PPC-5020

12.1" TFT Panel PC

(Ver 2.0)

Copyright Notice

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1 Introduction

The PPC-5020, 12.1" high brightness LCD TFT Panel PC takes advantage of modern flat-panel display technology, coupled with a POS-566/370 CPU board, one hard drive bay and an integrated power supply to ensure minimum size. It is an IBM PC/AT compatible computer specially designed to meet the applications in an industrial environment.

1.1 Checklist

ITEM	DESCRIPTION	Q'TY	NOTES
1	PPC-5020 USERMANUAL	1	
2	POWER CORD	1	
3	WALL-MOUNT VIBRATION KIT	2	
4	WALL-MOUNT bracket	1	
5	PANEL MOUNT KIT	4	
6	SCERW KIT	1	
6.1	SCREW BOLT (M4*P0.7*8mm)	4	
6.2	Round with washer screw (M3*6)	10	
6.3	Sink with washer screw M4*6	8	
6.4	Round screw (M5*50)	4	
6.5	FLAT SCREW (6#32*6)	4	
7	KEY WITH HDD	1	
8	CF-507 SOKET-370 BLOWER COPPER COOLER	1	
9	POS-370 OR POS-566 USER MANUAL	1	OPTION
10	DISK FOR SIS CHIP SET	1	
11	MINI JUMPER	SOME	
12	Y CABLE. (MINI DIM TO MOUSE/KB)	1	
13	TOUCH SCREEN DRIVER (option)	1	OPTION

1.2 Features

CPU Board

PPC-5020 is designed for POS-566/370 CPU board. The POS-566/370 board is a LPX specification board, equipped with a high-performance socket 370 Celeron Pentium III® CPU, LCD/CRT and 10/100Mbps Ethernet port, designed for system manufacturers, integrators, or VARs to provide the ultimate in performance, reliability, and quality.

LCD Display

The PPC-5020 is equipped with a high brightness 12.1" TFT LCD.

Power Supply

The PPC-5020 is equipped with a standard ACE-816APS 150W power supply with PFC.

Touch Screen (option)

Aluminum front panel supports both resistive and capacity touch screens.

Plastic front panel supports a resistive touch screen only.

HDD

The PPC-5020 supports one 3.5" removable HDD drive bay.

1.3 Specifications

Display Model	SANYO
Display Type	12.1" TFT color
LCD model	TM121SV-02L11
Resolution	SVGA 800x600
Max. Colors	Native 262k colors(r/g/b 6 bit each)
Brightness	360 cd/m^2 high luminance
LCD MTBF	50,000 hrs
Backlight MTBF	30,000 hrs
Nominal input Voltage VDD	+3.3V
Support Voltage	-0.3V to 4.0V

? **3M touch resistive type touch screen (option)**

Type: Analog Resistive

Resolution: Continuous

Light transmission: Typical value 72%

Surface Hardness: 4H (Test condition: ASTM D3363-92A)

8-wire touch screen

Support driver: Supports DOS, Windows 3.1, 95, 98, NT/Me/2000, WinCE. NET.

? **3M touch capacitive type touch screen (option)**

Type: Analog Resistive

Resolution: Continuous

Light transmission: Typical value 88%

Support driver: Supports DOS, Windows 3.1, 95, 98, NT/Me/2000, WinCE. NET.
Please download the capacitive type driver from IEI web site.

? **Environmental specifications**

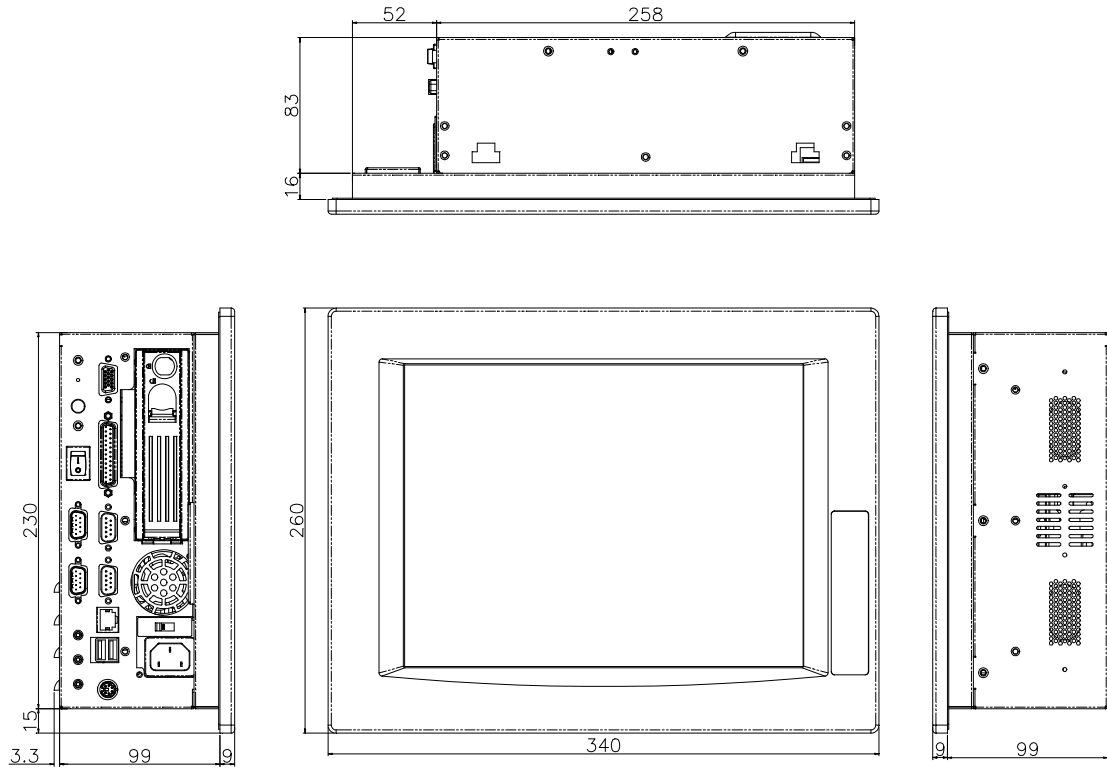Operating Temperature: 0 ~ 50

Relative Humidity: 5~95 %, non-condensing

Vibration: 5 to 17 Hz, 0.1"double-amplitude displacement,
        17 to 640 Hz, 1.5 G peak to peak.

