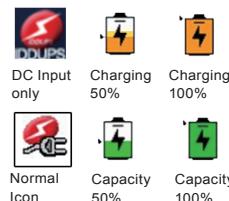
The UPC series is equipped with rechargeable "smart battery" which can supply voltage to systems for up to 60 minutes without any external power supply.

| Platform | Smart Battery Run-time |
|------------|------------------------|
| Intel®GM45 | 40 mins |

2. Battery Monitoring Utility



- Battery detection
- Battery capacity status
- Battery charge
- DC Input Indicator
- Battery Indicator
- Temperature warning
- Low battery alarm
- Connection port status



3. Temporary Mobile System



UPC Battery Mode

BATT / UPS **AT / ATX**

Under battery mode, the UPC system can boot by power switch while the UPS battery supplies main power to the unit as a temporary mobile system.

Protection

| | |
|---------------------|--|
| Automatic self-test | Battery self-test ensures early detection of a battery that needs to be replaced. |
| Back Up Power | Back-UPS instantly switches your computer to emergency battery backup power and allows you to work through brief power outages |

Convenience

| | |
|---------------------|--|
| Audible Alarms | Proactively notifies you of changing battery under 10% capacity. |
| Automatic self-test | User friendly graphical interface. |

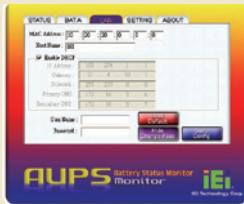
Manageability

| | |
|----------|---|
| Software | This ensures real time monitoring and networking remote management Network based power management Internet ready monitoring |
|----------|---|

■ Manageability

LAN CONFIGURATION

- LAN shows system IP address information



AUPS STATUS

- STATUS shows DC / battery power input detection



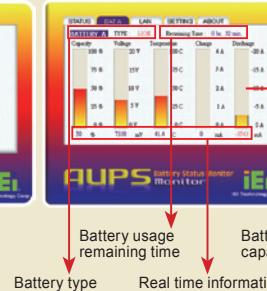
ABOUT

- Shows AUPS utility information



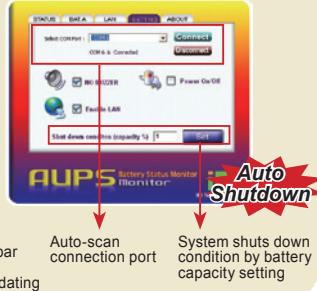
BATTERY STATUS

- BATT.A shows battery status real time monitoring



SETTING

- SETTING shows connection detection port

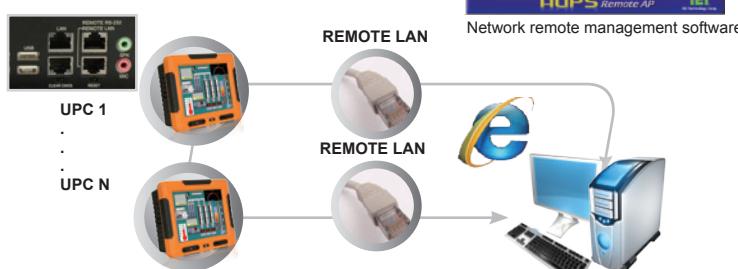


■ Network Based Power Management and Monitoring

The UPC series comes with a smart battery software utility program for users to monitor battery status and remotely control system power on/off from anywhere and anytime through the network. Remote management software allows users to select static IP or DHCP for remote management.

Multiple Systems Power Control

The remote management software utility and application program allows users to easily get the status of the UPC and to control the UPC power functions form anywhere with an Internet connection.



UPC Network Remote Management

Battery Capacity Status

Power On/OFF: Click to toggle

UPS Status Monitoring:

- **ACK Version:** v1.1
- **Last Update:** Sep 30 2008 11:20:54
- **STATUS - display UPS status and change UPS ON/OFF**
- **E-mail - Send UPS status with E-mail**
- **Configuration - setup IP Address and enable DHCP....**

Email Status Report:

Send E-Mail:

By sending the status of your UPS system via e-mail, you can receive an alert if there is a problem with your UPS system. Enter the parameters below in the text fields.

Subject: UPS Status Report

To: [Email Address]

Message: [Message Content]

Send: [Send Button]

Remote control DC output ON/OFF via web interface.

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Optional Peripherals

Powerful Computing

The powerful UPC-12A is designed for embedded performance grade applications. Featuring an Intel® GM45/910GMLE chipset, the UPC-12A provides total compatibility in a wide variety of high performance and low power industrial control applications.

■ Intel® GM45

The UPC-xxA series comes integrated with 45nm next generation Intel® Core™2 Duo processor family (Penryn) which extends leadership in performance and energy efficiency for low power embedded applications.

