

# PPC65B-1x

IP65-Compliant Fanless Panel PC with Touch Screen

## **Features**

### **Performance for Industrial IoT Applications**

- 1.9 GHz Quad-Core Intel® Atom™ E3845 processor
- Up to 8 GB of RAM
- Supports Linux, Windows 10 Operating Systems

#### **Rugged Design for Demanding Environments**

- IP65-compliant fanless panel PC
- Front display sealed against water and dust
- Panel or VESA mounting configurations
- -25°C to +70°C operating temperature range
- SATA controller with 2.5-inch HDD/SSD
- Wide input power: 12-24V DC

#### **Fast Graphics at High Resolutions**

- Five-wire resistive touchscreen
- Resolution: 1024 x 768 / 1280 x 1024

### Connectivity and I/O for Embedded Systems

- 2x Gigabit Ethernet ports
- 1x USB 2.0 port (up to 3x with expansion)
- 1x USB 3.0 port
- Half-size Mini-PCle socket
- Watchdog timer

### **Expansion Options**

- 2x RS-232/422/485 plus 2x USB (default)
- 2x RS-232/422/485 plus 1x RS-232 (optional)
- 1x line-out, 1x RS-232/422/485 plus 2x USB (optional)







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# **Product Description**

WinSystems' PPC65B-1x Panel PC Series is IP65-certified and optimized for use in demanding market applications including industrial machinery, utilities, petroleum, transportation, pipeline and food processing, wherever there is need for tight system integration in a minimal foot print.

High performance embedded applications will benefit from the PPC65B-1x's 1.9 GHz Quad-Core Intel® Atom™ E3845 processor. The panel PC is designed and engineered to operate without a fan—even with the quad-core processor—resulting in quieter operation, lower maintenance, and increased product service life.

The front panel and touchscreen of the PPC65B-1x 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.

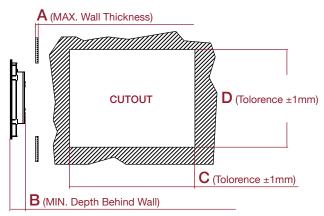
Applications that require a conventional 2.5" SATA hard drive or 2.5" SATA SSD will benefit from the built-in drive tray that facilitates easy insertion and removal of the drive without the need for a SATA cable.

The PPC65B-1x series supports operating systems (OS) such as Linux and Windows 10. Contact an Applications Engineer for details on pre-installed operating system options. The unit is engineered to meet and exceed industry standards for RF emissions and susceptibility, is shock- and vibration-resistant, and confirmed to be compliant with FCC Part 15 Class A and CE EN 55022/55024: 2010 Class A.



# **Mounting/Installation Dimensions**

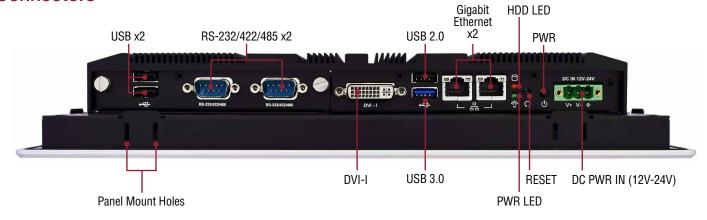




# **Panel Mount Cutout Dimensions**

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	Brackets (pcs)
PPC65B-10	<10.7	50.2	297	236	X 8
PPC65B-12	<10.9	53.2	326	265	X 12
PPC65B-15	<11.3	55.6	408.5	313	X 16
PPC65B-17	<12	58.6	420	358	X 16
PPC65B-19	<12	58.6	463	383	X 20