1.4   Dimensions

Front Panel: 340mm x 260mm x 9mm (WxHxD)
Cabinet: 310mm x 230mm x 99mm (WxHxD)

2   System Setup

The PPC-5020, 12.1" LCD TFT Panel PC, is provided complete kit for your operation. The following sections of this chapter will help your installation and maintenance.

2.1   Assembly Diagram

The Reverse Side of PPC-5020

The diagram shows below the reverse side of PPC-5020.   For maintenance, installation or upgrade, you will need to remove the back cover first by unfastening the 9 screws as shown in the diagram.
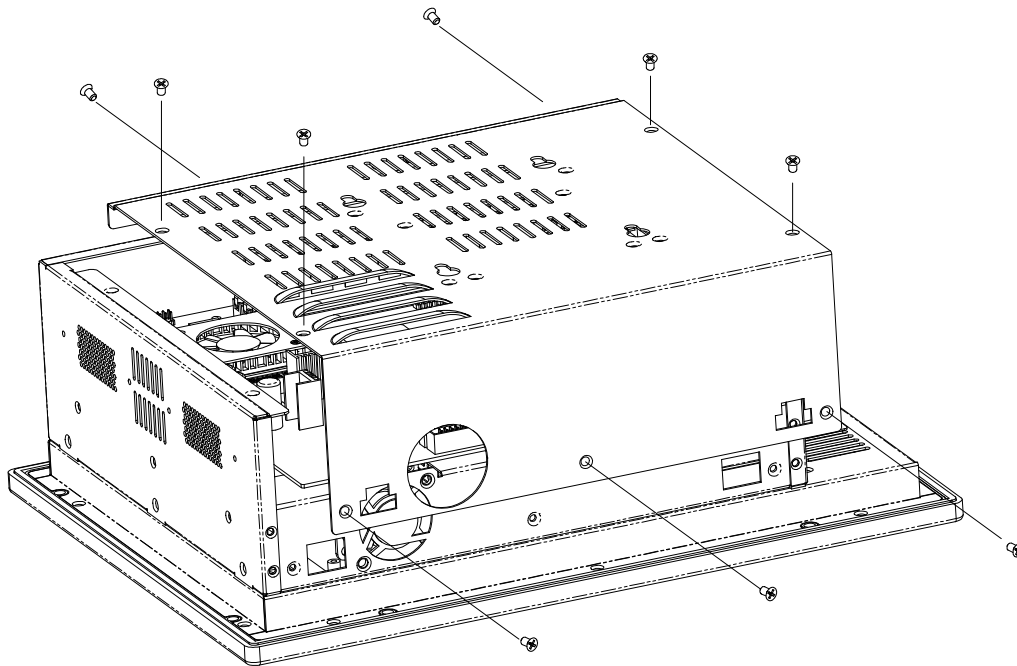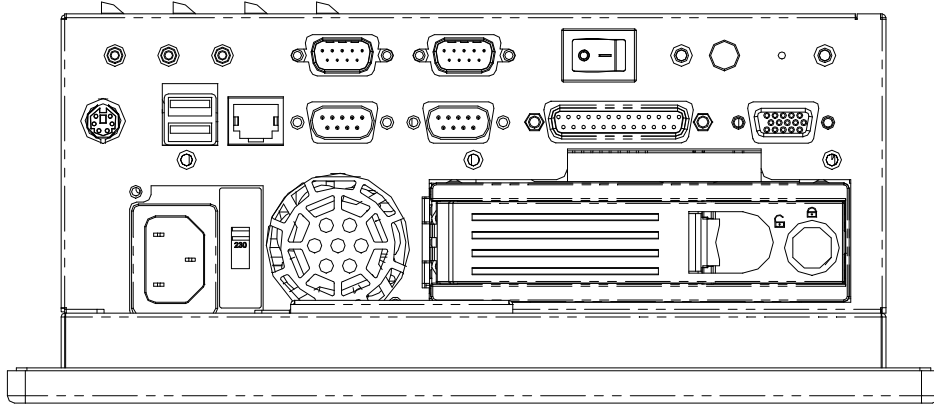

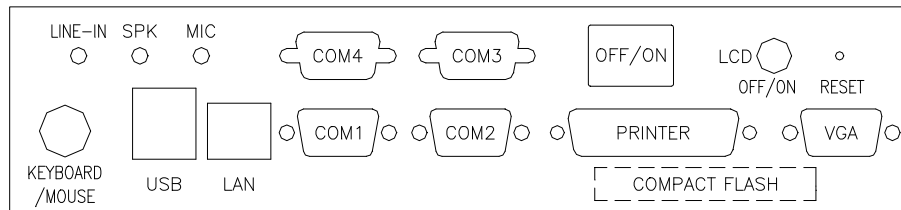**Warning:** Before any installation/un-installation, please notice any effects of static electricity.

