

Heavy Industrial Panel PCs

IEI's rugged industrial panel PCs (PPC) all have reliable IP 65 aluminum front panels are suitable for the demands of harsh industrial environments. Powerful Intel® Core™ 2 Duo, Pentium® 4 and Pentium® M processor and AMD low power processor are integrated onto a wide range of feature-rich IEI embedded motherboards that drive the IEI industrial PPCs. Multi I/O and expansion capabilities enables you to interface your system with many external devices.



1 Automation Panel Solutions

2 All-in-One Touch POS

3 Digital Signage

4 Video Wall Controller

5 RISC-based Solutions

6 PACSmate Medical

7 Optional Peripherals

A. Industrial Aluminum Panel PCs

Compact Size

Compact size with fanless design



Slim Type

Robust Fanless/Mobile Dual Core PPCs



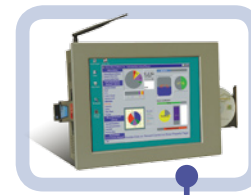
High Performance

Desktop Dual Core form factor with multiple expansion interfaces (PCI express/PCI / PCIe mini)



Flexible Expansion

Embedded form factor with multiple expansion interfaces (PCMCIA/PCI/mini PCI(mini PCIe)/Express Card)



| Product Line | 27-series | 37-series | | | 51-series | | 53-series | |
|----------------|------------------------------------|--------------|-------------------------------------|-------------------------------------|---|---|---|--|
| Platform | AMD LX800 | Intel® 852GM | Intel® 945GME | Intel® 945GSE (ATOM) | Intel® 852GME | Intel® 945G | Intel® 855GME | Intel® 910GMLE |
| Expansion Slot | 1 x Mini PCI (Wireless LAN Module) | N/A | 1 x PCIe mini (Wireless LAN Module) | 1 x PCIe mini (Wireless LAN Module) | 1 x PCI | 1 x PCI/1 x PCIe x4 (PCIe x1 signal) 1 x PCIe mini (Wireless LAN Module) | 1 x PCI 1 x PCMCIA 1 x mini PCI (Wireless LAN Module) | 1 x Express Card 1 x PCI 1 x PCIe mini (Wireless LAN Module) |
| Wireless | 802.11 b/g (10.4"/12.1" Optional) | N/A | 802.11 b/g Optional | 802.11 b/g Optional | N/A | N/A | 802.11 b/g Optional | 802.11 b/g Optional |
| Models | | | | | | | | |
| 6.5" | 640 x 480 | PPC-2706GS | | | | | | |
| 8.4" | 800 x 600 | PPC-2708GHS | PPC-3708GHS/8522 | PPC-3708GHS/9452 | PPC-3708A/N270 | Fanless | | |
| 10.4" | 800 x 600 | Fanless | PPC-3710GHS/8522 | PPC-3710GHS/9452 | PPC-3710A/N270 | Fanless | | |
| | | Fanless | | | | | | |
| 12.1" | 1024 x 768 | Fanless | PPC-3712GXS/8522 | PPC-3712GXS/9452 | PPC-3712A/N270 | Fanless | | |
| | | Fanless | | | PPC-3712BA/N270/890A PPC-3712BT/N270/709TX | Fanless | | |
| 15" | 1024 x 768 | | | | | | PPC-5150GS | PPC-5150A |
| 17" | 1280 x 1024 | | | | | | PPC-5170GS | PPC-5170A |
| 19" | 1280 x 1024 | | | | | | PPC-5190GS | PPC-5190A |
| | | | | | | | | PPC-5350GS/A300 |
| | | | | | | | | PPC-5350GS/A311 |

