

PPC-5010

6.4" LCD Wafer Station

Ver 6.0

Copyright Notice

This document and product is copyrighted, April 2001, by ICP Electronics Inc. All rights are reserved. No part of this manual may be reproduced, copied, or translated without prior notice to ICP Electronics Inc.

The information provided in this document is for reference only. We do not assume any responsibility arising out of the application of the products. This manual is subject to change without any notice.

PPC-5010 and ICP are trademark of ICP Electronics Inc.

Table of Contents

Chapter 1 Product Information

- 1.1 General Information
- 1.2 Product Specifications
- 1.3 Mechanical Dimensions
- 1.4 Indication of components

Chapter 2 System Setup

- 2.1 LCD Module Installation and Connection
- 2.2 Wafer-5XXX and Power Supply Installation & Connection
- 2.3 Disk Installation
- 2.4 Chassis Installation

Chapter 3 Maintenance

- 3.1 Cards and LCD
- 3.2 Power Supply
- 3.3 Disk Drives

Appendix A Exploded Diagram

Appendix B Display Interface

APPENDIX C Accessories Kit List

Chapter 1 Product Information

1.1 General Information

The PPC-5010, 6.4" LCD panel PC, takes advantages of modern flat-panel displays, wafer series SBC and power supply for minimum size. It is an IBM PC/AT compatible computer specially designed to meet the Industrial applications.

Cards

PPC-5010 is designed for Wafer-5XXX or other Wafer series SBC.

LCD Display

The PPC-5010 is equipped with a 6.4" TFT LCD.

Power Supply

The standard industrial power supply of PPC-5010 is equipped with ACE-855A. Power switch is put on the side of the station.

Touch Screen (option)

Dynapro resistive touch screen.

2.5" HDD

It is suggested to be equipped with IEI Flash Disk IFD-250.

1.2 Product Specifications

- Designed for wafer-5XXX or other Wafer series SBC.
- Disk Drive Bay: Support one 2.5" HDD. It is suggested to be equipped with IEI Flash Disk IFD-250.
- Best solution for wall-mount man machine interface.
- Space for one more PC/104 module.
- Cooling Fan: one 40mm fan.
- Dimensions : 200(230)mmx146(136)mmx84.2(87.2)mm
- **LCD Display:** 44-pin LCD connector interface to wafer series SBC High brightness.
- Support screen reverse function.

Display Model	Prime View
TYPE	TFT
DIAGONAL	6.4 inch
BRIGHTNESS	300 cd/m ²
RESOLUTION	640x480 with 18 bits colors

- **Dynapro Touch Screen (option)**

Type: Analog Resistive

Resolution: Continuous

Light transmission: Typical value 72%

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

4-wire touch screen

Support driver: Supports DOS, Windows 3.1, 95, 98, NT.

- **Industrial Power Supply**

PPC-5010 is equipped with ACE-855A, 55 Watt industrial power supply. The optional power supplies can be: ACE-855C +24VDC input power supply or ACE-845V +12VDC input power.

Shock: 10 G peak acceleration (11 msec. duration)

Safety: meet UL/CSA/TUV

EMI: meet FCC/VDE class A

- **Environmental specifications**

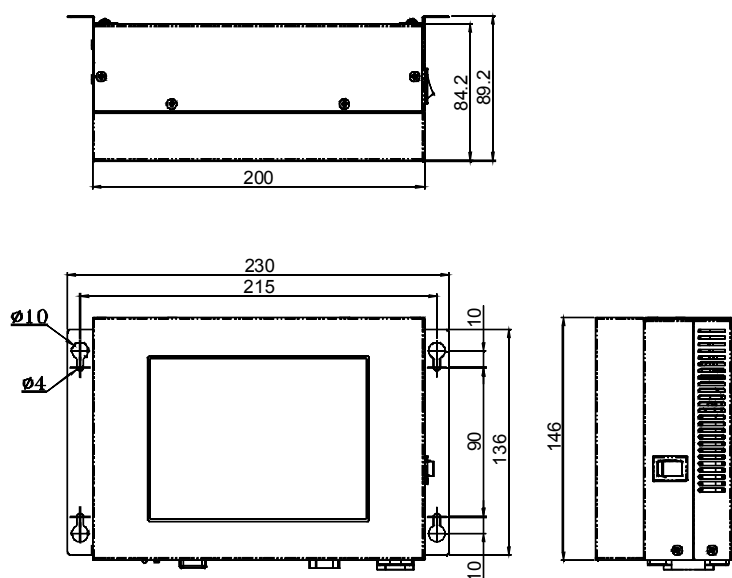
Operating Temperature : 0 ~ 50°C

Relative Humidity: 10-95% @40°C , non-condensing

Vibration: 5 to 17 Hz, 0.1"double-amplitude displacement,
17 to 500 Hz, 1.5 G Peak to peak.

