

IPC-810E

4U 上架机箱

4U Rack-mount Chassis

Version: C00



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Safety Instructions

1. Please read this manual carefully before using the product;
2. Before inserting, removing or re-configuring motherboards or expansion cards, first disconnect the computer and peripherals from their power sources to prevent electric shock to human bodies or damage to the product;
3. Before moving the product, please unplug the AC cable from the power socket;
4. When inserting or removing boards, please firstly unplug the AC power cable;
5. Before connecting or disconnecting any signal cable, make sure all power cables are unplugged in advance;
6. After turning off the computer, wait at least 30 seconds before turning it back on;
7. All the operations such as upgrade, remove or installation shall be implemented on the ESD worktable, because some exactitude components are sensitive to electrostatic discharge (ESD).
8. If there's no ESD worktable, please take the following measures to prevent damage from electrostatic discharge (ESD):
 - a) Wear a antistatic wrist strap and connect it with the metal part of the corresponding product;
 - b) Always touch the metal enclosure or frame before touching any components;
 - c) Keep part of your body in contact with the metal enclosure to discharge the static while handling components;
 - d) Avoid unnecessary movement;
 - e) Hold the components (especially the boards) by the edges;
 - f) Place the components on a grounded, static-free operating platform. Use a conductive foam pad if available (not the component wrapper).
 - g) Do not let the components slide on the operating platform.
9. Use cross-head screwdriver to operate. A magnetic screwdriver is recommended (Magnet helps to prevent screws from remaining in the enclosure). Do not leave any tools or accessories inside the enclosure;
10. Ensure abundant cooling and ventilation.
11. Non-professional personnel are not allowed to open the enclosure.

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Chapter 1 Product Introduction

Overview

IPC-810E is a 4U rack-mount chassis, which not only retains the style of 810B, but supports the complete range of full-size boards and industrial motherboards of our company, such as FSC, EPI, EPE, EC9 and EC0, etc. As a universal 4U rack-mount chassis, it can be widely applied in the fields such as industrial control, petroleum, petrochemical and video surveillance, etc.

Main Functions

Connectors and Buttons on the Chassis

Two front-accessible USB 2.0 ports, ATX rocker switch, reset switch, power supply, HDD indicator and safe door with lock.

Expandability

Supported motherboards: PICMG 1.0, PICMG 1.3, EPI 2.0 and EPE standard full-size boards and EC9 and EC0 standard single boards;

Supported carrier boards: 10-slot standard PICMG 1.0 carrier, 14-slot standard PICMG 1.0 carrier, 10-slot standard PICMG 1.3 carrier, 13-slot standard EPI 2.0 carrier and 10-slot EPE carrier.

Supported power supplies: standard PS2 ATX power and standard PS2 AT power.

Storage Expansion

Two 5.25" CD-ROM bays, two 3.5" HDD (with shock absorption) bays and one 3.5" HDD (without shock absorption) bay.

Main Performance

Mechanical Dimensions, Weight and Environment

- Dimensions: 482mm (W) x 177mm (H) x 470.4mm (D);
- Net Weight: 15.3Kg;
- Operating Environment:
Temperature: 0°C ~ 50°C;
Humidity: 5% ~ 90% (non-condensing);
- Storage Environment:
Temperature: -20°C ~ 60°C;
Humidity: 5% ~ 90% (non-condensing);

EMC

- GB9254-2008 Radiation disturbance class A/Conducted disturbance class A;
- GB/T 17626.2-2006 Electrostatic discharge, level 2;
- GB/T 17626.4-2008 Burst immunity, level 2;
- GB/T 17626.6-2008 Conducted Immunity, level 2;
- GB/T 17626.5-2008 Surge (Impact) immunity, level 2;
- GB/T 17626.6-2008 Conducted susceptibility, level 2;

Reliability

- MTBF \geq 50000h;
- MTTR \leq 0.5h.

Safety

Meets the basic requirements of GB4943;

Mechanical and Environment Adaptability

- Anti-vibration: 5-17Hz/1.0mm amplitude; 17-200Hz/1.0g acceleration;
- Anti-shock: 10g acceleration, 11ms duration;
- Noise: ≤ 50 dB.

