



## Features

- Fan-less and Industrial-grade Design
- Intel® Atom N270 Processor
- Intel® Low-power Mobile Chipset
- DDR2 SO-DIMM Support
- Mini-PCI and Mini-PCI-E Expansion Support
- Dual CFs Support
- Isolated Digital IN/OUT
- Wide-range DC Input Support
- 2x RS-422/485 Support
- 2x CAN-Bus 2.0B Support

## Cable-Free

## Specifications

### Fan-less Platform

- Low power, low Heat-dissipation during operation
- Fan-less Aluminum chassis, without moving parts

### Processor

- Intel® Atom N270 1.6GHz Low-power processor
- 533MHz FSB, 512KB L2 cache

### Chipset

- Intel® 945GSE and ICH7-M chipset

### Memory

- 533MHz DDR2 SO-DIMM socket, up to 2GB

### BIOS

- Award BIOS with Console Redirection support
- Power-ON after Power Failure support
- Voltage and Temperature Monitoring support

### Disk Storage

- Internal: 1x 2.5" SATA Interface, 1x CF socket
- External: 1x Hot-swappable CF socket

### Expansion

- Internal: 1x Mini-PCI and 1x Mini-PCI-E expansion slots

### Ethernet

- 1x Realtek 8111 GbE LAN with Wake-ON-LAN and DMI

### Watchdog Timer

- Programmable WDT from 1 to 255 seconds

### Display Function

- Intel® Build-in GMA 950 Display Engine
- Up to 1900x1200@60Hz Resolution

### RS-422/485

- 2x DIN8, external Jumper-wire Enable/Disable Termination
- Signal with 2.5KVrms Isolation Protection  
5V Power with 3KV DC Isolation Protection

### RS-232/485

- 1x DB9 RS-232/485
- 3x DB9 RS-232 (with DC Output optional)

### CAN-Bus Support

- 2x DB9 CAN-Bus 2.0B with Isolation Protection

### Audio

- ALC655 Codec for Speaker-out support

### Digital I/O with Isolation Protection

- 3x D-IN, supports Dry/Wet Contact, 2.5KV Isolation Protection  
Low level in 0~3V, High level in 10~50V
- 2x D-OUT, 500mA in Driving. 2.5KV Isolation Protection

### Power Source

- DC: 9~30V / 5~1.5A Input
- Supports AT or ATX Power ON/OFF mode

### Environment

- Ambient Temperature for Operation: -20°C ~ 50°C
- Ambient Temperature for Storage: -40°C ~ 80°C
- Relative Humidity for Storage: 10% ~ 90% (Non-condensing)

### Dimension and Weight

- 208(W) x 66.5(H) x 230(D) mm, Compact Size
- Net: 3.1Kg, Gross: 4.5Kg

### Certification

- CE / FCC Class A

### Front Panel I/O

- 2x DB9 RS-232, 2x DB9 CAN-Bus
- 1x Hot Swappable CF, 2x USB
- LEDs of HDD/CF Status/Power, Power Button and Reset

### Rear Panel I/O

- 3-pin Screw-lock Power Connector
- 1x DB9 of RS-232/485, 1x DB9 of RS-232, 1x DB15 of VGA
- 2x DIN8 of RS-422/485, 1x DIN8 of Digital I/O
- 4x USB, 1x RJ-45 LAN port, 1x Speaker-out
- LEDs of Power and Status, System Reset

### Internal I/O Interface

- 1x Mini-PCI and 1x Mini-PCI-E expansion slots
- 1x CF slot, 1x SATA interface, 1x Audio pin-header
- Up to 4x D-IN and 4x D-OUT connector
- 1x Dual-channel 18-bit LVDS connector

## Ordering Guide

Specifications subject to change without notice

Model Name	CPU	RS-232	CAN-Bus	Digital I/O	LAN / USB / CF	RS-422/485
Pipal-2030C	N270 1.6GHz	x3	x2	3x IN, 2x OUT	1x GbE / 6x USB / 2x CF	x2

### Optional:

- \* 60W Power Adapter, SO-DIMM Memory Module
- \* Wireless LAN Module, Anti-Vibration HDD Kit, 2.5" HDD, SSD

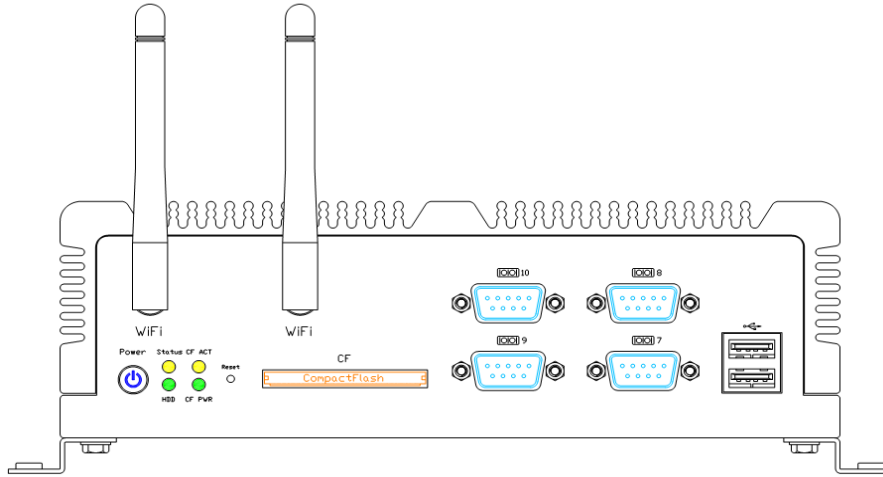
**Dimension:**

Without Mounting Kit : 208(W) x 66.5(H) x 230(D) mm

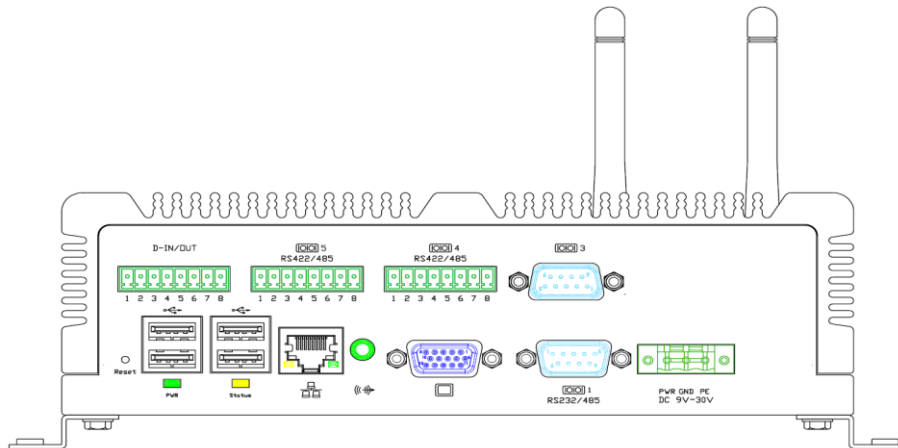
With Mounting Kit : 236(W) x 76.5(H) x 230(D) mm

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## Pipal-2030C Front I/O



## Pipal-2030C Rear I/O



(V1.2 Sep/2011)