1.3 Dimensions

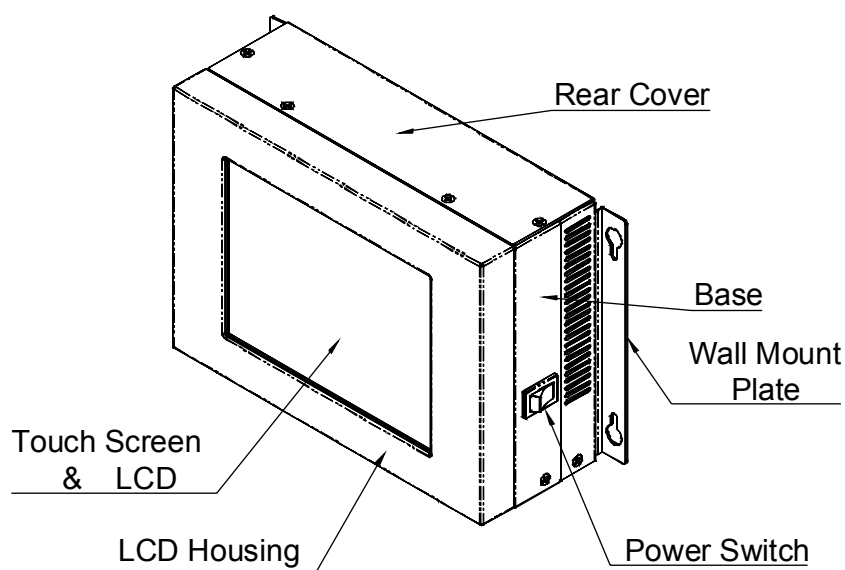
Dimensions : 200(230)mmx146(136)mmx84.2(89.2)mm (LxHxD)

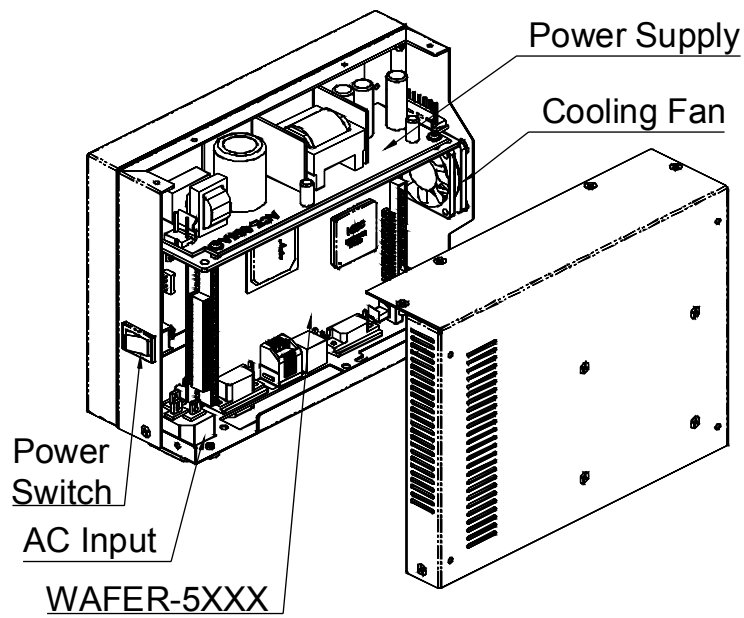
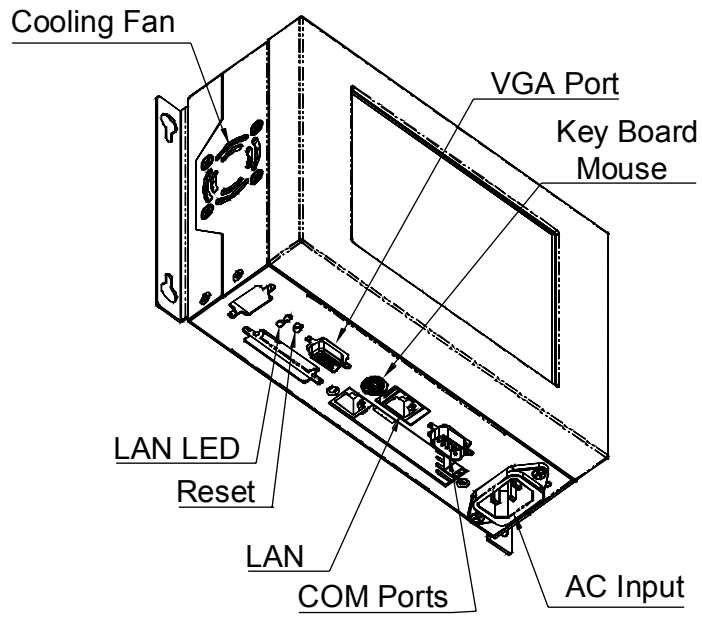