Performance Leadership

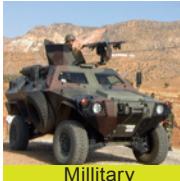
- Penryn on 45nm process
- Large L2 Cache and Faster FSB (6M, 1066MHz)

Increased Integration

- Support for High Definition Decoder in H/W

| Format | Decoding Stage | GME965 | GM45 |
|-------------------------|-------------------------------------|--------|------|
| MPEG2 (DVD) | HW Motion Comp | v | v |
| | Inverse DC Transform | v | v |
| | Variable Length Decode | v | v |
| VC-1 (WMV9) | HW Motion Comp + In Loop Deblocking | v | v |
| | Inverse Transform | | v |
| | Variable Length Decode | | v |
| AVC (H.264) (HD DVD) | HW Motion Comp + In Loop Deblocking | v | v |
| | Inverse Transform | | v |
| | Variable Length Decode | | v |

| For performance-oriented users, socket type allows customers to easily upgrade processors from Celeron® M 2.0GHz to Core™2 Extreme 2.53GHz. | | | | | | | | |
|---|--------------------------------|-----------------------|----------------------|-------------|-----------|-----|-----|---------|
| Package Type | Brand Name | Code Name | CPU No. | Clock Speed | FSB (MHz) | L2 | TDP | Chipset |
| Socket P 45nm | Core™2 Duo | Penryn (Montevina) | QX9300 | 2.53G | 1066 | 12M | 45W | GM45 |
| | | | X9100 | 3.06G | | 6M | 44W | |
| | | | Q9100 | 2.26G | | 12M | 45W | |
| | | | Q9000 | 2.0G | | 6M | 45W | |
| | | | T9900 (PGA/BGA) | 3.06G | | 6M | 35W | |
| | | | T9800 (PGA/BGA) | 2.93G | | 6M | 35W | |
| | | | T9600 (PGA/BGA) | 2.8G | | 6M | 35W | |
| | | | T9550 (PGA/BGA) | 2.66G | | 6M | 35W | |
| | | | T9400 (PGA/BGA) | 2.53G | | 6M | 35W | |
| | | | P9600 (PGA/BGA) | 2.66G | | 6M | 25W | |
| | | | P9500 | 2.53G | | 6M | 25W | |
| | | | P8800 (PGA/BGA) | 2.66G | | 3M | 25W | |
| | | | P8700 (PGA/BGA) | 2.53G | | 3M | 25W | |
| | | | P8600 (PGA/BGA) | 2.4G | | 3M | 25W | |
| | | | P8400 (PGA/BGA) | 2.26G | | 3M | 25W | |
| Core™2 Extreme | Penryn (Santa Rosa Reflash) | Core™2 Duo | X9000 | 2.8G | 800 | 6M | 44W | GM45 |
| | | | T9500 (PGA/BGA) | 2.6G | | 6M | 35W | |
| | | | T9300 (PGA/BGA) | 2.5G | | 6M | 35W | |
| | | | T8300 (PGA/BGA) | 2.4G | | 3M | 35W | |
| Core™2 Duo | Meron (Santa Rosa) | 65nm | T8100 (PGA/BGA) | 2.1G | | 3M | 35W | |
| | | | T7500 (PGA/BGA) | 2.2G | | 4M | 35W | |
| | | | Meron (Montevina) | 575 | 2.0G | 667 | 1M | 31W |



Millitary Application:

- Powerful PC with super high brightness LCD Screens for demanding military applications
- Touch screen capability
- Integrated Intel® Core 2™ Duo CPU with high performance graphics speeds up to 533 MHz improve graphics and 3D rendering performance, enable high-definition video playback. for graphic intensive applications (i.e. mapping, simulation)

Selectable AT/ATX Power Mode



Convenient External Switch in the Rear



• AT Power Mode

The AT power option allows multiple systems to be powered on directly by turning on the power supply. A room of computers can be controlled by a central power switch, so all systems are turned on and off by a central switch. This power mode is best suited for multiple computers where constant connectivity is not necessary, as the computers cannot be accessed or turned on remotely.

UPC switch settings

BATT / UPS AT / ATX

Benefits:

- Automatic start when power connected



• ATX Power Mode

The ATX power option allows systems to be powered on and off remotely over a network. Systems must be plugged in all the time, but they can be turned on from a "soft-off" using software that sends the appropriate signal over the network connections. Individual PCs can be turned on at the same time. The always-on ability allows complete remote administration, reducing technician visits to only when there are hardware issues.

UPC switch settings

BATT / UPS AT / ATX

Benefits:

- Power Management: Turn the system to standby mode to save power when the PPC is not used.
- Remote Control: The standby function on the ATX mode power supply allows the PPC to be turned on/off remotely via network.

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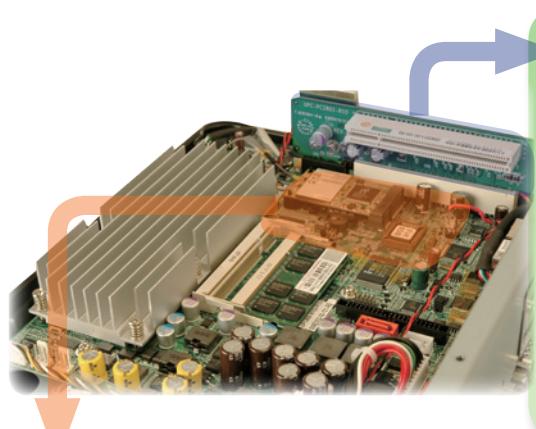
3
RISC-based Solutions

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PACSMate Medical Solutions

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Optional Peripherals

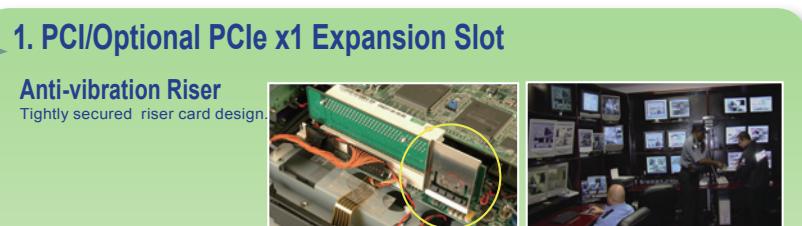
Flexible Expansion Interface

The UPC series provides many expansion interfaces including one standard 32-bit PCI slot for various PCI add-on cards, and one PCIe Mini card socket for a small form factor extender such as a wireless module.



