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Introduction

The power supply has been our trusty and sometimes neglected friend through thick and thin, and nowadays they are finally getting their just due. More and more people are throwing away the cheap power supply that came with their \$100 cases and doing their homework on which power supply will fit their needs.

With all the high-end components available today, it's more critical than ever to have a consistent and stable power supply source. The Hiper Type-R HPU-4B580 580W power supply combines a unique modular design with a shiny blue chrome exterior and awesome performance. Let's see how this beast handles our test rig's power-hungry demands.

Hiper's power supplies came on the scene in the U.S. this year and have been turning heads every since. Their original modular design reminds me of the old school? input devices that were used with some of the first computers in the 80s and early 90s. Their popularity began overseas and exploded when they brought their products over to the U.S. market. Now, Hiper manufactures several types of computer components including cases, power supplies, keyboards, case fans, and cold cathodes, to name a few.

The Hiper Type-R HPU-4B580 power supply allows directional convection, which helps lower the need for forced air from case fans and helps keep the power supply extremely quiet. This power supply was also modded to have modular connections available for up to 12 devices. These innovative connectors are much more secure than other similar products available on the market today. Let's start our review by checking out the power supply's packaging and also give you my initial thoughts on the product.

Packaging and initial thoughts

The HPU-4B580 was packaged in a very unique plastic tool box that could be used later to house all of the modular connectors you might not need to power the components in your rig. The power supply itself is nestled in a very secure foam material; I don't think it's Styrofoam, but something similar. The entire packaging was very creative and went an entirely different direction from other power supply companies. I think it makes Hiper stand out from the crowd and makes the packaging very functional and something you can use over and over again.

My overall thoughts are extremely high because not only



is this Hiper power supply powerful and functional, but it's also extremely attractive and will be an awesome addition to anyone's modded case. It also supports all the latest next generation components like SLI, PCI-Express, and Serial ATA. The extra toolbox included is another handy feature that compliments the power supply very well.



Check out this power supply's features and see if it meets your PC's power needs.



Part III: Features and technical specifications

The HPU-4B580 is crammed with excellent features including fully-sleeved connectors for up to four Serial ATA hard drives, two dedicated PCI-E connectors for SLI setups, and EZ-Grip molex connectors.

Here's the technical specifications from Hiper's website. (<http://www.hipergroup.com>)

Features:

- Unique user friendly modular design to reduce excess cables.
- Ultra quiet 14db noise
- Patented design device extension cables.
- Supports ATX up to v2.2 & Intel BTX configuration.
- Complies with all Intel & AMD CPU specification requirement.
- Gold Plated connector, preventing rust & bad connection.
- Connects up to 4 SATA HDD + 8 other component devices.
- Two Dedicated PCI-E connectors
- EZ-Grip Molex connectors.

Power Train:

- 580Watt continuous output. (Peak Load 630 watts)
- Newest ATX 2.2 with 2 x 12V connection

Chassis:

- Full 1.0 mm Japanese Steel
- Complete Mesh Body
- High Gloss Titanium Coating

Cooling System:

- Active Thermal Controlled Circuitry.
- 120 mm Long Life Chromed Blade Fan with LED.
- 80 Long Life Chromed Blade Fan with LED
- Power-Off Component Protection design.

Power Delivery:

- Aviation Type heavy duty Enamel Modular Connector (Patent Pending)
- exTension Device Connection Cable (Patented Design)
- UL/CE/TUV Grade Cables

- Gold Plated Connector Pins.
- Braided Power Cables.
- EZ On/Off Connectors.
- Serial ATA Connector.

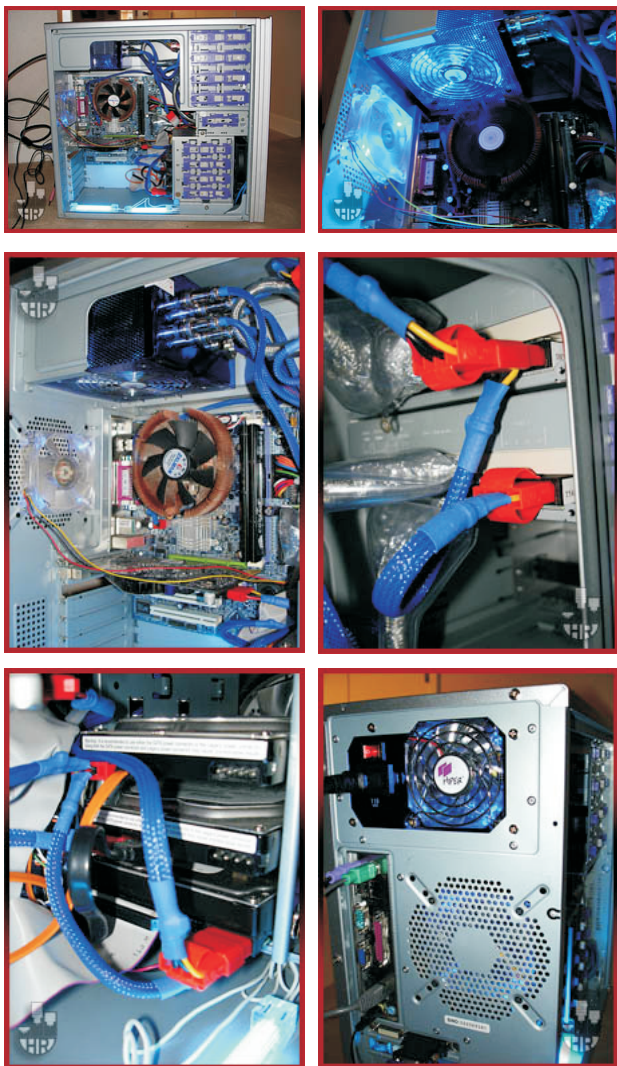
Electrical Protection:

- Over Voltage Protection Circuitry.
- Over Current Protection Circuitry.
- Short Circuit Protection Circuitry.

Output Voltages and Currents:

Output Voltage	Load Range Min / Max (Ripple)
+5V:	2.0A / 36A \pm 5% (100mV)
+12V1:	0.2A / 20A \pm 5% (120mV)
+12V2:	0.0A / 18A \pm 5% (120mV)
-12V:	0.0A / 0.8A \pm 10% (200mV)
+5VSB:	0.0A / 2.5A \pm 5% (70mV)
+3.3V:	0.4A / 30A \pm 5% (70mV)

Part IV: Test rig specs, overall reliability, and performance



Here's the system we put together to stress the HPU-4B580:

CPU: AMD Athlon 64 3000 (Socket 754)
Heatsink: Zalman CNPS7000-Cu
Motherboard: Gigabyte GA-K8VM800M Micro-ATX
System memory: 1GB Corsair XMS PC-3500 (2x512)
Hard drives: 2x Hitachi 80GB SATA, 1x WD 160GB PATA,
1x WD 80GB Passport USB hard drive

Video card: BFGTech 6600GT OC (AGP)
CD-ROM drives: 1x Lite-On DVD-RW LDW-851S, 1x
Lite-On CD-RW LTR-52327S
System Fans: 1x generic 120mm fan, 1x 80mm
CoolerMaster fan
Cold cathodes: 2x 6-inch blue cold cathodes

With all of these hard drives, optical drives, and fans vying for the Hiper power supply's attention, this rig should really stress it out and give us reliable data that will show how this power supply can handle a power-hog system. The only thing I would have done differently with this rig if I had the opportunity was use an SLI or Crossfire setup. I would have also used a few more fans to and a Pentium processor to stress the HPU-4B580 to the max.

After more than six weeks of testing, the HPU-4B580 handled everything I threw at it like a champ. During my testing phase, I used Photoshop and Premiere almost daily as well as Macromedia's Flash and Dreamweaver to help me gauge how reliable this power supply is from a software perspective. All I can say is that it handled it all very well and was well on its way to a great write-up for my review.

Part V: Pros and cons, availability, and conclusion

Man, this power supply couldn't have pleased me more. There are so many pros to discuss and so few cons to talk about that. Check out my bulleted list of pros and cons:

Pros

- Innovated modular design with unique old school connectors
- All cables were sleeved and had EZ-Grip mollex, SATA, and SLI connectors
- Support for SLI setups
- Two internal chrome-colored fans that were quiet and cooled nicely
- The entire power supply chassis was decorated in a metallic-blue finish

Cons

- Sleeved connectors were way too short for a full-size case; need to have different sizes for people to choose from
- No fan controller for power supply's internal fans; this is welcome for people who like to have control of these items

Availability

This was a tough one because as of Oct. 18 I couldn't find any U.S. Online retailers with this power supply in stock. This concerns me somewhat, but I will update this review when I see them pop up again.

Conclusion

With its innovative modular design, blue-chrome finish, and UV-blue sleeved connectors, the Hiper HPU-4B580 power supply will be a nice addition to any high-end system. It handled all of my real-world stress testing extremely well and is still asking for you to throw more at it. Its unique connectors are sure to draw a crowd at any LAN party, but its internals are very soundly-designed and will provide more than adequate power for all your PC's needs. To

To that end, we give the HPU-4B580 a **9.5/10**, our Editor's Choice Award, and Hardware-Review.net's seal of approval!



Hiper Type-R 580W Modular Power Supply

Company: [High performance Group](#)

Product: [HPU-4B580](#)

For further information please visit: <http://www.hipergroup.com>

This review was reviewed by Hardware-Review.



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