The Reverse Side of the Rear Cabinet

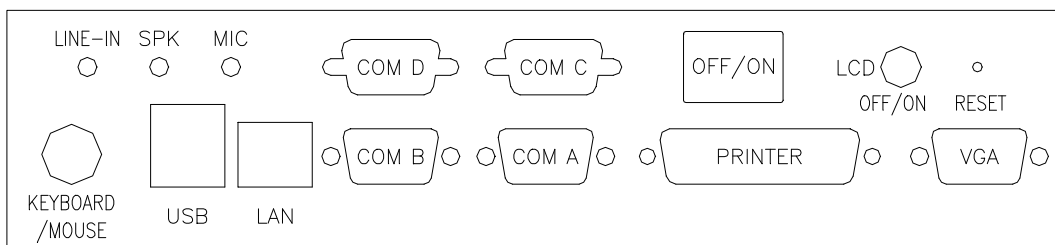The following figure shows the reverse side of the rear cabinet.
One HDD and one power supply are accessible for operation on the driver frame.
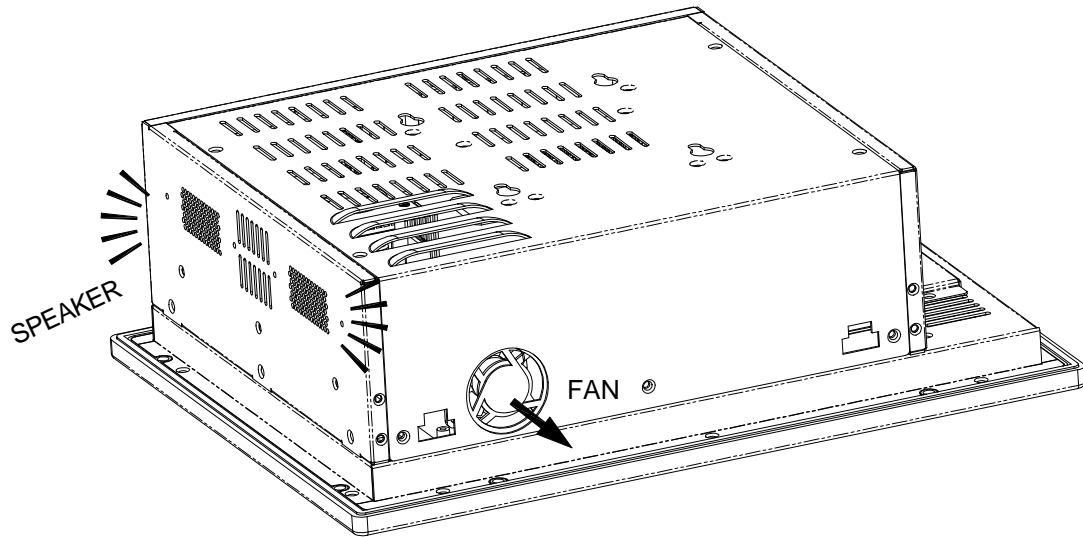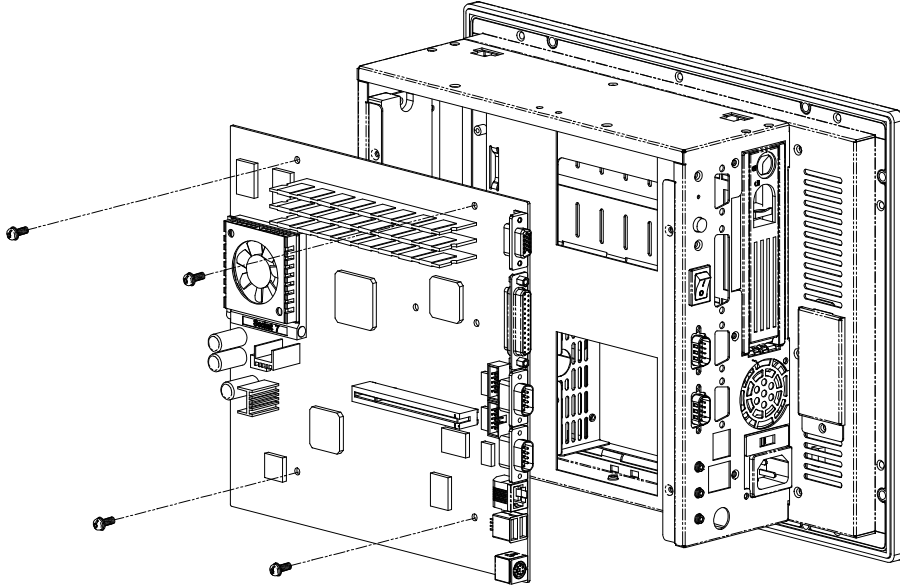

✎✎ POS-370

✎✎ POS-566

The Side View of PPC-5020

On the side panel, you will find one fan and two speakers. Please bear this in mind when mounting the unit. It is placed in to the cabinet and then fastened by four screws.

2.2 POS-566/370 CPU Board Installation

To install the POS-566/370 CPU Board, you have to place the board into the cabinet and then fasten it by four screws.
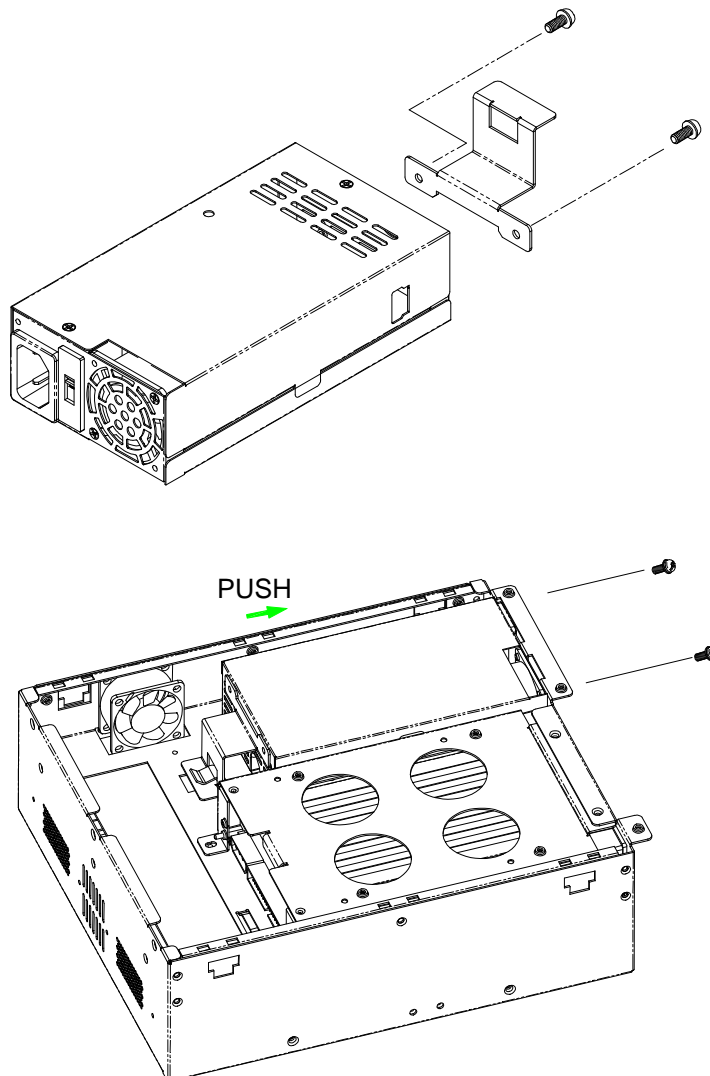
2.3 Power Supply Installation

The standard Power Supply for **PPC-5020** is **ACE-816APS**, which needs to be fastened to the power bracket by 2 screws, and to be fastened in the cabinet by pushing it as far back as possible, as shown in the diagram below.