1. PCI/Optional PCIe x1 Expansion Slot

Anti-vibration Riser
Tightly secured riser card design.



• PCI Riser • PCIe x1 card • PCI serial card • PCI interface Capture Card

• PCI e x1 Riser (Optional)

2. PCIe Mini slot for 802.11b/g/n wireless module

The UPC series features high speed Wi-Fi IEEE 802.11 n protocol which builds on previous 802.11 standards by adding a multiple-input multiple-output (MIMO) and 40 MHz operation to the physical (PHY) layer. MIMO uses multiple transmitter and receiver antennas to improve the system performance. The 40 MHz operation uses wider bands, compared to 20 MHz bands in previous 802.11 operation, to support higher data rates. Wider bandwidth channels are cost effective and easily accomplished with moderate increases in digital signal processing.



27 times faster data transfer rate compared to 802.11b

| Protocol | Freq. | Thru. | Data | Range indoor | Range outdoor |
|----------|----------------------|----------|------------------------|--------------|---------------|
| 802.11 | (GHz) | (Mbit/s) | (Mbit/s) | (m) | (m) |
| a | 5 GHz | 23 | 54 Mbit/s | ~35 | ~120 |
| b | 2.4 GHz | 4.3 | 11 Mbit/s | ~38 | ~140 |
| g | 2.4 GHz | 19 | 54 Mbit/s | ~38 | ~140 |
| n | 5 GHz and/or 2.4 GHz | 74 | 300 Mbit/s (2 streams) | ~70 | ~250 |



The UPC System Features

- Invisible antenna delivers 802.11n wireless network connectivity
- Wireless IEEE 802.11 b/g/n module with PCI Express Mini-Card interface

Sunlight Readable



• 1000 nits Super High Brightness

The UPC-12AH series has greatly improved luminance through edge lighting

• Low Reflection through AR (Anti-Reflection) Technology

Outdoor applications in daylight or other bright environments require technology that can suppress surface reflection. The UPC-12AH sunlight readable model offers special AR (anti-reflection) surface treatment to prevent reflection, which ensures excellent visibility in daylight conditions.

Super high brightness: 1000 nits
High contrast: 700:1
Wide viewing angel: 60/60 (R/L) 45/75 (U/D)

Ambient Light Sensor



Ambient Light Sensor provides Comfortable Viewing and Power Saving

Auto-detects the amount of light in the viewing environment and auto-adjusts the brightness of the screen.

- Avoid eye strain for more comfortable viewing
- Power saving
- Extended lamp lifetime
- Extended backlight life

Note: Fully Dimmable Controls (for UPC-xxAH model)

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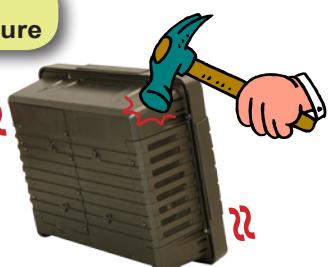
Optional Peripherals

F. Rugged Design

The UPC series has an ultra-rugged design that can survive the continuous shocks and jolts of a forklift. Engineered with a tough, anti-vibration and IP 65 front panel dust and water rating.

Robust Die-Cast Aluminum Enclosure

A rugged die-cast aluminum enclosure eliminates the need for a fan as heat dissipation minimizes the troublesome overheating problem.



Rigorous Shock/Vibration Test

Compliant with MIL-STD-810F shock and vibration protection, as well as offering IP 65 water and dust proof front panel protection.



HDD install with anti-shock buffer rubber enhances protection performance.

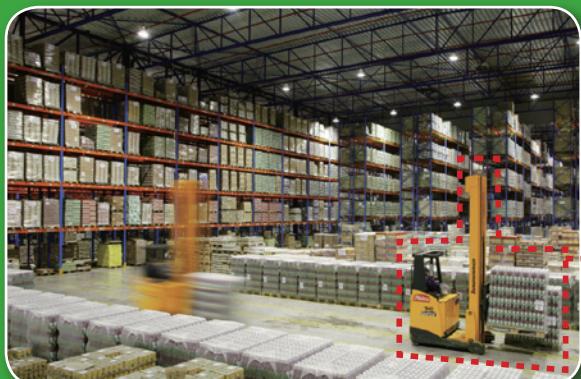
Dismantleable Fan Module for Easy Maintenance



Applications

1. Lift Truck PPC

Lift truck mounted with UPC-12A. Just as with barcode scanners, enable real-time data collection which allows operators to accomplish traditional warehouse tasks faster thus reducing labor costs.



We Offer:

- 9~28V DC Input for Mobile Application.
- Wi-Fi 802.11 b/g/n
802.11b/g Wi-Fi, which gives you up to broadband-speed browsing and connectivity while moving, compared to traditional wired LAN. Wireless connectivity frees without hinders worker movement and increases productivity.