UNIT: mm

1.4 Indication of Components

The figures below indicate the components of PPC-5010 in terms of the location for your reference.

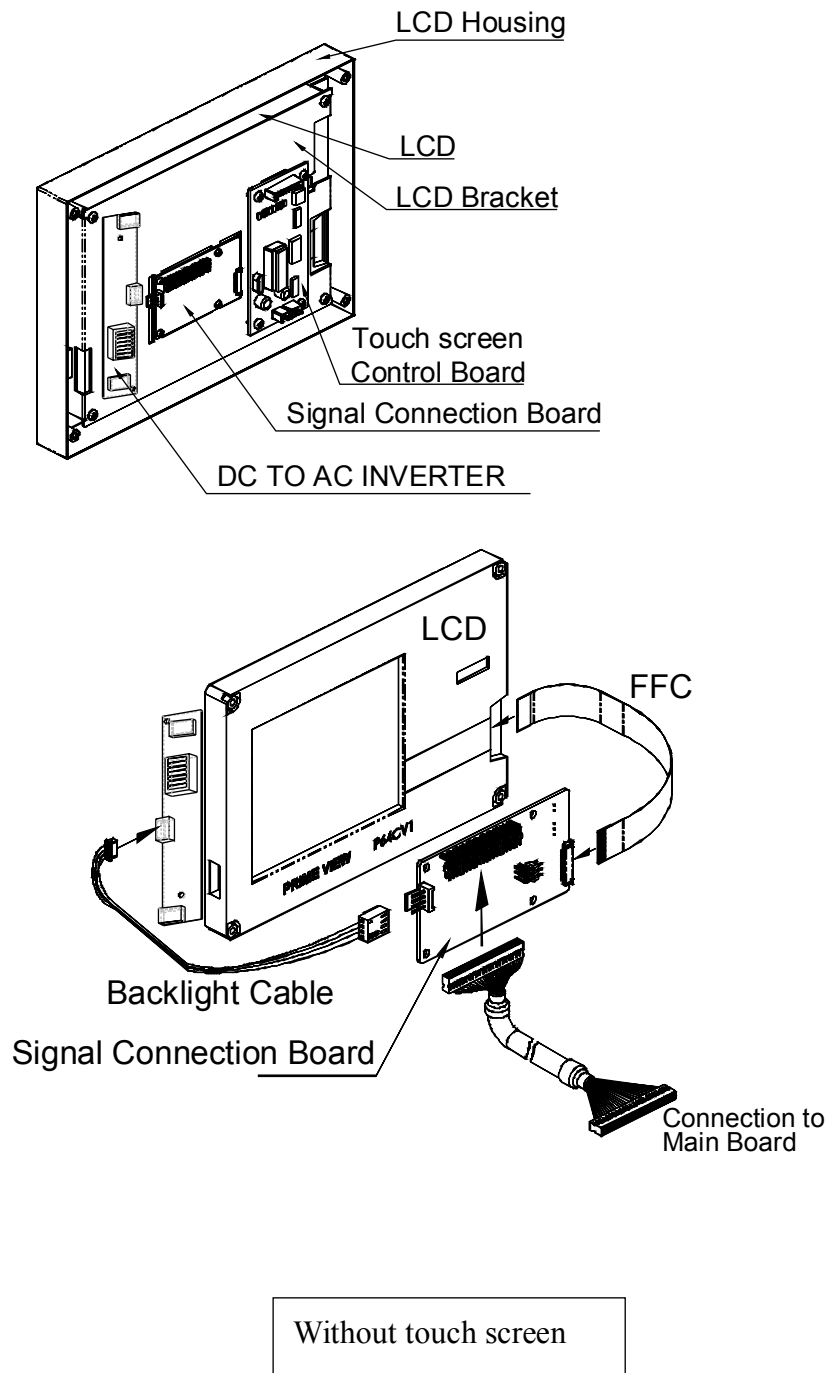


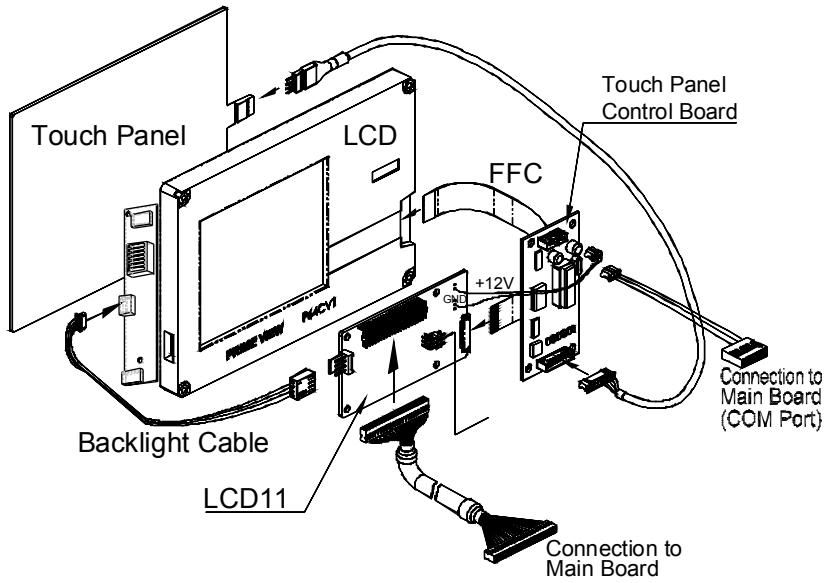


Chapter 2 System Setup