# **Connectors**



## PPC65B-1x



## **Technical Specifications**

PART NUMBER	PPC65B-10	PPC65B-12	PPC65B-15	PPC65B-17	PPC65B-19		
DISPLAY	LCD Size: 10.4" Res: XGA 1024 x 768 Brightness: 450 cd/m2 Contrast Ratio: 3000:1	LCD Size: 12.1" Res: XGA 1024 x 768 Brightness: 500 cd/m2 Contrast Ratio: 700:1	LCD Size: 15" Res: XGA 1024 x 768 Brightness: 450 cd/m2 Contrast Ratio: 700:1	LCD Size: 17" Res: SXGA 1280 x 1024 Brightness: 350 cd/m2 Contrast Ratio: 700:1	LCD Size: 19" Res: SXGA 1280 x 1024 Brightness: 350 cd/m2 Contrast Ratio: 1000:1		
	Backlight: LED type     Touch Window: 5-Wire Resistive Single Touch						
SYSTEM	<ul> <li>SOC: Intel® Atom™ Quad-Core E3845 (1.91 GHz)</li> <li>Memory: DDR3L SO-DIMM 1333/1600 MHz max up to 8 GB</li> <li>BIOS: AMI</li> <li>Graphics: Intel® Gen7 Graphics</li> <li>LAN: Chipset Dual Intel® I210IT Gigabit Ethernet</li> <li>Audio: Realtek High Definition Audio Codec</li> <li>Watchdog Timer: 1~255 levels reset</li> <li>Storage Device: 2.5" SATA HDD / SSD, Compact Flash II and SD card</li> <li>OS: Windows 10, Linux, and other x86 Operating Systems</li> </ul>						
ONBOARD I/O	<ul> <li>Serial Ports: 2 x RS-232/422/485 (Expansion: default)</li> <li>Display: 1 x DVI-I</li> <li>USB Options: 1 x USB 2.0 and 1 x USB 3.0 or 2 x USB 2.0 (Expansion: default)</li> <li>Ethernet: 2 x Gigabit Ethernet</li> <li>Half-Size Mini-PCIe Expansion slot</li> <li>Others: 1 x SMA Antenna hole for WiFi/3G Solution</li> <li>Expansion Options: <ul> <li>Option 1 - 2 x RS-232/422/485, 1 x RS-232</li> <li>Option 2 - 1 x Line-out, 1 x RS-232/422/485, 2 x USB 2.0</li> </ul> </li> </ul>						
MECHANICAL	Weight: 3.5 Kg Dimensions (mm): 314 x 253 x 50.2	4.3 Kg Dimensions (mm): 343 × 282 × 53.2	5.3 Kg Dimensions (mm): 425.4 x 330 x 55.6	6.8 Kg Dimensions (mm): 437 x 375 x 58.6	7.8 Kg Dimensions (mm): 480 x 400 x 58.6		
	Mounting (mm): VESA Mount 75 x 75 & 100 x 100; Panel Mount						
POWER	Power Supply: DC 12-24V input with 3-pin Terminal Block Connector						
	Consumption (Max): 31.5W (12V); 35.2W (24V) Consumption (Min): 10.3W (12V); 11.8W (24V)	Consumption (Max): 29.4W (12V); 30.2W (24V) Consumption (Min): 10.2W (12V); 11.5W (24V)	Consumption (Max): 30W (12V); 30.5W (24V) Consumption (Min): 10W (12V); 11.8W (24V)	Consumption (Max): 37.8W (12V); 38.3W (24V) Consumption (Min): 10W (12V); 11.8W (24V)	Consumption (Max): 33.7W (12V); 33.8W (24V) Consumption (Min): 10.2W (12V); 11.5W (24V)		
	Power Adaptor: 12V, 5A/60W (Optional)						
ENVIRONMENTAL	Operational Temperature Range: -25°C to +70°C Storage Temperature Range: -40°C to +85°C (20-90% non-condensing) Vibration: 1.0G (SD/CF/SSD) and 0.5G (HDD), Power on & 2.16G, Packaged; 5-500Hz, IEC 60068-2-64 Shock: 15G peak acceleration, 11 ms (Power on condition), IEC 60068-2-27 Drop: Package with Carton from 96.5 cm (1-Corner, 3-Axis, 6-Face), ISTA 2A Standard Front Panel Protection: IP65 (Front) / IP20 (Rear), IEC 60529 Edition 2.1 Standard Certification: CE/FCC Class A						

## **Order Information**

PART NO. SCHEME	PPC65B-1x-a-b-c		
a = RAM Installed	2 = 2G 4 = 4G 8 = 8G		
b = Expansion Opts	n Opts 0 = 4 USB 2.0, 2 Serial (RS-232/422/485) 1 = 2 USB 2.0, 3 Serial (1x RS-232, 2x RS232/422/485) 2 = 4 USB 2.0, 1 Serial (RS-232/422/485), Audio Line-Out		
c = Media & OS	(Contact Application Engineer)		

### **Expansion and Customization Options**

WinSystems offers additional cables, expansion cards, power supplies, and solid state drives to complete your embedded computing solution including data acquisition, communications, location, and other features via PCIe/104 and M.2 interfaces. Our Application Engineers are available to guide you through product selection and customized options.



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