B. Industrial Vertical Application Panel PCs

Fanless



SAILORPC-12A 12.1" Full IP67 PPC

Full IP67
Upto 1 meter of submersion



UPC-12A 12.1" UPS PPC

UPS Backup
40~60 mins smart battery backup



WIDS-515A/517A 15"/17" Wireless panel mount PPC

Invisible WiFi Antenna

| Product Line | LCD Size | | Platform | Expansion Slot | Wireless | Models |
|-----------------|----------|-------------|----------------------|----------------|--------------|-----------------|
| SAILORPC Series | 12.1" | 1024 x 768 | Intel® 945GSE (ATOM) | N/A | 802.11 b/g/n | SAILOR-12A(SR) |
| UPC Series | 12.1" | 1024 x 768 | Intel® 910GMLE | 1 x PCI/PClex1 | 802.11 b/g/n | UPC-12A(H)/910 |
| | | | Intel® GM45 | | | UPC-12A(H)/GM45 |
| WIDS Series | 15" | 1024 x 768 | Intel® 945G | 1 x PCI/PClex1 | 802.11 b/g/n | WIDS-515A |
| | 17" | 1280 x 1024 | | | | WIDS-517A |

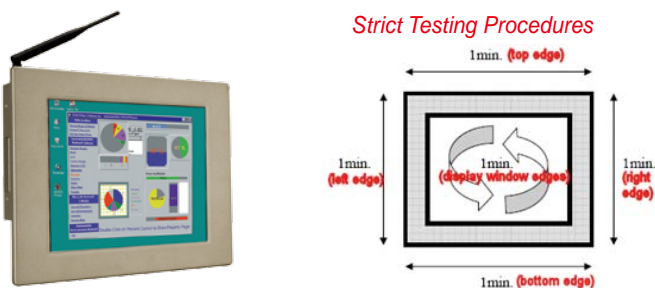
Feature 1 / IP65/IP67 Waterproof Panel PCs

The IP (ingress protection) rating system is an international standard for classifying the degrees of protection from solid objects and liquids afforded by electrical equipment and enclosures. IEL waterproof laboratory was found to have the 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 drizzle is encountered.

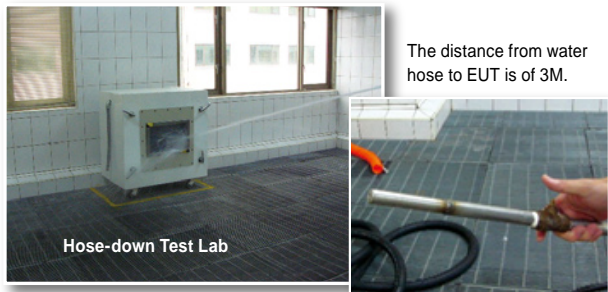
IP65 Front Panel Compliant

[IP65] **Dust-Tight**

[IP65] **Protected against water sprayed from all directions**



| | Water Flown Rate | Hose Diameter |
|------|------------------|---------------|
| IP64 | 10.0L/min | 0.5mm |
| IP65 | 12.5L/min | 6.3mm |
| IP66 | 100L/min | 12.5mm |
| UL50 | 246L/min | 25.4mm |



Full IP67 Sealed

[IP67] **Dust-Tight**

[IP67] **Temporary immersion under water 1m**



Waterproof OSD Keypad



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

| Table of NEMA Enclosure Rating and Comparison to IP Code | |
|--|--------------------------------------|
| Enclosure Type Number IEC | Enclosure Classification Designation |
| 1 | IP 10 |
| 2 | IP 11 |
| 3 | IP 54 |
| 3R | IP 14 |
| 3S | IP 54 |
| 4 and 4X | IP 56 |
| 5 | IP 52 |
| 6 | IP 67 |
| 12 | IP 52 |
| 13 | IP 54 |

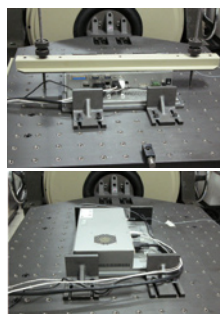
NEMA Enclosure Rating and IP Rating

NEMA (National Electrical Manufacturers Association) sets the industry standards in the USA for electrical equipment enclosures. The European Standards are determined by the Institute of Petroleum and are sometimes referred to as Ingress Protection (IP) numbers. The standards are listed below.