Input Voltage: 90V to 264VAC

Output rating:

Nominal	Regulation	Ripple/Noise	MIN.	MAX.
+3.3V	+/-5%	50mV	0.3A	10A
+5V	+/-5%	50mV	1.0A	14A
+12V	+/-5%	120mV	0.3A	4.2A
-12V	+/-10%	120mV	0.0A	0.3A
+5VSB	+/-5%	50mV	0A	2.0A

Total Output of +3.3V and +5V may not exceed 85W.

2.4 Drive Disk Installation

The following sections will inform you how to install the power supply and HDD.
As the power supply and HDD are installed in the cabinet, they are reached by opening the back cover.
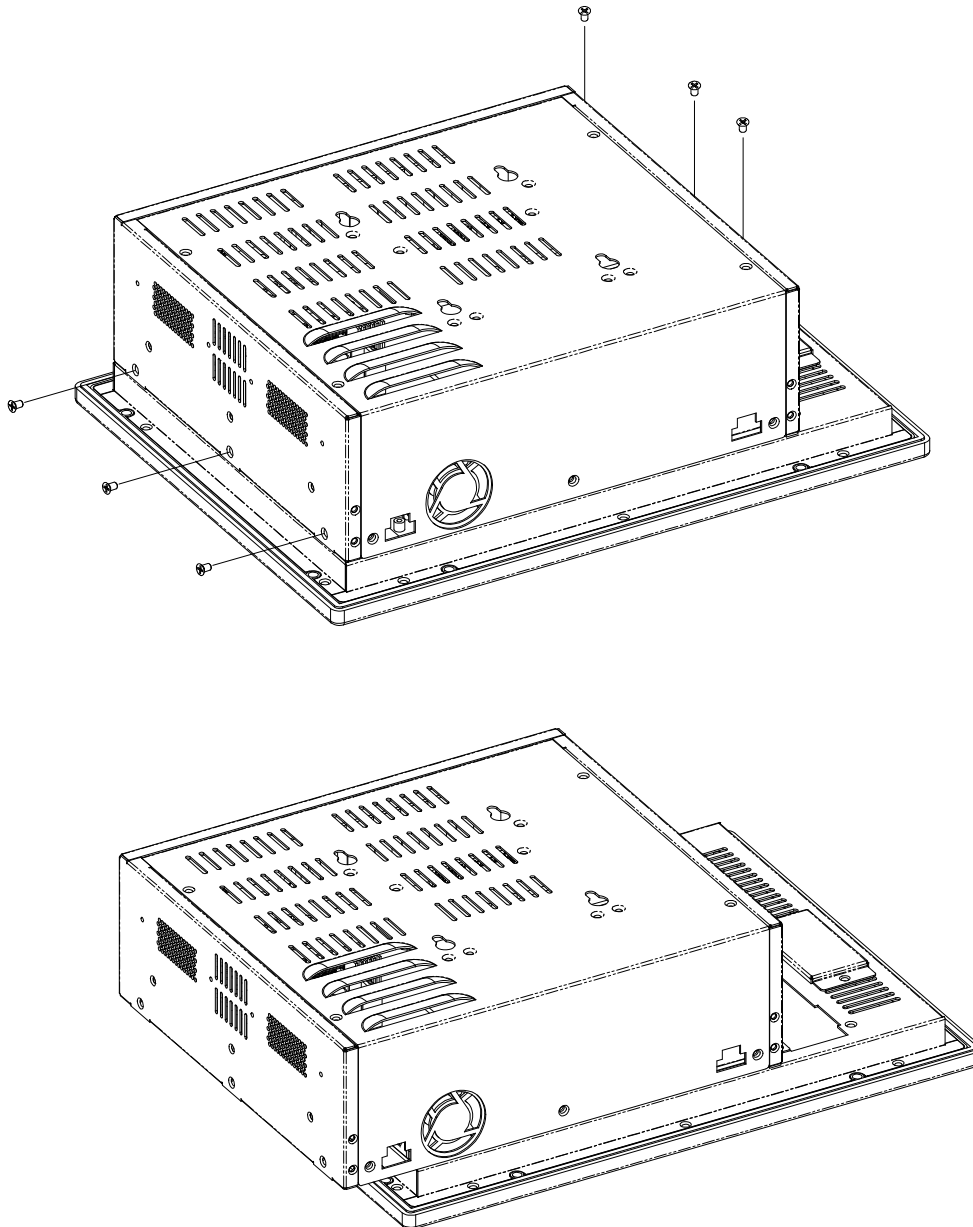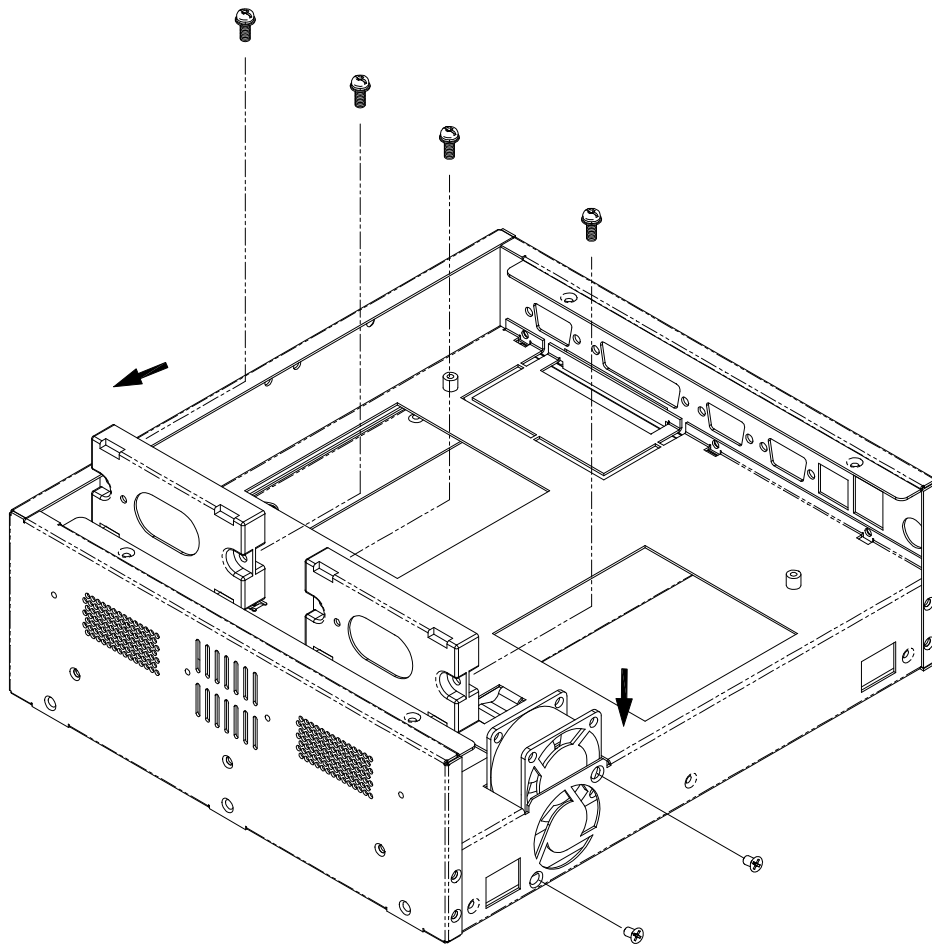
HDD Installation