2. Power Bank

We Offer:

- Redundant Power Protection
As a redundant power supply, in the event of the main power source failing or running out, the UPC unit is able to power the load for greater reliability.
- Wide Range 9V~28VDC Input
The UPC series provides wide range +9~+28VDC power input for regulator function to prevent unstable power input damage, also avoid unexpected power loss.
- Rechargeable temporary battery pack
Provides up to 60 minutes uninterrupted operation time for external battery change or relocation data back up.
- Reduce risk of losing valuable data with continuous system operation
- VESA Compliance Easy to Employ



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Optional Peripherals

Full I/O and User Friendly Interface



• Waterproof Front USB

Designed for industrial use, UPC waterproof front USB cover is based around a standard USB interface, with USB Ver.2 performance offering data transfer up to 480Mbps.

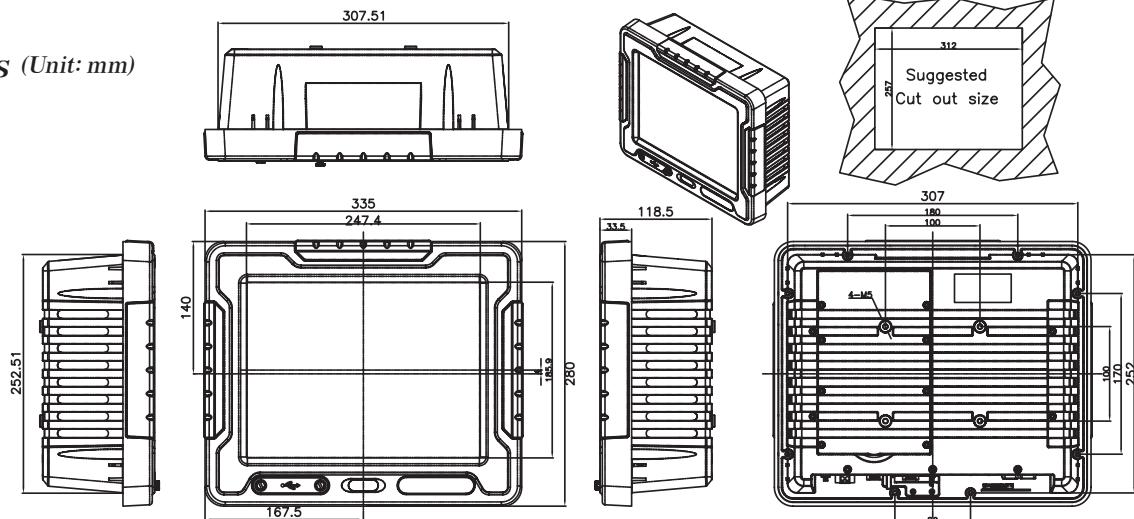
- ① 9~28VDC Input
- ② Power Switch
- ③ DC 12V Power Jack
- ④ 3 x RS-232 COM, 1 x RS-232/422/485 COM
- ⑤ User-accessible CF
- ⑥ 4 x USB2.0
- ⑦ 1 x PCI Expansion Slot
- ⑧ 2 x RJ-45 Giga LAN
- ⑨ Remote RS-232, Remote LAN
- ⑩ Clear CMOS
- ⑪ Reset
- ⑫ Line-out
- ⑬ Mic-in
- ⑭ AT Mode UPS Switch
- (Optional PCIe x1 expansion) ⑮ VGA Output

Specifications

| Model | | 12.1" Regular Brightness | 12.1" Sunlight Readable |
|-------------------|----------------------------|---|--|
| | | UPC-12A/GM45 | UPC-12AH/GM45 |
| Display | LCD Size | 12.1" | 12.1" |
| | Max Resolution | 1024 x 768 | 1024 x 768 |
| | Brightness (cd/m²) | 450 | 1000 |
| | Contrast Ratio | 700:1 | 500:1 |
| | LCD Color | 262k | 262k |
| | Pixel Pitch (mm) | 0.240(H) x 0.240(V) | 0.240(H) x 0.240(V) |
| | Viewing Angle (H-V) | 150° / 150° | 120° / 120° |
| | Backlight MTBF | 50000hrs | 50000hrs |
| Motherboard | CPU | Intel® Core™2 Duo P8400 2.26GHz Intel® Celeron® M 575 2.0GHz Intel® Core™2 Duo T9400 2.53GHz | Intel® Core™2 Duo P8400 2.26GHz Intel® Celeron® M 575 2.0GHz Intel® Core™2 Duo T9400 2.53GHz |
| | Chipset | Intel® GM45 Chipset + ICH9M | Intel® GM45 Chipset + ICH9M |
| | RAM | two DDR2 SO-DIMM Up to 4GB | |
| I/O | | 3 x RS-232 COM 1 x RS-232/422/485 COM 2 x RJ-45 Giga LAN 6 x USB 2.0 (2 waterproof USBs in front of the panel) 1 x VGA 1 x Power Switch 2 x Audio Jack (Line-out, Mic-in) 1 x Reset Button | 1 x COM Clear Button 1 x 9~28VDC Power Jack 1 x Power Mode Switch (Battery or DC input) 1 x 9~28VDC Power Input Terminal Block 1 x Networking UPS Management Port by RJ-45 Ethernet 1 x Remote COM port by RJ-45 connector 1 x AT Mode UPS Switch (2 pin terminal block) |
| Expansion | | 1 x PCI, 1 x PCIe x1 (Optional), 1 x PCIe Mini (Wireless LAN Module) | |
| LED Indicator | | Power LED / HDD Status / Charging / Discharging / Light Sensor | |
| Membrane Keypad | | LCD On/Off; Brightness Up/Down; Volume Up/Down; Auto Dimming On/Off; Battery Low Beeper (under 10% batter capacity beeper on/off) | |
| Drive Bay | SSD | CF Type II | |
| | HDD | 1 x 2.5" SATA HDD bay | |
| Battery | Capacity | 14.8V, 3800 mAH | |
| | | 40 mins | 40 mins |
| | UPS run-time | 50 mins | 30 mins |
| | | 40 mins | 40 mins |
| Physical | Construction Material | Aluminum Die-casting | |
| | Mounting | VESA 100 mm x100 mm | |
| | Front Panel Color | Orange (Pantone 151C) | |
| | Dimensions (WxHxD) (mm) | 335 x 280 x 119 | |
| Environment | Operation Temperature (°C) | -10°C~55°C | |
| | Storage Temperature (°C) | -20°C~70°C | |
| | Net/Gross Weight | 5.8 Kg / 6.9 Kg | |
| | IP Level | IP 65 Compliant front panel | |
| | Safety & EMC | CE / FCC / CCC / CB | |
| Touch Screen | | Resistive Type 5-Wire (Touch controller IC is on board) | |
| Power Requirement | | 9~28VDC | |
| Power Consumption | | 63W | 73W |
| | | 60W | 70W |
| | | 65W | 74W |

