





**EA-650 PLATINUM POWER SUPPLY** 

USER'S MANUAL

# USER'S MANUAL EARTHWATTS PLATINUM SERIES EA-650 PLATINUM POWER SUPPLY

Antec's EarthWatts Platinum is one of the most efficient PSU series ever created. With an 80 PLUS® PLATINUM rating, the highest efficiency mark for power supplies, this PSU achieves up to 93% efficiency and gives you savings unheard of from other power supplies. By using the EA-650 Platinum, you can reduce your electricity bill up to 25%. A 3 year Antec Quality warranty, a whisper-quiet 120mm DBB fan controlled by Antec's renowned Thermal Manager and CircuitShield™'s industry-leading 7 levels of protection make the EA-650 Platinum one of the best choices available. Get the power you need, save money and help protect the environment with Antec's EA-650 Platinum!

#### STANDARDS AND FEATURES

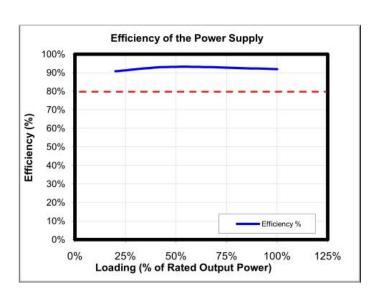
The connectors and power specifications of the EA-650 Platinum PSU are all compatible with ATX12V v2.32 and EPS12V v2.92 specifications. The EA-650 Platinum features Universal Input, which automatically senses when you connect the power supply to any AC power source between 100 - 240V without setting a voltage switch. This power supply also features Active Power Factor Correction (PFC), which improves the power factor value of the power supply by altering the input current wave shape, helping to power transmission across the grid.

#### System Protection

A variety of industrial-grade safety circuitry will help protect your computer: Over Current Protection (OCP), Over Voltage Protection (OVP), Under Voltage Protection (UVP), Short Circuit Protection (SCP), Over Power Protection (OPP), Surge & Inrush Protection (SIP) and Brown-Out Protection (BOP). Sometimes the PSU will "latch" into a protected state. You will need to power off the PSU and clear the fault before it will function again. There are no user-replaceable fuses in your EA-650 Platinum.

# 80 PLUS® CERTIFICATION

80 PLUS® certification is the most widely recognized independent standard in power supply efficiency. An 80 PLUS® certified power supply uses less energy and generates less heat to stay cooler, run quieter and last longer. The EA-650 Platinum has been 80 PLUS® PLATINUM certified to be at least 89% efficient at a wide range of operating loads; this will lower your operating costs and help protect the environment.



# **POWER OUTPUT**

To see the output capacity and regulation for each different voltage, see table 1.

TABLE 1

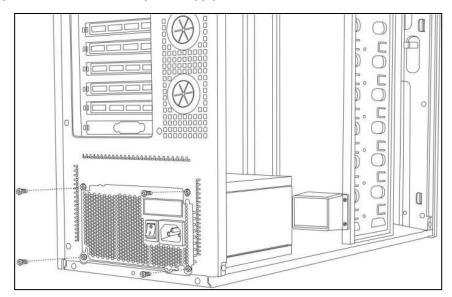
Output Voltage	Load Max.	Regulation	Ripple & Noise
+3.3V	20A	±5%	< 50 mV
+5V	18A	±5%	< 50 mV
+12V1	30A	±5%	< 120 mV
+12V2	30A	±5%	< 120 mV
+12V3	30A	±5%	< 120 mV
+12V4	30A	±5%	< 120 mV
-12V	0.3A	±10%	< 150 mV
+5VSB	3A	±5%	< 50 mV

TABLE 2

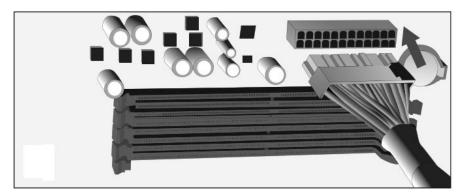
Cable Quantity	Connectors	+12V Rail	Description
1		+12V3	24-pin main connector
1	x1	+12V2	8 (4+4)-pin ATX12V/ EPS12V
1	x 2	+12V4	8 (6+2)-pin PCI-E
1	x 3	+12V1	Molex + FDD
1	x 3	+12V1	SATA + Molex
1	x 3	+12V1	SATA

# **INSTALLATION:**

1. Install the PSU into either the top or bottom of your case with the four screws provided. Refer to your case manual if you are unsure where the power supply should be installed.

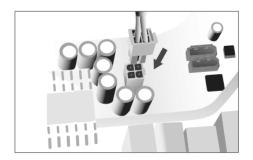


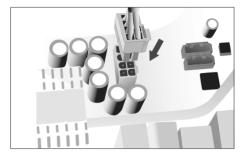
2. Connect the 24-pin main power connector to your motherboard.



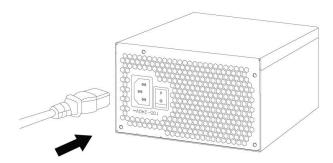
3. Connect the 8-pin or 4+4-pin connector for the CPU. If your motherboard has an 8-pin socket with a cover on some of the openings, we recommend that you remove the cover and use the 8-pin connector.

**Note:** Please also refer to your motherboard user's manual for any special instructions.





4. Connect the AC power cord to the power supply AC inlet. Be sure to use the heavy-duty cord supplied with your PSU.



- 5. PCI-E graphics cards use different amounts of power. For some, a single 6-pin connector is sufficient, making the hardwired connector the preferred choice. More powerful cards use multiple connectors, including the advanced 8-pin PCI-E connector. The 8-pin PCI-E connector on the PSU can be used as either a 6- or 8-pin connector.
- 6. Hard drives, optical drives (CD/DVD/BluRay™) and other accessories will use either the older 4-pin Molex connector or the newer 15-pin SATA connector. 4-pin Molex connectors have two black, one yellow and one red wire. The SATA connector has an additional orange power wire.
- 7. When you have all the connections secured, turn the switch on the PSU to the "|" position.

### **Technical Support:**

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