To install the HDD, first fasten the HDD to the HDD cage. Then, push the HDD cage into the HDD bracket and fix it by key lock.
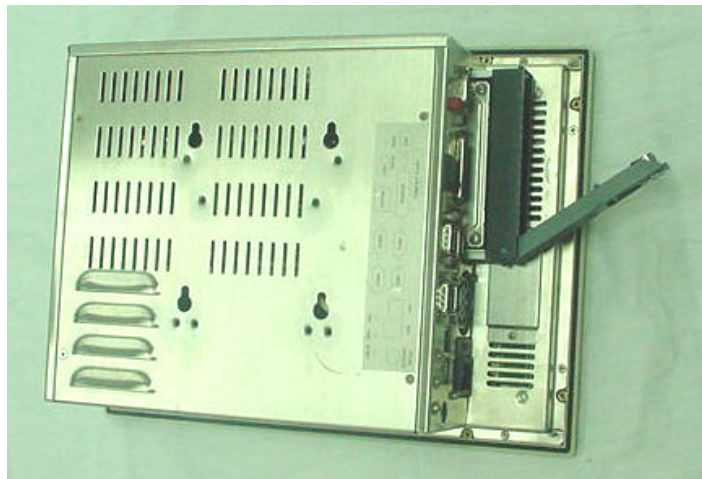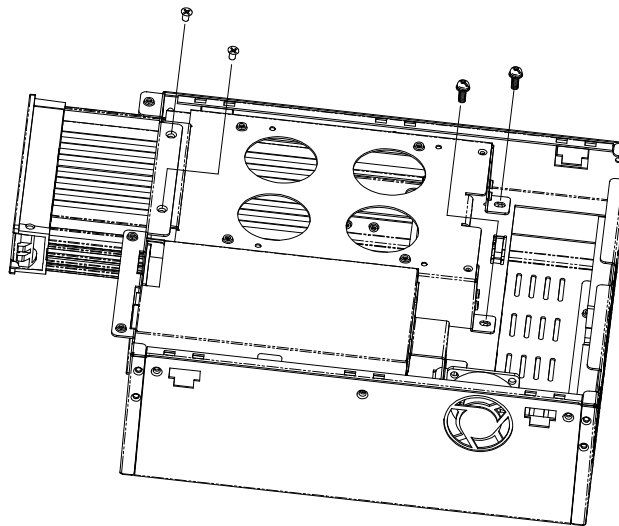