*note: Battery normal operating temperature 0°C~45°C

UPC-12A Dimensions (Unit: mm)



Options

| Model | UPC-12A-910 | UPC-12A-GM45 | UPC-12AH-GM45 |
|---------------------|------------------------|---------------------------------------|-----------------------|
| Panel mounting kit | | UPCPK-12 | |
| Wall mounting kit | | AFLWK-19 | |
| Rack mounting kit | | UPCRK-12 | |
| ARM | | ARM-11-RS / ARM-31-RS | |
| Stand | | STAND-A19 / STAND-B19 / STAND-210-R11 | |
| OS: Win CE 6.0 | UPCCF-12-910-CE060-R20 | N/A | N/A |
| OS: Win XPE | UPCCF-12-910-XPE-R20 | UPCCF-12-GM45-XPE-R20 | UPCCF-12-GM45-XPE-R20 |
| Battery Pack | | BAT-LI-4S2P3800A (14.8V, 3800mAh) | |
| PCIe x 1 Riser Card | | 034D335-00-100-RS | |

Packing List

| Item | Part No. | Q'ty | Specifications |
|-----------------------------------|---------------------|------|---|
| Screws Pack | 44003-050501-RS | 4 | M5; 5mm |
| RJ45 to DB9 COM port cable | 32000-089201-RS | 1 | |
| Power Adapter | 63040-010096-010-RS | 1 | 90~264V AC; 12V DC; 96W |
| Power Cord | 32000-000002-RS | 1 | 1750mm; European Standard |
| Utilities CD | 7B000-000087-RS | 1 | |
| Touch Pen | XTR104-0002-RS | 1 | - |
| Wi-Fi 802.11 b/g/n PCIe Mini card | 7F900-Q802XKN-RS | | |
| Smart battery pack | BAT-LI-4S2P3800A | | Lithium ion Battery 4S2P, 3800mAh, FOR UPC Series |
| One Key Recovery CD | | 1 | |



Note: Connect DC input continuously. Battery will be drained after 14 hours.

Ordering Information

| Part No. | Description |
|-----------|--|
| 450 nits | UPC-12A/GM45-CM575/WT-R/1GB-R20 12.1" 450cd/m ² XGA panel PC with Intel® Celeron® M 575 2GHz CPU , 100W UPS with 14.8V, 3800mAH, 1GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |
| | UPC-12A/GM45-P8400/WT-R/2GB-R20 12.1" 450cd/m ² XGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |
| | UPC-12A/GM45-T9400/WT-R/2GB-R20 12.1" 450cd/m ² XGA panel PC with Intel® Core™2 Duo T9400 2.53GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |
| 1000 nits | UPC-12AH/GM45-CM575/WT-R/1GB-R11 12.1" 1000 cd/m ² XGA panel PC with Intel® Celeron® M 575 2GHz CPU , 100W UPS with 14.8V, 3800mAH, 1GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |
| | UPC-12AH/GM45-P8400/WT-R/2GB-R11 12.1" 1000 cd/m ² XGA panel PC with Intel® Core™2 Duo P8400 2.26GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |
| | UPC-12AH/GM45-T9400/WT-R/2GB-R11 12.1" 1000 cd/m ² XGA panel PC with Intel® Core™2 Duo T7500 2.2GHz CPU, 100W UPS with 14.8V, 3800mAH, 2GB DDR2 RAM and touch screen, 802.11 b/g/n wireless |