Mounting Mode

- 19" Rack Mount Desktop Embedded Panel
Wall Mount VESA Standard Supporting Arm Portable
Others _____

Requirements of Transportation and Storage

● **Transportation**

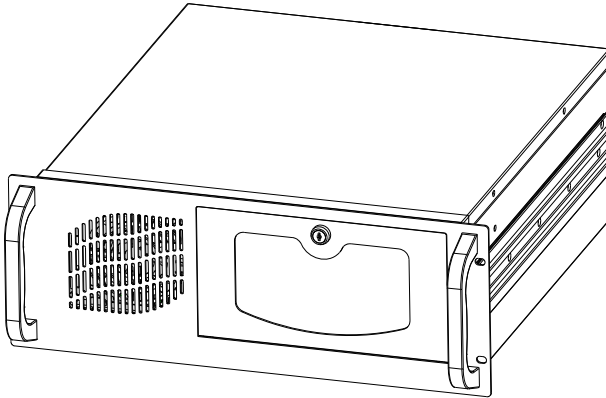
Well-packaged products are suited for transportation by truck, ship, and plane. During transportation, products should not be put in open cabin or carriage. When transshipping en route, products should not be stored in open air without protection from the atmospheric conditions. Products should not be transported together with inflammable, explosive and corrosive substances and are not allowed to be exposed to rain, snow and liquid substances and mechanical force.

● **Storage**

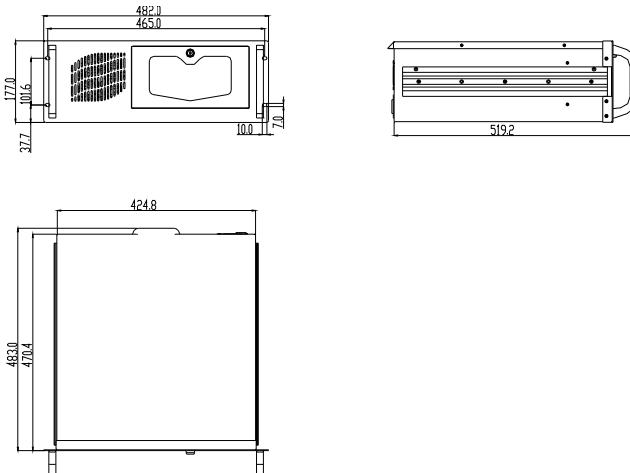
Products should be stored in package box when it is not used. And warehouse temperature should be $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$, and relative humidity should be $20\% \sim 85\%$. In the warehouse, there should be no harmful gas, inflammable, explosive products, and corrosive chemical products, and strong mechanical vibration, shock and strong magnetic field interference. The package box should be at least 10cm above ground, and 50cm away from wall, thermal source, window and air inlet.