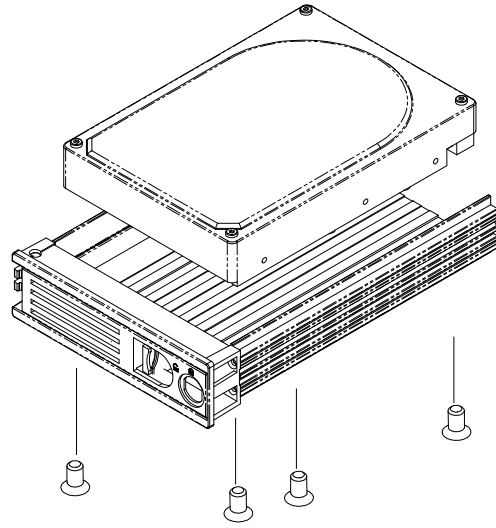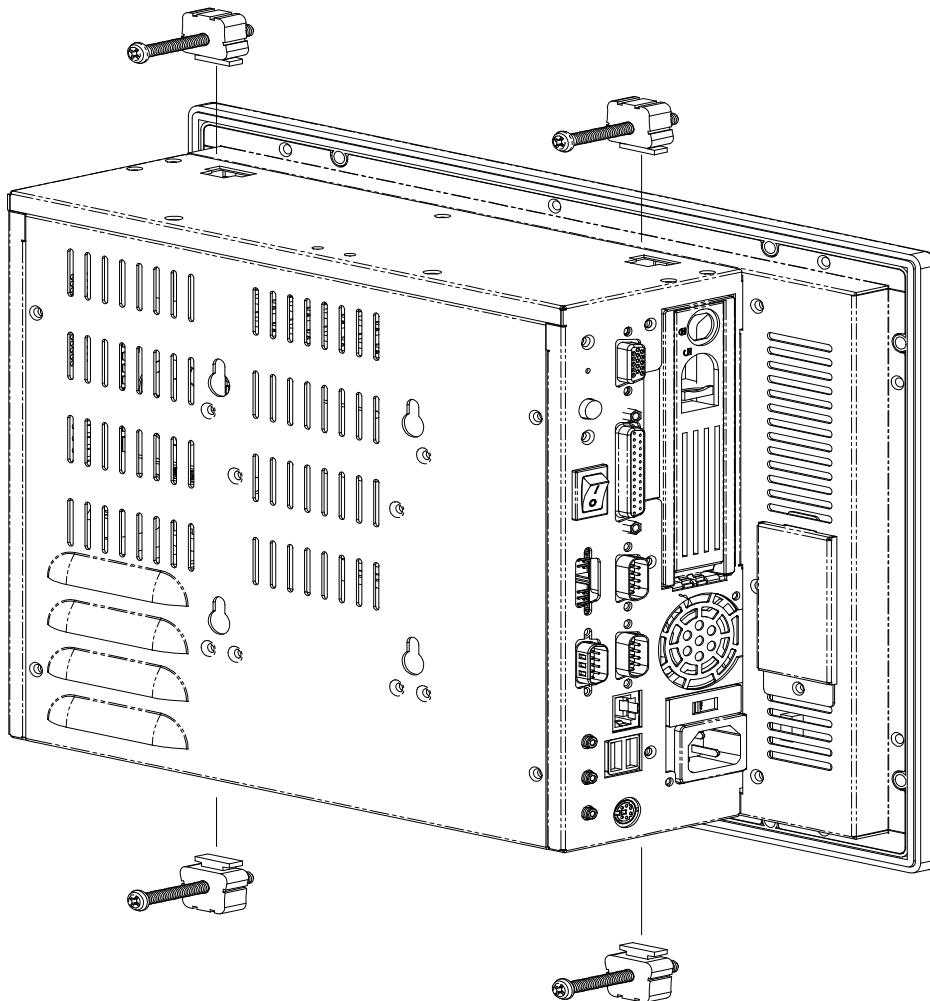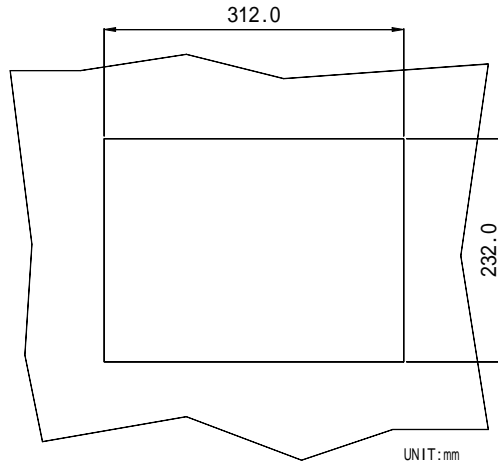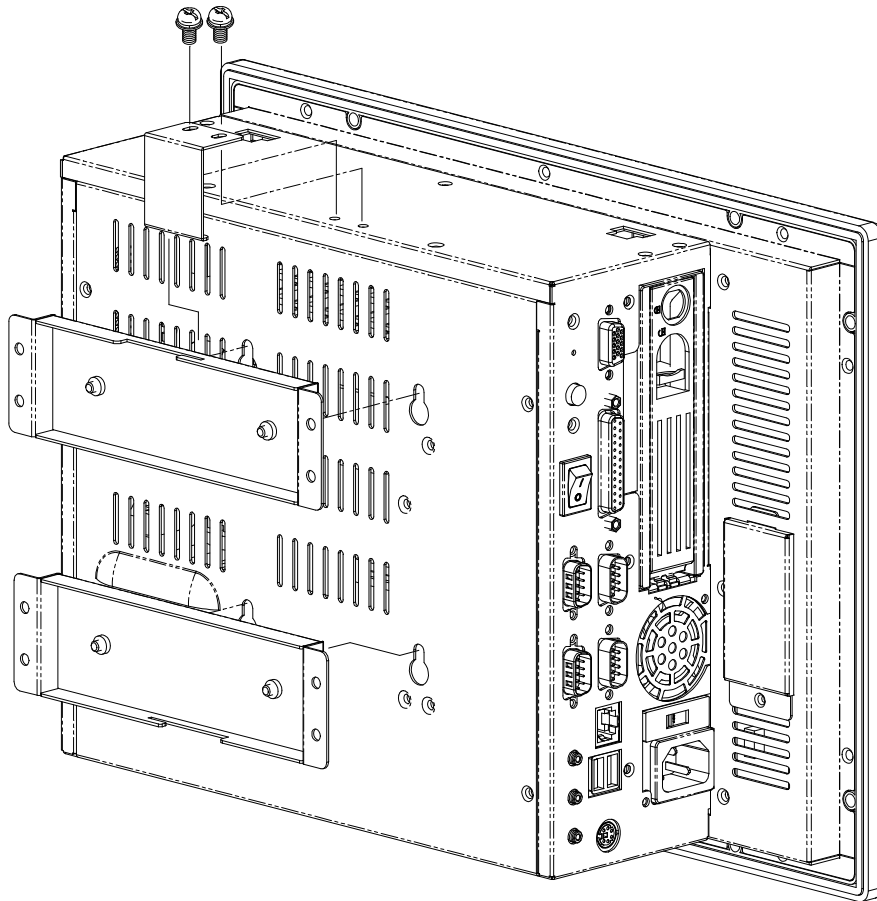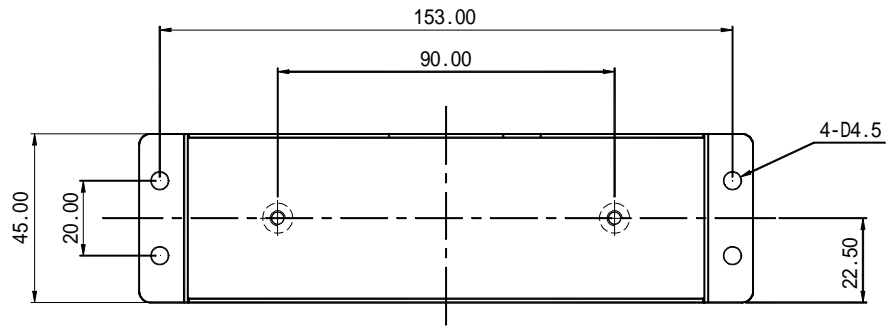
2.5 Speakers and Fan Installation

