

### Features

- IP65-compliant 12.1-inch fanless Panel PC
- Panel or VESA mounting configurations
- Low power 12.1" AM TFT Flat Panel Display
  - Resolution: 800 x 600
  - Contrast ratio: 600:1
  - Luminance: 400 cd/m2 (nits)
- Fanless PC-compatible computer features
  - 1.6GHz Intel® Atom™ N270 processor with Intel® 945GSE + ICH7M and 2GB SDRAM
  - Two Gigabit ENET ports
  - One RS-232 COM, one RS-232/422/485 COM, and four USB 2.0 ports
  - SATA controller, audio, and CFlash socket
- 5-wire resistive touch screen
- Custom bezel available for OEM applications
- Complies with the following standards
  - CE/FCC Class B and CE EMC Directive
  - IEC/EN 60529: Dust-Proof
  - IEC/EN 60529: Water-Proof
  - IEC-68-2-36: Vibration
  - IEC 61000: EFT, SURGE, DIPS, CIT, and CS
- Runs Linux, Windows® XP embedded, and WES7
- 24/28/48VDC input voltage
- 61mm (2.4") depth for space-limited environments
- Operating temperature: 0°C to +50°C

### Product Description

WinSystems' PPC65-1211B is a compact, 12.1-inch Panel PC that meets IP65 certification for ingress against dust and water. The PPC65 is optimized for markets including industrial machinery, utilities, petrochemical, gas, transportation, pipeline, and food processing that needs tight system integration and minimal space requirements.

The PPC65 supports operating systems (OS) such as Linux, Windows XP, Windows XPe, CE 6.0, WES7, and Windows 7. The PPC65's standard shipping configuration does not include the OS, but can be preloaded for OEMs.



The PPC65's enclosure is constructed of heavy-duty brushed aluminum alloy. Aluminum was chosen because it provides excellent shielding from light, RFI/EMI, or infrared radiation. It has a high strength-to-weight ratio making it rugged and durable. Aluminum will not rust like steel and is corrosion resistant. Aluminum is non-combustible, non-magnetic, non-sparking, non-toxic and recyclable. It is also thermally conductive to dissipate component heat.

The combination of the rugged enclosure with a fanless computer and touch screen allows the unit to meet and exceed industry standards for RF emissions, susceptibility and shock/vibration. The PPC65 is tested and compliant with FCC Part 15 Class B and CE EMC Directive 2004/108/EC (EN55022/EN55024). It is also operationally tested with 1.0G vibration (5-500Hz, 3-axis, 30 min/axis) and 15G shock (peak acceleration, 11 ms duration).

Furthermore, the PPC65 has been tested for electrical plus electromagnetically induced or radiated interference that could possibly degrade its performance when electronic and electrical systems are in close proximity in confined spaces. This unit is in compliance with IEC 61000 Electrical Fast Transient (EFT or "Bursts"), Surge, Drop in Power (DIPS), conducted susceptibility (CS), and conducted immunity (CIT) tests.

The PPC65's front panel and touch screen are environmentally sealed to protect the unit from damaging moisture, dust, and dirt when mounted in an IP65-rated enclosure. It can also be attached to a 75 x 75mm or 100 x 100mm VESA mount.

# PPC65-1211B: IP65-Compliant 12.1-inch Panel PC

## Technical Specifications

### Hardware

CPU Type	Intel® Atom™ N270 1.6GHz
Chipset	Intel 945GSE + ICH7M
Memory	2GB DDR2 SODIMM
Ethernet	2x Gigabit ports
Serial I/O	1x RS-232 COM port 1x RS-232/422/485 COM port
USB Ports	4x USB 2.0
RTC	Built-in
VGA Port	Supports second monitor
Audio	1x Line-out; 1x Line-in
CompactFlash Storage	Socket supports Type I & II Option for 2.5" SATA drive

### Display

Type	12.1" diagonal Color TFT
Resolution	800 x 600
Brightness	400 cd/m2
Contrast Ratio	600:1
Max Colors	262K/16.2M
Backlight MTBF	50,000 hours

### Touchscreen

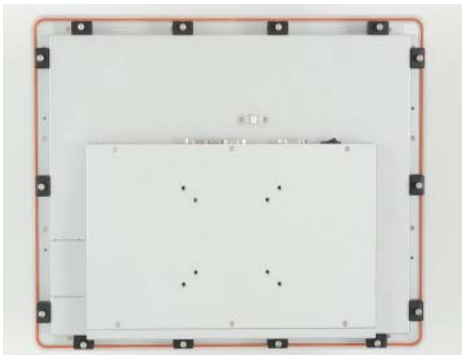
Type	5-wire resistive
Resolution	4096 x 4096
Light Transmission	78%

### Environmental

Operational Temperature	0° - 50° C
Relative Humidity	5 - 95% non-condensing
Shock	15G peak (11 mS)
Vibration	1.06G (5-500Hz)
Ratings	Front Panel is IP65-compliant
Certifications	CE/FCC Class B

### Mechanical

Dimensions	343 x 278 x 61mm (WxHxD)
Weight	4.9kg (10.8 lbs.)
Mounting	VESA 75 or 100 and Panel
Power	24/28/48VDC (60W typ.)
Warranty	1 year



Back Picture of PPC65-1710S

## Ordering Information

### Panel PC

PPC65-1211B-2G-0 IP65 PPC, 12.1", Black, 2G RAM, No HDD

### Standard Ordering Configurations

WinSystems offers 15-inch, 17-inch, and 19-inch sizes as well as the 12.1-inch version. These standard units are available as a 12VDC input version or a wide voltage input version. An optional rotating hard disk is available. Also custom bezel inlays are available. Contact a WinSystems' factory application engineer with your specific needs.

### Technical Support and Custom Configurations

WinSystems offers free support to speed your initial design cycle into production. Our engineers are dedicated to answering your questions.

If you do not see a product or feature listed in this data sheet that you require, please contact us. We may have a product in development, know of another source, or perhaps can modify existing product to serve your needs.

### -40°C to +85°C Industrial CompactFlash Memory

CFLASH-G-128M-I	128MB CFlash - RoHS
CFLASH-G-256M-I	256MB CFlash - RoHS
CFLASH-G-512M-I	512MB CFlash - RoHS
CFLASH-G-1024M-I	1GB CFlash - RoHS
CFLASH-G-2048M-I	2GB CFlash - RoHS
CFLASH-G-4096M-I	4GB CFlash - RoHS
CFLASH-G-8192M-I	8GB CFlash - RoHS

### High-Speed Industrial CompactFlash Memory

CF-DC-A-1GB-I	1GB CFlash - RoHS
CF-DC-A-2GB-I	2GB CFlash - RoHS
CF-DC-A-4GB-I	4GB CFlash - RoHS
CF-DC-A-8GB-I	8GB CFlash - RoHS
CF-DC-A-16GB-I	16GB CFlash - RoHS

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