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RISC-based Solutions

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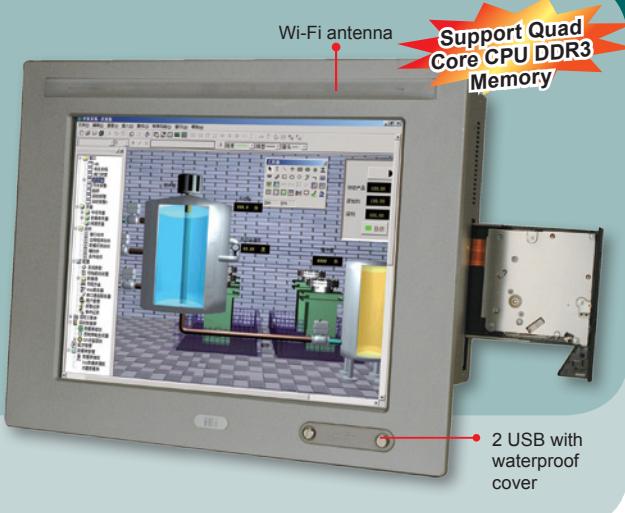
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Optional Peripherals

WIDS-515A/517A

15"/17" Wireless Panel PC

Features

- 15" and 17" wireless panel PC with touchscreen
- Embedded PIFA antenna and built-in Mini PCIe 802.11b/g/n interface wireless module
- Powered by high performance Intel® Core™2 Extreme/Quad/Duo and Celeron® processor supports up to 1333MHz FSB with Intel® G41 chipset
- System memory supports dual-channel DDR3 DIMM up to 4 GB
- Offers one expansion slot for PCI or PCIe x1 add-on cards
- Dual gigabit Ethernet
- Heavy-duty design with anti-rust chassis with aluminum IP 65 compliant front panel



802.11 b/g/n Ready with Invisible Wi-Fi Antenna

WIDS wireless technology utilizes the most efficient antenna type available on the market-PIFA (Planar Inverted-F Antenna). This particular antenna creates an exceptionally uniform 3D signal sphere through its inverted-F design, which generates an omni-directional signal field.



| Protocol | Freq. | Thru. | Data | Range indoor | Range outdoor |
|----------|----------------------|----------|------------------------|--------------|---------------|
| | (GHz) | (Mbit/s) | (Mbit/s) | (m) | (m) |
| 802.11 | | | | | |
| a | 5 GHz | 23 | 54 Mbit/s | ~35 | ~120 |
| b | 2.4 GHz | 4.3 | 11 Mbit/s | ~38 | ~140 |
| g | 2.4 GHz | 19 | 54 Mbit/s | ~38 | ~140 |
| n | 5 GHz and/or 2.4 GHz | 74 | 300 Mbit/s (2 streams) | ~70 | ~250 |

IP 65 Security Front USB Port

Front USB function switch allows user to enable or disable the front USB port function. Depending on application and security demands, the system administrator can choose whether or not to activate the front USB port.



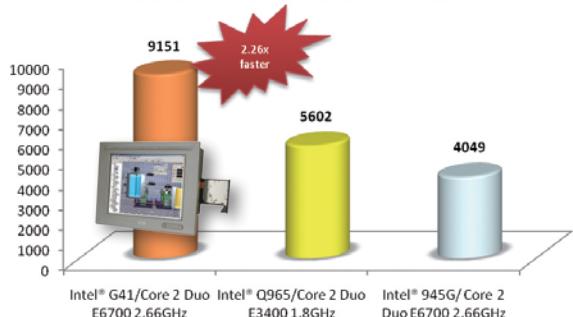
Designed for industrial use, WIDS waterproof front USB cover is based on the standard USB interface, with USB Ver.2 performance offering data transfer up to 480Mbps.