2.6 Panel Mounting

PPC-5020 is designed for panel mounting. Before mounting the PPC-5020 into panel, you have to check the cut out dimension first. Then mount it into panel by four supporters. Please refer to diagrams below.
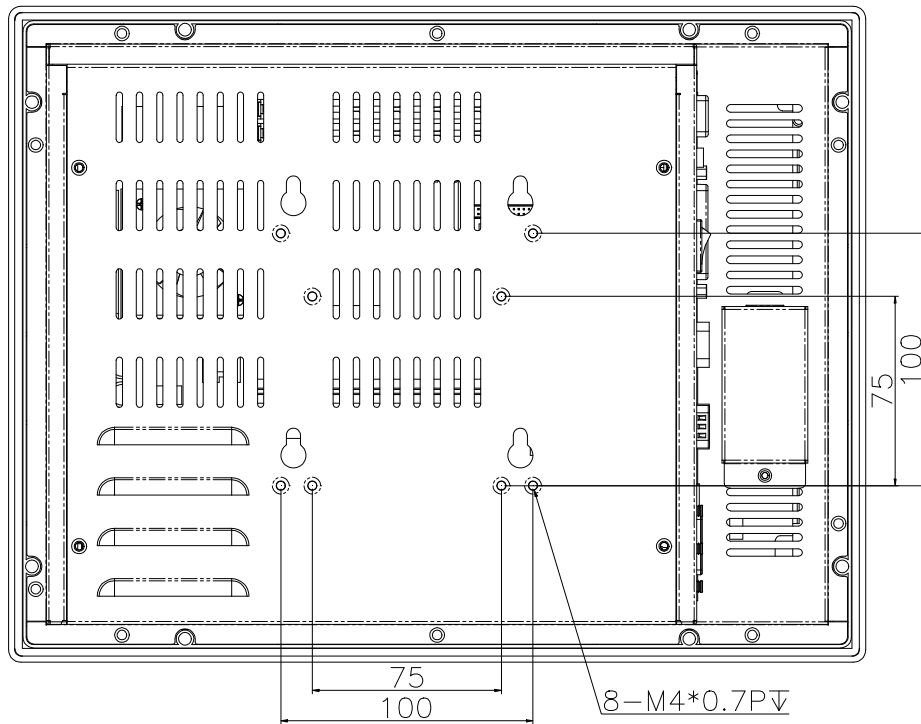
312.0

232.0

UNIT: mm

**PPC-5020 is suitable for Wall mount.**

2.7 Arm Mounting

PPC-5020 is not only suitable for panel and wall mounting but also has 75/100mm interface pads, making it ideal for arm mounting; and the specification conform to proposed VESA standards.

2.8 Rack Mounting

DM/SRM/PPC serial product provide option rack mount kit for industrial Rack. The following diagram shows how to mount DM/SRM serial product onto the 19" Rack.