The PPC-5010, 6.4" LCD Panel PC, is provided completed kit for your operation. The following sections of this chapter could help your installation and maintenance.

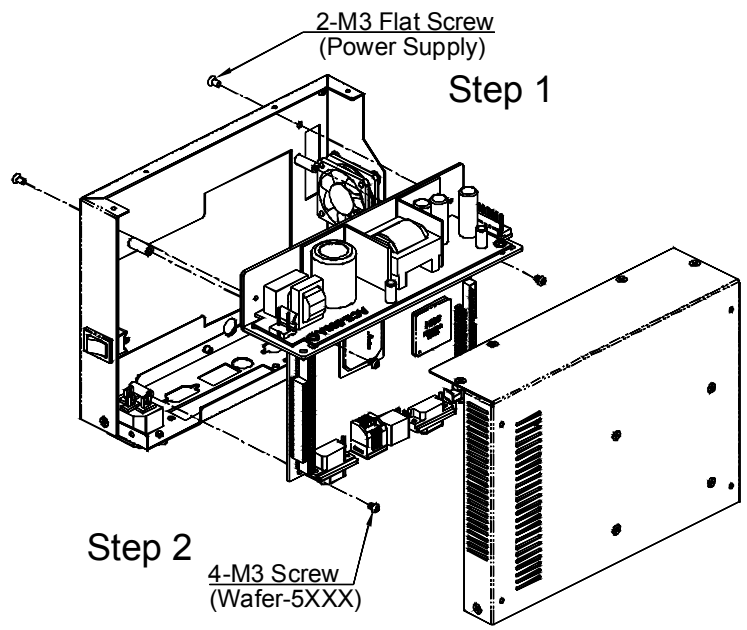
2.1 LCD Module installation & connection