Chapter 2 Installation

Product Outline

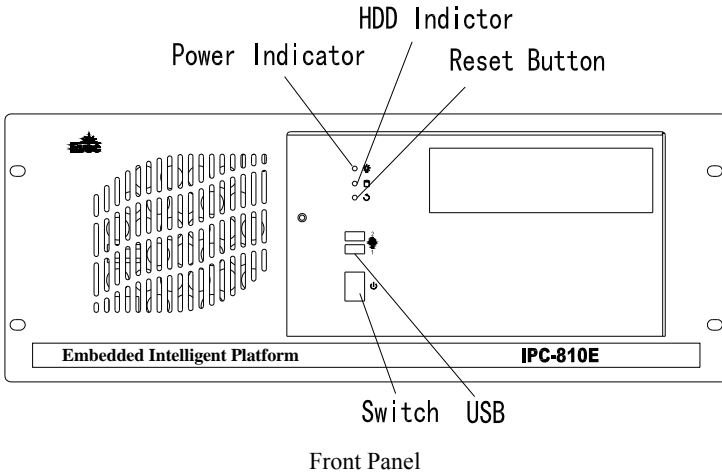


Product Appearance and Installation Dimensions

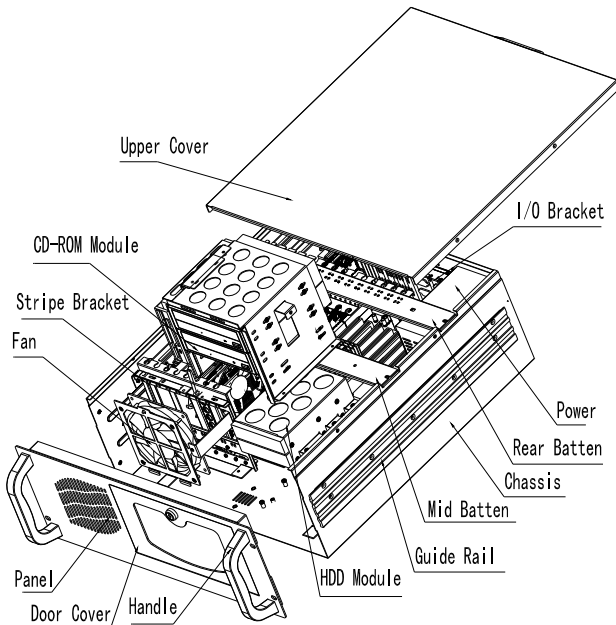


Unit: mm

External Connectors



Overall Assembly Drawing



HDD Module and Driver Module Assembly

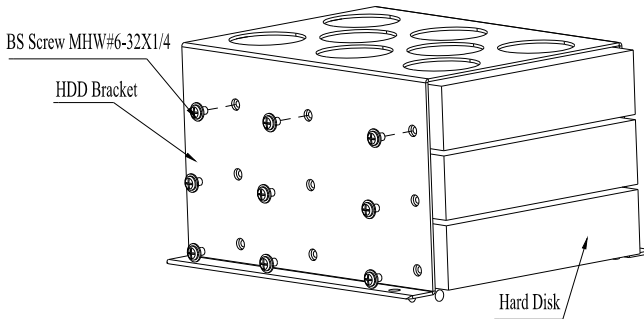


Figure 1

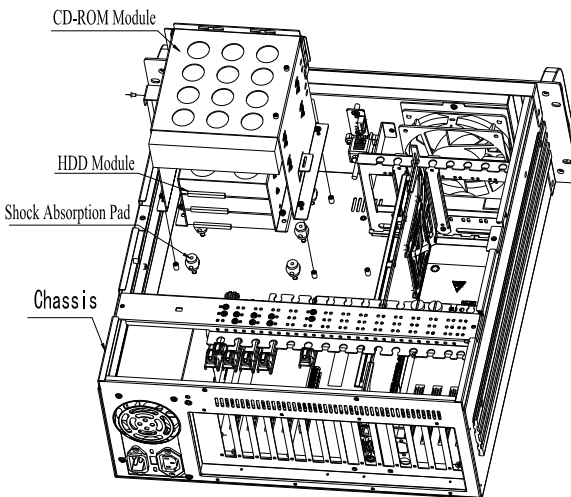
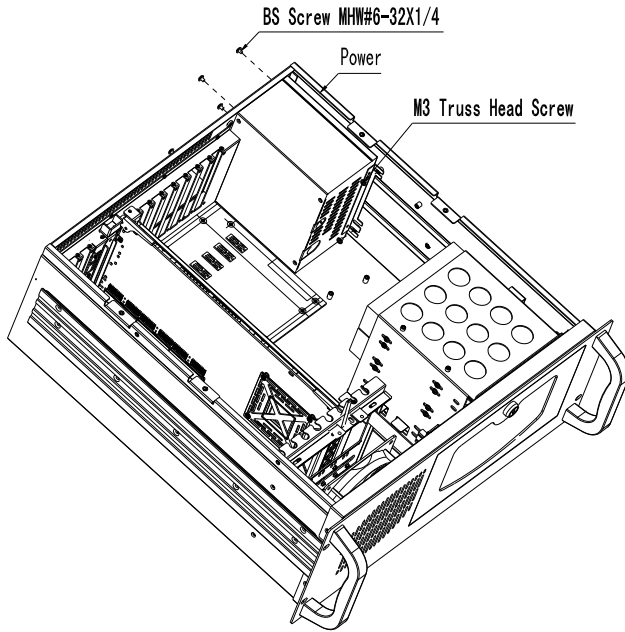