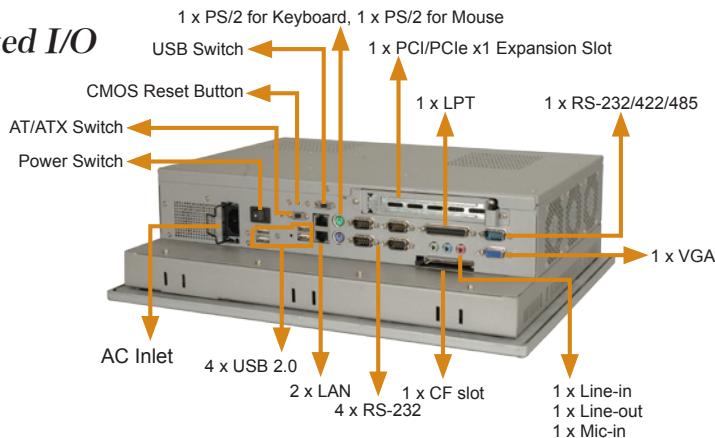


The Best Performance with Socket LGA 775

Excellent graphic performance compared to the Q965/945G chipset

3DMark2001SE Performance



Fully Integrated I/O**Specifications**

| Model | 15" Wireless Panel PC | | 17" Wireless Panel PC | | | |
|------------------------|---|---|--|--|--|--|
| | WIDS-515A-945G | WIDS-515A-G41 | WIDS-517A-945G | WIDS-517A-G41 | | |
| Display | LCD Size | 15 " | | 17 " | | |
| | Max Resolution | 1024(W) x 768(H) | | 1280(W) x 1024(H) | | |
| | Brightness (cd/m ²) | 350 | 300 | 380 | | |
| | Contrast Ratio | 700:1 | 800 : 1 | 1000 : 1 | | |
| | LCD Color | 16.2M | 16.7M | 16.7M | | |
| | Pixel Pitch (mm) (HxV) | 0.297(H) x 0.297(V) | 0.264(H) x 0.264(V) | 0.264(H) x 0.264(V) | | |
| | Viewing Angle (V/H) | 125°/ 140° | 160°/160° | 160°/170° | | |
| | Backlight MTBF (hrs) | 50000 | | 50000 | | |
| Motherboard | SBC | POS-9455 | POS-G41 | POS-9455 | | |
| | CPU | LGA 775 Socket with Intel® Core™2 Duo, Celeron® D with 533/800/1066 MHz | LGA 775 Intel® Core™2 Extreme/Quad/Duo, Celeron® D with a 1333/1066/800MHz FSB support | LGA 775 Intel® Core™2 Extreme/Quad/Duo, Celeron with a 1333/1066/800MHz FSB support | | |
| | Chipset | Intel® 945G + ICH7R | Intel® G41 + Intel® ICH7 | Intel® 945G + ICH7R | | |
| | RAM | 2 x 240-pin DIMM socket, supporting DDR2 400/533/667MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/1066MHz modules for up to 4GB | 2 x 240-pin DIMM socket, supporting DDR3 800/533/667MHz modules for up to 4GB | | |
| I/O Ports and Switches | 4 x RS-232 1 x RS-232/422/485 2 x RJ-45 for LAN Port 6 x USB 2.0 (2 waterproof USB in front of the panel) 1 x VGA Port 1 x Line-in, 1 x Line-out, 1 x Mic-in | | 2 x PS/2 mouse and keyboard interface 1 x LPT Power Switch AT / ATX Switch CMOS reset button Front USB switch | | | |
| | HDD Driver Bay | 1 x 2.5 SATA/IDE HDD bay with anti-shock | | | | |
| Drive Bay | SSD | CF Type II | | | | |
| | CD-ROM Driver Bay | SATA Slim Type CD-ROM Bay | | | | |
| Wireless | | Wireless 802.11 b/g/n module (PCIe Mini interface) | | | | |
| Expansion Slot | Either 1 x PCI or PCle1 expansion slot (PCI riser card built-in, optional PCle1 riser card) | | Either 1 x PCI or PCle1 expansion slot (Optional PCI and PCle1 riser card) | Either 1 x PCI or PCle1 expansion slot (PCI riser card built-in, optional PCle1 riser card) | | |
| | 1 x PCIe Mini card | | 1 x PCIe Mini card | 1 x PCIe Mini card | | |
| Physical | Construction Front Panel | Aluminum Die-casting | | | | |
| | Chassis Construction | Heavy-duty Steel (SECC) | | | | |
| | Mounting | Panel, Wall, Rack, Stand and Arm VESA 100mm x 100mm | | | | |
| | Front Panel Color | Silver (Pantone 8001C) | | | | |
| | Dimensions (WxHxD) (mm) | 410 x 329 x 124 | 410 x 329 x 124 | 451 x 375 x 123 | | |
| | Cut Out Dimensions (WxH) (mm) | 386 x 305 | 386 x 305 | 424 x 350 | | |
| | Net Gross Weight | 7 Kg / 11 Kg | 7 Kg / 11 Kg | 8 Kg / 12 Kg | | |
| Environment | Operation Temperature | -10°C~50°C | -10°C~50°C | -10°C~50°C | | |
| | Storage Temperature | -20°C~60°C | -20°C~60°C | -20°C~60°C | | |
| | Vibration | 5~17Hz, 0.1 double amplitude displacement 17~640Hz 1.5G acceleration peak to peak | | | | |
| | Shock | 10G acceleration part to part (11ms) | | | | |
| Touch Screen | | Resistive Type 5-Wire with RS-232 interface | | | | |
| Power Supply | AC Input | P/N: 63000-ACEA618APPC-RS -180W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.5A | P/N: ACE-A622A-RS-R11 - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A | P/N: 63000-ACEA622APPC-RS - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.5A | | |
| | DC Input | P/N: ACE-4520C-RS, 200W power supply Input: 24 VDC(18~36 VDC), Output(max.): 3.3A@12A, 5V@12A, 12V@15.4A, -12V@0.5A | | P/N: ACE-A622A-RS-R11 - 220W Power Supply - Input: 90VAC~264VAC, 50/60Hz - Output(max.): 3.3A@14A, 5V@16A, 12V@10A, -12V@0.8A | | |

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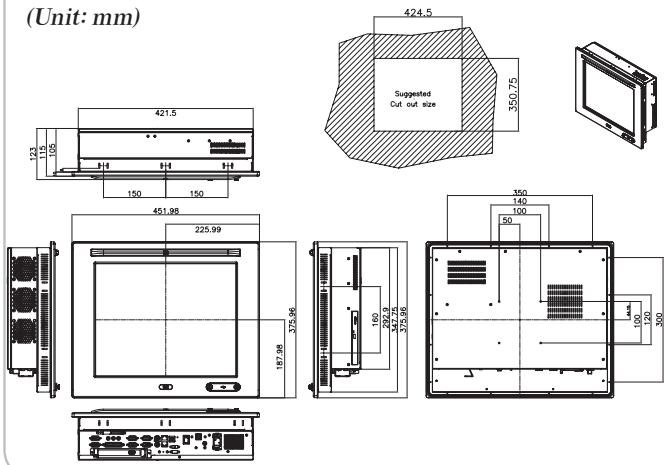
PACSmart Medical Solutions