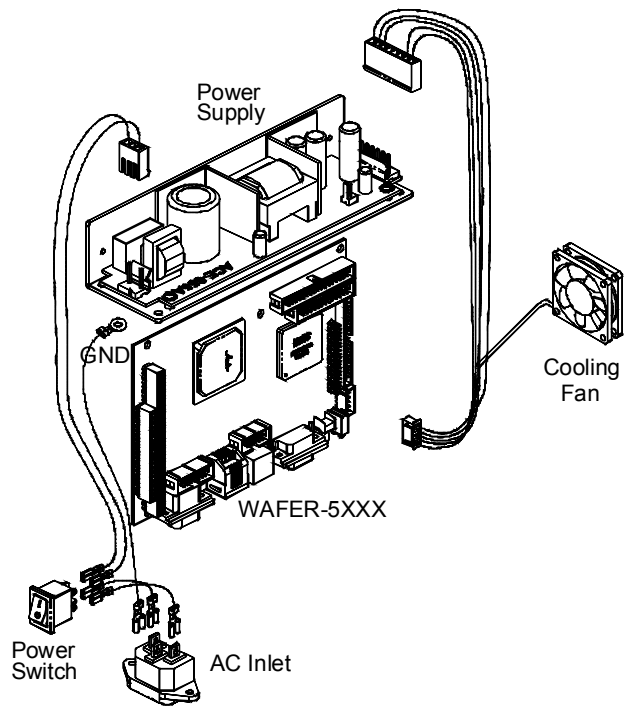




With touch screen

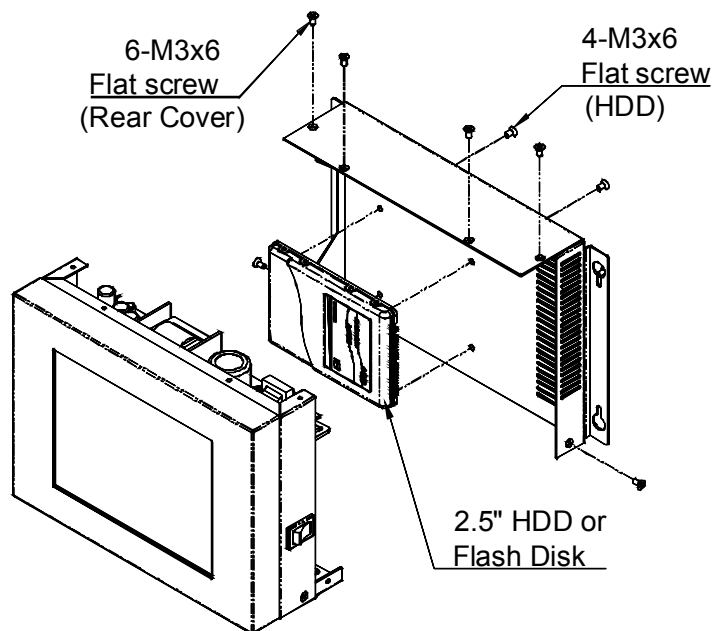
2.2 Wafer-5XXX and power supply installation & connection