- IP Classification – addresses the European market
- NEMA Classification – addresses the American market

Feature 2 / Rigorous Vibration and Shock Testing

IEL rugged industrial Panel PCs follows the strict environmental testing procedures performed to ensure the panel PC can withstand the relatively infrequent, non-repetitive shocks or transient vibration encountered in handling, transportation and service environments.

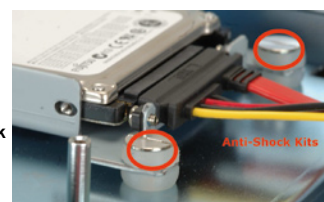


1. Vibration Testing Specifications

- **Testing Standard:** MIL-STD-810F 514.5C-1
- **Operating Random Vibration Mode**
10-500 Hz, 60min/axis. Equivalent to Z:1.04 Grms X:0.204 Grms Y:0.74 Grms
- **Non-Operating Sine Mode**
5~17Hz, 0.1" double amplitude displacement
17~640Hz, 1.5G acceleration peak to

2. Shock Testing Specifications

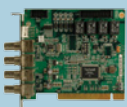




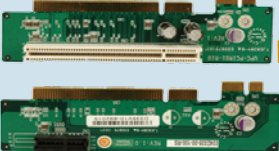
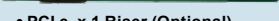



- **Testing Standard:** IEC68-2-27
- **Operating Shock Half-Sine Wave Shock**
3G acceleration part to part (11ms)
- **Non-Operation Shock Half-Sine Wave Shock**
10G acceleration part to part (11ms)



HDD with Anti-shock buffer rubber enhances protection performance.

Feature 3 / Versatile Expansion Interface

The industrial PPC with various kinds of expansion interfaces with the flexibility of functions enhancement and the ease of system integration.

| | 1. PCI Slot | 2. PCIe x 1 Slot | 3. PCIe mini | 4. PCMCIA | 5. Express Card |
|---|---|---|---|---|---|
| Various Expansion Interface |  |  |  |  |  |
| Applications | - Capture card - Wireless card - Serial card | - Video Grap - FireWire hics Card | - Wireless USB-3G broadband wireless-WiFi-GSM | - TV tuners - WLAN/WWAN/Smart Card/SATA - Bluetooth device - Memory Card Adapter | - TV tuners - WLAN/WWAN/Smart Card/SATA - Bluetooth device - Memory Card Adapter |
| Solution Models | PPC-51xxGS PPC-51xxA WIDS-51xA PPC-5350GS/A300 PPC-5350GS/A311 | PPC-51xxA WIDS-51xA | PPC-27xxGS PPC-37xxGS/9452 PPC-37xxA/N270 PPC-5350GS/A311 | PPC-5350GS/A300 | PPC-5350/A311 |
| PCI/PCIe External Expansion Slot | | Internal PCIe mini Slot | | External Express Card Slot | |
| <ul style="list-style-type: none"> • PCI Riser   <ul style="list-style-type: none"> • PCIe x 1 Riser (Optional)  | |  <p>Wireless PCIe mini Card</p> | |  | |

Feature 4 / User Friendly Interface



1. User-accessible CF

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



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.

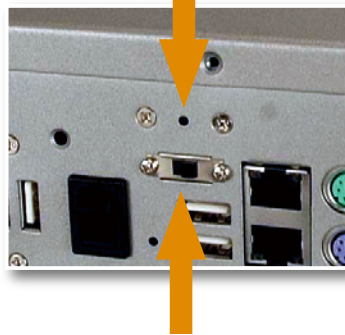


3. Lockable Power Cord

Power plug lock keeps power cable securely in place.

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 slows down or disrupts system operation



Restoring default system settings!



5. Selectable AT/ATX mode switch

Easily select the AT or ATX power mode with an easily accessed switch.

Production Line



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

General Ticketing Machine (GTM)



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

1
Automation Panel Solutions

2
All-in-One Touch POS

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Digital Signage

4
Video Wall Controller

5
RISC-based Solutions

6
PACSmate Medical

7
Optional Peripherals