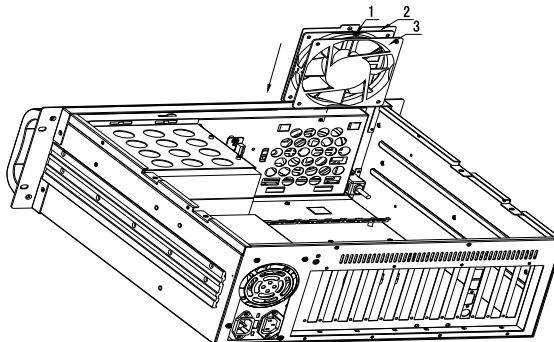
Figure 2

1. Assemble the hard disk module according to Figure 1 first;
2. Fix the shock absorption pads with the relevant rivets on chassis as shown in Figure 2; then fix the hard disk module on the shock absorption pads and fix the CD-ROM module with the relevant rivets on chassis finally. (Note: when the shock absorption function is not required on hard disk, the M4 via copper studs can be used to replace the shock absorption pads.)

Install the Power

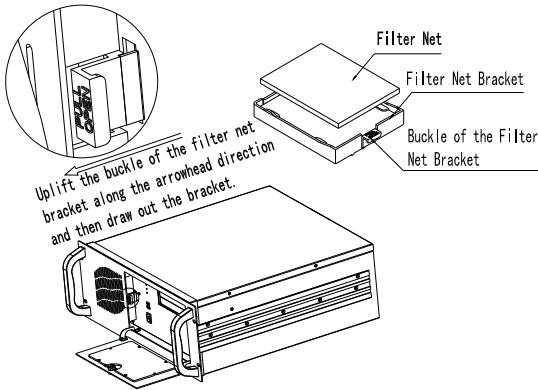


Install the Fan



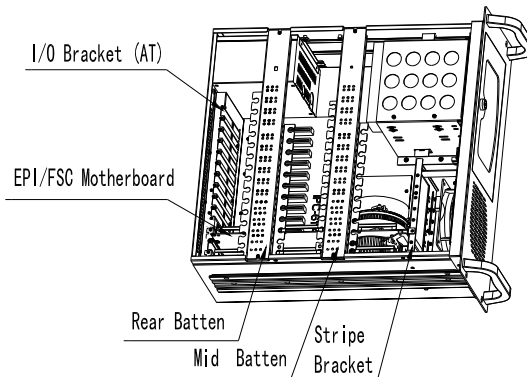
1. M3 Truss Head Screw	2. Fan Bracket
3. 120 Fan	

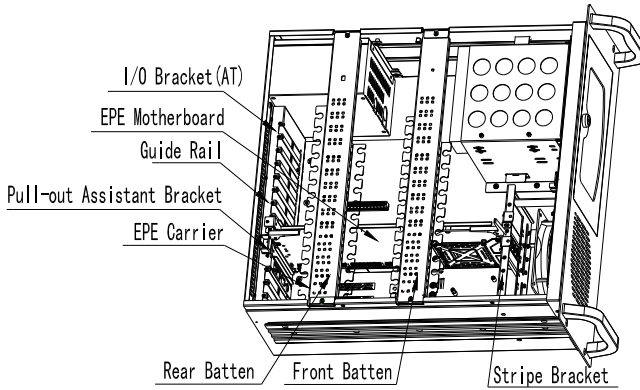
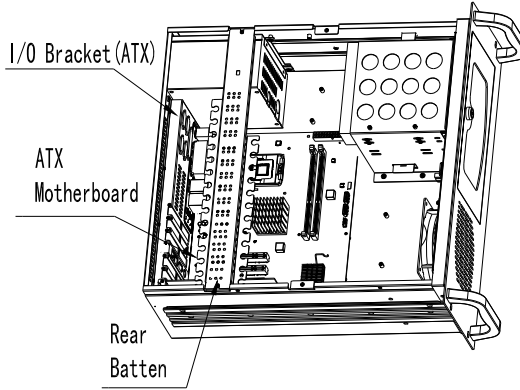
Install the Filter Net



Installation methods for Different Configurations

IPC-810E is a 4U 19" rack-mount chassis, which can be installed with MiniITX (EC7), FlexATX (EC8), MicroATX (EC9) and ATX (EC0) series motherboards and EPI, EPE, PICMG1.0 and PICMG1.3 (IPC) series carriers; different accessories shall be installed to match the boards. The detailed information is shown in the following figures:





Chapter 3 Install the Drivers

Regarding the installation of the driver program, please refer to the CD that accompanies the PC.