

# power and protect



## User's Manual

Manuel de l'utilisateur / Anwenderhandbuch  
Manuale per l'operatore / Manual del usuario

# Neo HE

High Efficiency Power Supply

**Antec Neo HE User's Manual**  
**ATX12V version 2.2 power supply**  
**Models: Neo HE380, Neo HE430, Neo HE500, Neo HE550**

### **Introduction**

The Neo HE power supply series supports the newest ATX12V version 2.2/EPS12V 2.2 specifications. Neo HE has increased output power distribution to match the newest Intel and AMD processor requirements. Furthermore, it includes three +12V outputs that deliver safer and more reliable power to your system's components. Delivering up to 85% efficiency, this power supply saves energy and money on your electrical bill compared to typical power supplies. Also, Neo HE power supplies generate less heat because of the high efficiency which keeps the power supply cooler and prolongs its working life. Also included are a variety of industrial-grade protective circuitries: OCP (over current protection), OPP (over power protection), OVP (over voltage protection), SCP (short circuit protection), and UVP (under voltage protection).

### **Special Quiet Computing Fan Operation**

Neo HE power supplies feature an innovative design that decreases noise during normal use, but which allows for superior cooling capabilities as loads increase. Owing to its ultra high efficiency and low heat generation, Neo HE can utilize a smaller size exhaust fan that rotates slowly and quietly to blow hot air out of the power supply, speeding up as heat increases.

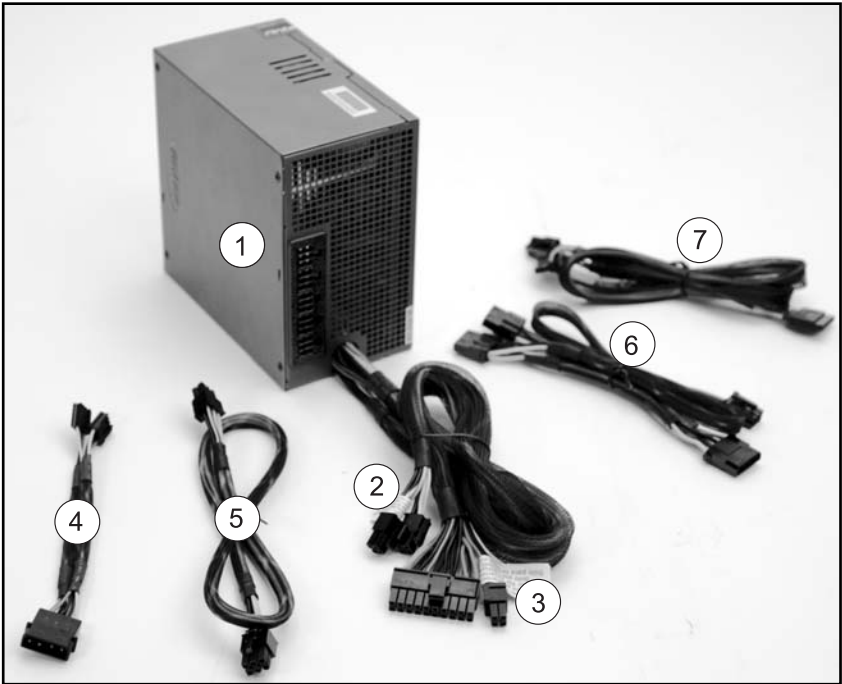
Neo HE power supplies include Universal Input and Active Power Factor Correction (PFC). Universal Input allows you to connect your Neo HE power supply to any AC power outlet between 100~240V without having to worry about setting a voltage switch. Active PFC improves the power factor value of the power supply by altering the input current wave shape, helping the power plant provide power to users more efficiently.

**Connectors:** Neo HE power supplies are ATX12V version 2.2 form factor compatible. The Neo HE380 and Neo HE430 include a 24-pin main power connector with detachable 4-pin connector, and a 4-pin +12V power connector for ATX single CPU systems. Neo HE500 and Neo HE550 include a 24-pin main power connector with detachable 4-pin connector, a 4+4 pin +12V power connector for EPS12V dual CPUs and ATX12V single CPU systems with detachable 4-pin connectors. In addition, all models include six 4-pin peripheral connectors, four 15-pin Serial ATA Connectors, and PCI Express Power Connectors (two for Neo HE500 and Neo HE550, one for Neo HE380 and Neo HE430).