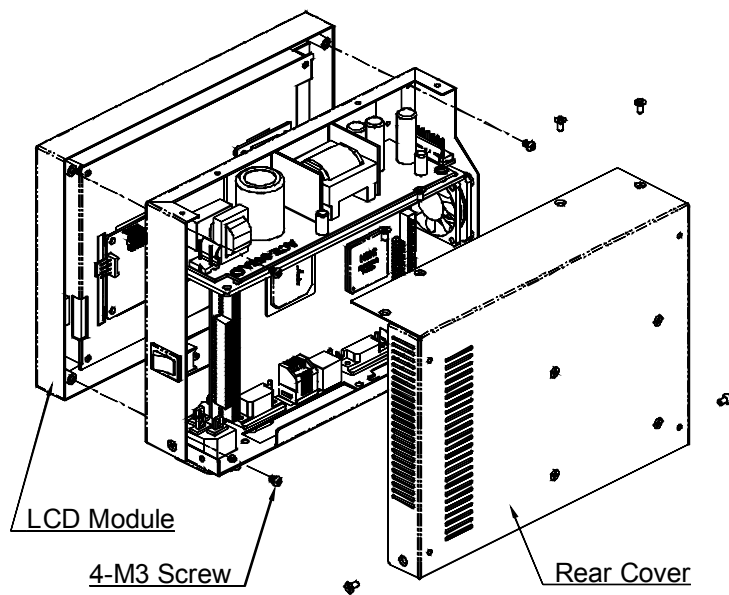
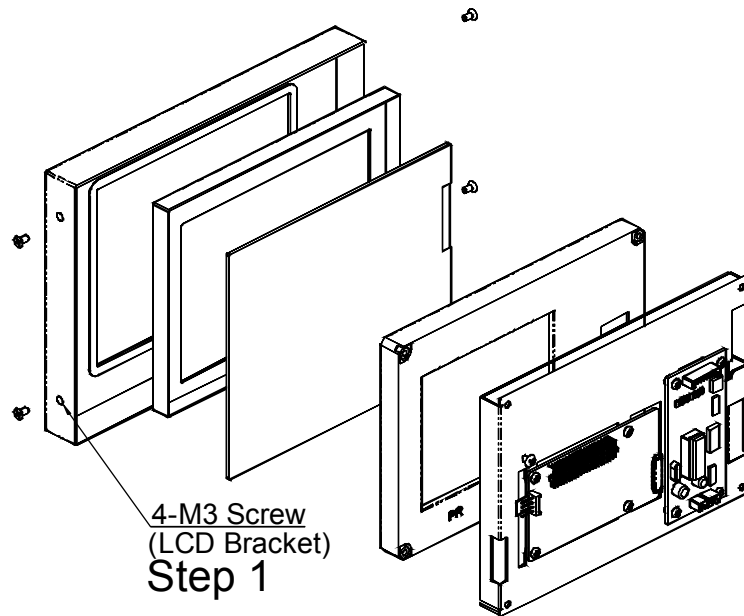


2.3 Disk Installation

Please refer to the following figure to install HDD or Flash disk.



2.4 Chassis Installation



Chapter 3 Maintenance

There are some essential parts you need to know during the operation for the purpose of maintenance or upgrading.

3.1 Cards and LCD

PPC-5010 is equipped with a wafer-5XXX card and 6.4" LCD. You need to unfasten the some screws and disconnect interface cables to take it out for maintenance or upgrading. Please refer to the section 2.1, 2.2 and 2.3

3.2 Power Supply

PPC-5010 is equipped with ACE-855A, 55 Watt industrial power supply. So you need to unfasten the some screws to take it out for maintenance or upgrading. Please refer to the diagrams of section 2.2

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.

Specifications

✿ Input Table :

Model	Input Voltage	Input Current
ACE-855A	85 ~264V AC, 47 ~ 63Hz	2A@115V AC or 1A@230V AC

✿ Output Table: (at 50°C):

Model	Rated Load		Max. Output	
	+5V	+12V	+5V	+12V
ACE-855A	8A	1.2A	10A	4A

✿ Inrush Current (ACE-855A) :

Not exceed 115V@30A AC or 230V AC@60A

✿ Ripple and Noise : Less than 1% of output voltage

✿ Line Regulation : The line regulation for each outputs are less than $\pm 1\%$, while measuring at rated loading and $\pm 10\%$ of input voltage changing

✿ Load Regulation : Less than $\pm 3\%$ @+5V, $\pm 5\%$ @+12V

✿ Efficiency : Higher than 70%

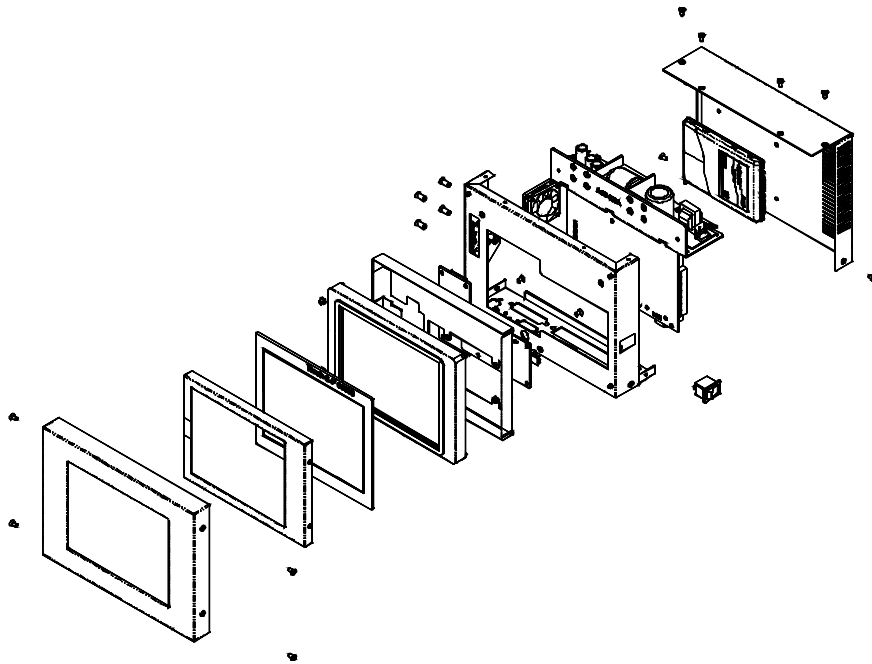
✿ Hold-up Time (ACE-855A) : 16ms (typical)@115V AC