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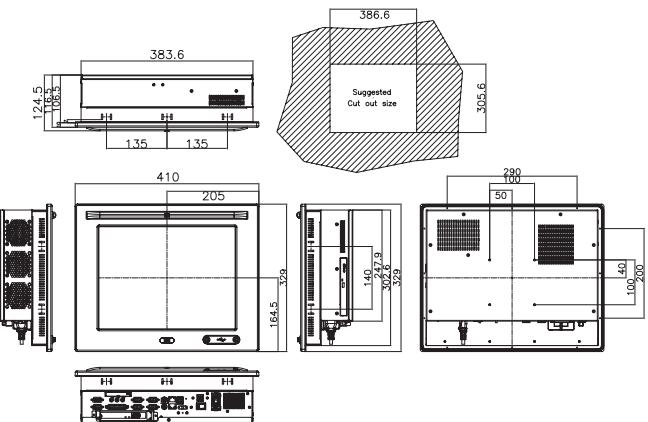
Optional Peripherals

WIDS-517A Dimensions

(Unit: mm)

**WIDS-515A Dimensions**

(Unit: mm)

**Ordering Information****Intel® G41 Platform**

| | | | |
|-----|------------------|-----------------------------|---|
| 15" | AC Input | WIDS-515A-G41-E15/R/1G-R10 | 15" 350 cd/m² XGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card |
| | | WIDS-515A-G41-Q94/R/1G-R10 | 15" 350 cd/m² XGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card |
| | 18~36 V DC input | WIDS-515AD-G41-E15/R/1G-R10 | 15" 350 cd/m² XGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A6220C, touch screen, w/o riser card |
| | | WIDS-515AD-G41-Q94/R/1G-R10 | 15" 350 cd/m² XGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A6220C, touch screen, w/o riser card |
| 17" | AC Input | WIDS-517A-G41-E15/R/1G-R10 | 17" 380 cd/m² SXGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A622A, touch screen, w/o riser card |
| | | WIDS-517A-G41-Q94/R/1G-R10 | 17" 380 cd/m² SXGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz, 1GB DDR3 RAM, silver color, ACE-A622A, touch screen, w/o riser card |
| | 18~36 V DC input | WIDS-517AD-G41-E15/R/1G-R10 | 17" 380 cd/m² SXGA Wireless Panel PC with POS-G41, Celeron Dual Core E1500 2.2GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A6220C, touch screen, w/o riser card |
| | | WIDS-517AD-G41-Q94/R/1G-R10 | 17" 380 cd/m² SXGA Wireless Panel PC with POS-G41, Core 2 Quad Q9400 2.66GHz CPU, 1GB DDR3 RAM, silver color, PSU ACE-A6220C, touch screen, w/o riser card |

Intel® 945G Platform

| | | | |
|------------|------------------|-------------------------------------|--|
| 15" | AC Input | WIDS-515A/9455-E2160/A618A/WT-R/1GB | 15" 350 cd/m² XGA Panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-A618A, touch screen, RoHS |
| | 18~36 V DC input | WIDS-515A/9455-E2160/4520C/WT-R/1GB | 15" 350 cd/m² XGA Panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| 17" | AC Input | WIDS-517A/9455-E2160/A622A/WT-R/1GB | 17" 300 cd/m² SXGA panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-A622A, touch screen, RoHS |
| | 18~36 V DC input | WIDS-517A/9455-E2160/4520C/WT-R/1GB | 17" 300 cd/m² SXGA panel PC with POS-9455, Pentium Dual-Core E2160 1.8GHz CPU, 1GB DDR2 RAM, 802.11 b/g/n wireless module, Silver color, PSU ACE-4520C, touch screen, RoHS |
| Riser Card | | PCIR-01H-R10 | 1-Slot PCI riser card |
| | | PCIER-101H-R10 | 1-Slot PCIe x 1 riser card |



PCIe x4 slot with PCIe x1 signal riser card



One Slot PCI riser card

Packing List

| Item | Part No. | Description | |
|-------------------------|---------------------|---------------------------------|--|
| SATA CD-ROM Cable | 32803-000300-100-RS | SATA 7+6 P TO SATA 7P /4P POWER | |
| Power Cord | 32702-000200-100-RS | EUROPEAN Standard ,1830MM | |
| Panel Mount Kit | 19Z00-000024-RS | | |
| Wall Mount Kit | 41020-016102-00-RS | WALL MOUNT BRACKET | |
| | 41014-057602-00-RS | ULTRA SET PLATE | |
| Touch Pen | 43125-0002C0-00-RS | | |
| User's Manual CD-ROM | IEI-7B000-000543-RS | For WIDS-51xA-G41 | |
| IEI One Key Recovery CD | IEI-7B000-000478-RS | | |

Options

| Item | Part No. | Description |
|-----------------------------|--------------------|-----------------------|
| IDE CD-ROM Installation Kit | 19Z00-000112-RS | CD-ROM IDE40 adapter |
| IDE HDD Bracket | 41019-0393C0-00-RS | |
| IDE HDD Cable | 32200-000037-RS | 25cm 44-pin IDE cable |

IQ Mounting Options

| Item | WIDS-515A | WIDS-517A |
|-----------------|------------------|------------------|
| Panel Mount Kit | PK-170M | |
| Wall Mount Kit | WK-190MS-R10 | |
| Rack Mount Kits | WIDSRK-150MS-R10 | WIDSRK-170MS-R10 |
| Stand | STAND-210-R11 | |
| ARM | ARM-31-RS | |

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Optional Peripherals