Table of Content

1. Function Description

This power supply is designed for personal computer. There are six DC outputs: +5V, +12V1, +12V2, +12V3, -12V, +3.3V & $+5V_{SB}$, and it provides power to all computer systems and peripherals with maximum protection.

Here are some of the key features:

- Full Range Input Voltage (OPTIONAL)
- Active Power Factor Correction (OPTIONAL)
- Surge Current Protection
- Input Transient Voltage Protection
- Over Voltage Protection
- Over Load Protection
- Short Circuit Protection
- Low noise design ***

  Compare with the conventional power supply which hires 8cm fan assembled at the side of chassis, the power supply is assembled with a 12cm fan horizontally located at the top chassis, with bigger fan blade, and just right assembly location, it cools down the heating components more effectively, and much low noise also gained.

2. How to Setup

It is rather simple to install this power supply to your precious computer tower. Follow the steps below to finish the setup.

Step1: Open the computer tower cover; put the power supply into the corresponding location of the tower, and then use right screws to fix the power supply to tower.

Step2: Put the Main Power Connector, ATX 12V Connector, , Peripheral Connectors, Floppy Connectors, PCI-Express Conntector and many others (when available) to the corresponding male sockets such as main-board, peripheral devices (i.e. HDD, CDROM etc.) and floppy drivers respectively. When you connect connectors, please pay attention to the orientation of them because of the different hole sizes. Find the proper orientation and push down firmly making sure that the pins are aligned.

3.Specifications

3.1 InputRequirements

The power supply shall operate as below :

115V (100V min-120V max) ,230V (200V min-240V max) .50-60Hz.

3.2 DC Output

Power distribution configuration:

Model	CX1-500B	CX1-600B
DC O/P Load	Max 500W	Max 600W
+5V	22A	24A
+3.3V	21A	24A
+12V1	17A	18A
+12V2	17A	18A
+12V3	12A	15A
-12V	0.5A	0.5A
$+5V_{SB}$	2.5A	2.5A

3.3 Protection

The power supply itself is designed with short circuit, over voltage, over load and functions described as below :

3.3.1 Short Circuit Protection

A short circuit on any DC output will cause the power to latch. The power supply will withstand a continuous short circuit to the output without damage or overseers to the unit. The $+5V_{SB}$ can be shorted indefinitely and will recover automatically when the short is removed.

3.3.2 No Load Operation

No hazardous conditions or damage to the supply will occur with all of the DC output connectors disconnected from the load.

3.3.3 Over Load Protection

When the total load exceed 130%~160% of the maximum output current, the power supply shall be latched into the state of shutdow

3.3.4 3-Band Thermal Management System

H(High):use by maximum system utilization,cooling down effectively.
A(Auto):PSU regulates fan speed automatically.(Recommended)
L(Low):use by low system utilization,like stand-by mode,etc.When temperature increases fast,PSU switches automatically to Level A(Auto).

3.4 Physical Environment

Operation Conditions

The power supply shall be capable of continuous operation and meet all electrical specification without need for adjustment when subjected to the following environmental conditions:

	Temp. Vs Load Condition	Humidity
Operation	0 ~30℃@Full Load	10% ~90%RH
	-20℃ ~80℃@90% Rated Load	
	-20℃ ~80℃@80% Rated Load	
Storage	-20℃ ~80℃	5% ~90%RH

No degradation of the power supply shall occur during shipping or storage at the specified condition.

3.5 Regulatory Compliance

Our power supply has been certified to comply with multi-national Safety and EMI.

-- UL, CUL, CSA, TUV, FCC.

4. Precaution

Caution: Unauthorized personnel should not do this to avoid electrical shock!

4.1 Do not open the top cover of the power supply case.

4.2 Please keep the power supply from humidity.

5. Simple Maintenance

If power supply cannot work properly, before send for repair, please check the following items:

5.1 Does power cord indeed plug into electrical outlet?

5.2 Does Input Voltage set in power supply correspond to the main source in your environment?

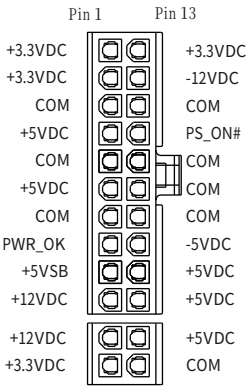
5.3 Please check the output connectors plugging in proper direction and connecting firmly.

5.4 Please turn off the power and turn it on for several times, and the interval must be at least 5 minutes.

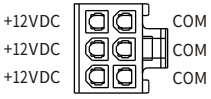
5.5 Having checked above items, if the power supply still does not function, please send it back to your retailer or distributor for repair.

6. Mechanical Diagram

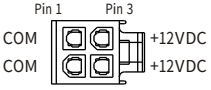
Power Connector Drawing



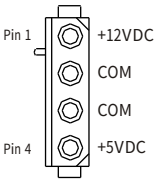
Main P ower Connector



PCI Express
Power Connector

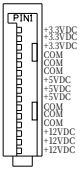


+12V P ower Connector



Peripher al P ower
Connector

Flopp y Dr ive
Power Connector



Serial ATA
Connector

Pin-side view, not to scale