- ✧ Altitude : 0 ~ 10,000ft
- ✧ Protection : Over voltage protection. The trip point is around 5.7V ~ 7.0V output
- ✧ Vibration : 10 ~ 55Hz at 2G 3min. period, 30 min. along X, Y and Z axis
- ✧ Impact : 10G for 20ms once on each X, Y and Z axis
- ✧ MTBF : – ACE-855A : 335,874 Hours
 - ACE-855C : 327,482 Hours
 - ACE-845V : 339,662 Hours
- ✧ Safety : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950
- ✧ EMI : Meets FCC docket 20780 curve "B", EN50081-2 : CISPR curve "B"
- ✧ EMS Standard (Design to meet the following limits) :
 - EN 50082-2
 - IEC 801-2 8KV (Air Discharge) criteria B
 - IEC 801-3, 10V/M criteria B
 - IEC 801-4, 2KV criteria B
 - IEC 801-5, 2KV criteria B
- ✧ Operating Temperature : -20° ~ 70°C
(Derating curve will occur 50° ~ 70°C)
- ✧ Storage Temperature : -20° ~ 85°C
- ✧ Dimensions : 50.5(W) x 37(H) x 177.5(D)mm; (2" x 1.5" x 7")

3.3 Disk Drives

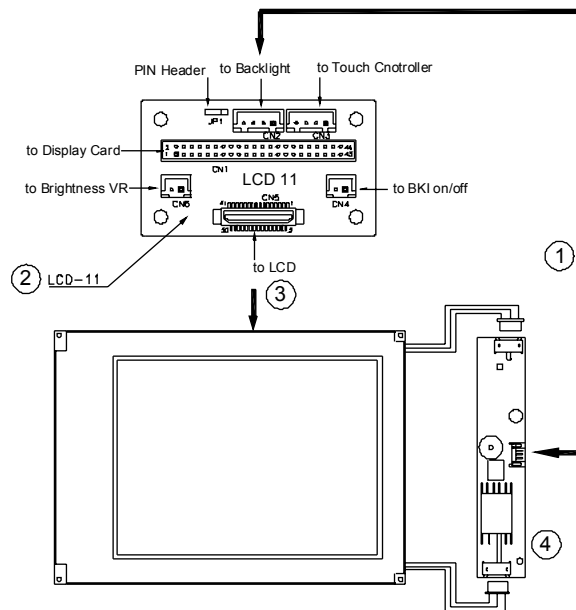
PPC-5010 provides one 2.5" HDD space. It is suggested that PPC-5010 is most suitable to work with IEI Flash Disk IFD-250 that it is a reliable disk against with shock, vibration and high working temperature.

Appendix A Exploded Diagram



Appendix B Display Interface







ITEM	PART NO.	DESCRIPTION	Q'TY	REMARK
1	32100-036900	Wire Cable	1	Backlight
2	131LCD11-00-020	LCD-11 Board	1	
3	32000-000048	31 Pin Cable	1	Display Signal
4	142PLCD19062-00-010	INVERTER	1	Display Model



APPENDIX C Accessories Kit List

1. Manual
2. Screws
3. Power cable
4. Wall mount

Contend of Accessories kit:

	1	2
	Manual	Screws set
		  
Q'ty	1	1. M3*6 Round with washer x15 2. M3*5 Flatx10 3. copper pillar x10
	3	4
	Power cable	Wall mount
		
Q'ty	1	Wall mount x2