STEP 2

STEP 1

Rackmount-Kit

STEP 4

STEP 3
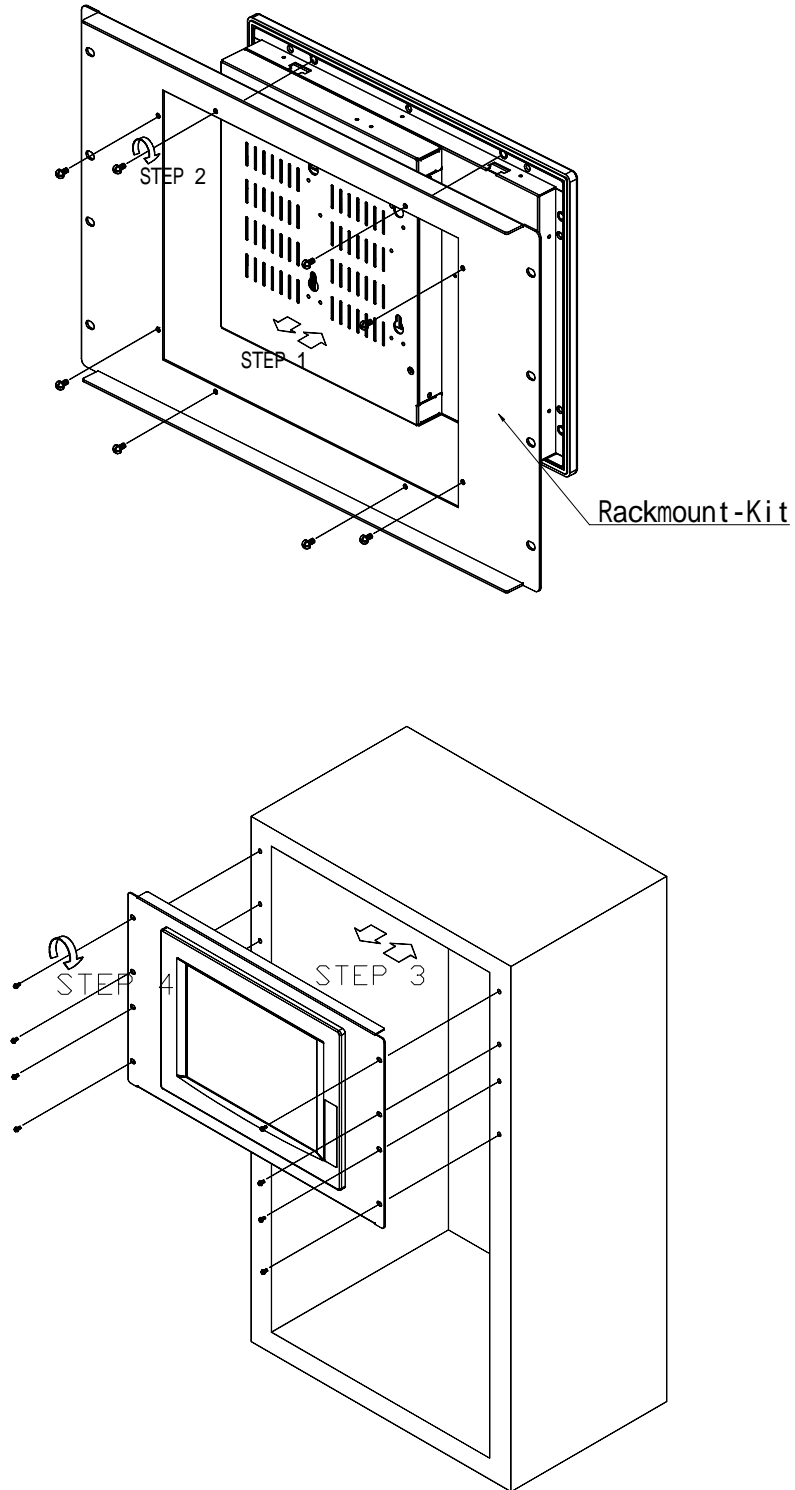
Appendix A   Power Supply

Industrial Power Supply: ACE-816APS series Power Supply

High reliability triple output switching Power Supply (just 40.6mm in height)

Standard Power Supply: ACE-816APS

Efficiency: 68% min

PROTECTION: Over Voltage/Load protection and short circuit protection

Operating temperature:0°C to 50°C

Vibration: 5~17Hz, 0.1" double amplitute displacement.

   17~640Hz, 1.5G acceleration peak to peak.

Shock: 10G for 11ms once on each X, Y, and Z-axis

Safety: - UL1950

   -TUV EN60950 OR VDE EN60950

   -CSA 22.2 NO.234 LEVEL 3

   -IEC 950

   -CE

   -NEMKO EN 60950

EMI:- FCC 15 Subpart J,class B Vac operation.
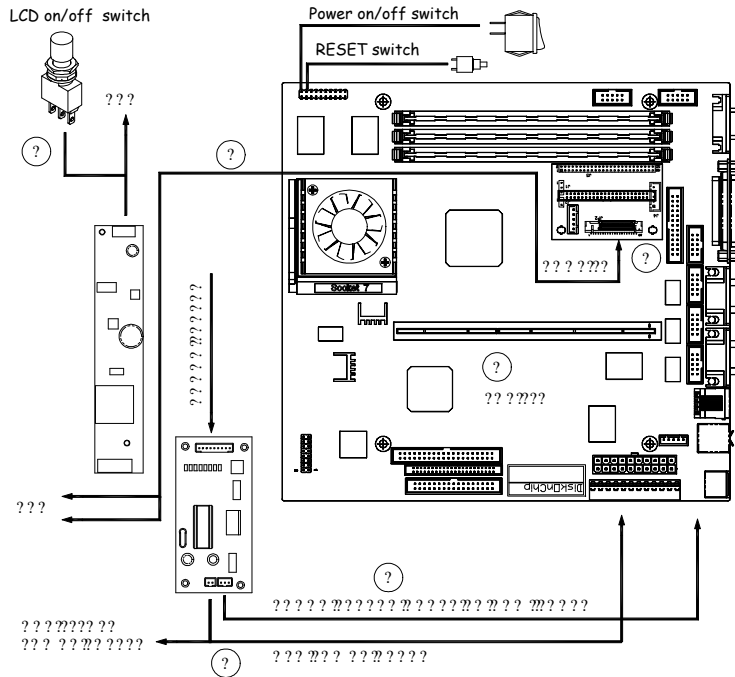
   - CISPR 22 CLASS 'B'230 Vac operation.

Power connector: ATX
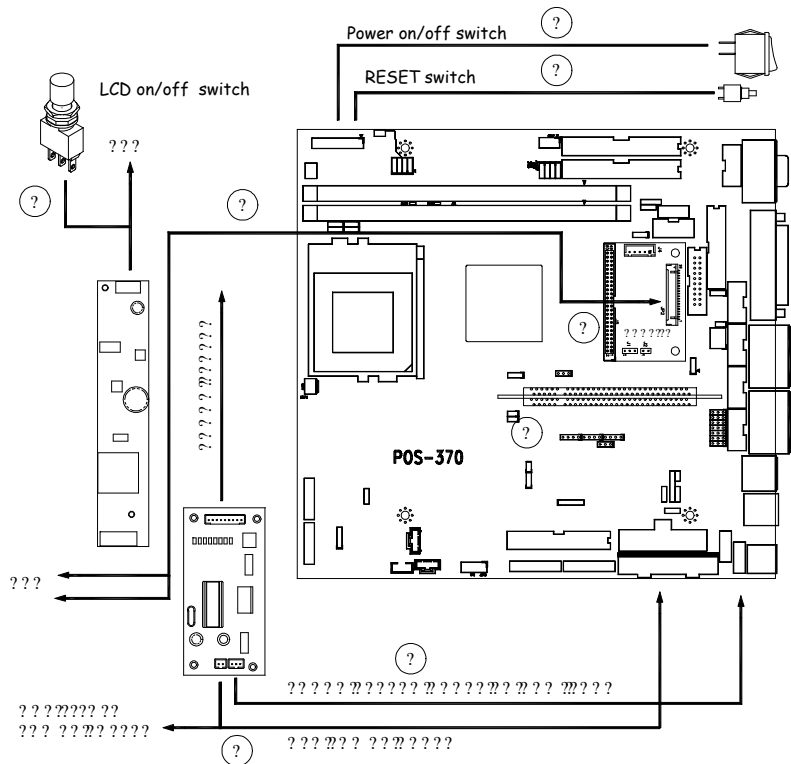
Built-in ball bearing fan.

Warning: Whenever you need to take off a part for either maintenance or upgrading purpose, you should switch off the power supply and unplug the power cord first.

Appendix B   Display Interface

A-1: For POS-566

B-2: For POS-370

Appendix C Touch Panel Controller

The optional touch screen provides RS232 interface and the wire diagram of the controller is shown in the diagram below.