**Power Switch:** This power supply comes with a main power switch. Make sure you turn the switch to the ON (I) position before you boot up your computer for the first time. In normal operation there is no need to turn the switch to the OFF (O) position since the power supply is equipped with a soft on/off feature which turns your computer on and off through the soft switch on your computer case. You may need to turn the switch to the OFF position occasionally should your computer crash and you cannot shut it down with the soft switch.

**Advanced Cable Management System:** Neo HE power supplies feature Antec's Advanced Cable Management System. It allows you to use only the power cables that you need, thereby reducing clutter and improving airflow inside your case. Inside the package, apart from a power cord, you will find the following cables (see Picture 1):

Attached to the power supply, you'll find the following:



Picture 1

1. A main power supply unit with five 6-pin output sockets, for use with the wire sets to power your drives and other peripherals.
2. A 4+ 4 pin +12V connector (Neo HE500 and Neo HE550 only) or 4-pin +12V connector (Neo HE380 and Neo HE430 only).
3. A 24-pin configurable main power connector with detachable 4-pin section for 20-pin applications.

### Advanced Cable Management Wire Set

4. One Y-adaptor with one standard 4-pin Molex peripheral connector at one end and two female Floppy power connectors at the other end.
5. For Neo HE380 and Neo HE430: one set of wires with a 6-pin PCI Express graphic card connector at one end and a 6-pin PSU connector at the other end.  
For Neo HE500 and Neo HE550: two sets of wires with 6-pin PCI Express graphic card connectors at one end and a 6-pin PSU connector at the other end.
6. Two sets of wires with three standard 4-pin Molex peripheral connectors at one end and a 6-pin PSU connector at the other end.
7. Two sets of wires with two SATA drive connectors at one end and a 6-pin PSU connector at the other end. **Note:** The SATA connectors include a +3.3V output so you can power the latest SATA devices.

**Parts list:**

#	Quantity	Part Name	Description
1-3	1	Neo HE power supply	includes 24-pin main connector, 4 pin +12V connector for HE 380 & 430 or 4+4 pin +12V connector for HE 500 & 550
4	2	77 cm Molex connector w/cable	includes three Molex connectors
5	1	14 cm Molex to Floppy connectors w/cable	includes one Molex and two floppy connectors
6	1	60 cm PCI Express connector w/cable (Neo HE380 and Neo HE430 only)	Includes one PCI Express connector
	2	60 cm PCI Express connector w/cable (Neo HE500 and Neo HE550 only)	Include one PCI Express connectors
7	2	73 cm Serial ATA connector w/cable	includes two Serial ATA connectors

**Installation:**

This power supply is backwards-compatible to previous ATX specifications. To make sure you connect your power supply properly, please refer to the user manual supplied with your motherboard and peripherals before connecting the Neo HE to any of your devices.

1. Disconnect the power cord from your old power supply.
2. Open your computer case. Follow the directions provided in your case manual.
3. Disconnect all power connectors from the motherboard and from the peripheral devices such as case fans, hard drives, optical drives, floppy drives, etc.

4. Remove the existing power supply from your computer case and replace it with your new Neo HE power supply.
5. Connect the 24-pin main power connector. If your motherboard uses a 20-pin connector, detach the 4-pin attachment on the 24-pin power connector (see pictures 2 and 3). **Note: the detachable 4-pin section cannot be used in place of the 4-pin +12V connector.**



Picture 2



Picture 3

6. For Neo HE 380 and Neo HE 430: Connect the 4-pin +12V connector.

For NeoHE 500 and Neo HE 550: If you are using a single CPU system, separate the 4+4-pin +12V connector and plug the 4-pin section labeled with "Use this Connector for Single CPU" to the motherboard (pic 4). If you are using a dual CPU system or a system that require a 8-pin +12V connector, snap the 4-and-4-pin connector together before plugging into motherboard (pic 5).



Picture 4



Picture 5

7. In the package, you will find power-supply-to-peripheral Molex connectors. Connect the 6-pin to any of the 6 pin sockets on the power supply and connect the peripheral Molex connectors to your peripheral devices. Repeat as necessary.
8. In the package, you'll find power supply-to-SATA connectors. Connect the 6-pin connector to any of the 6-pin sockets on the power supply and connect a SATA connector to your SATA drives. Repeat as necessary.
9. In the package, you'll find 1 for NeoHE 380 and 430, 2 for NeoHE 500 and 550 PCI Express graphic card connector. It's the only 6-pin connector with 3 yellow wires and 3 black ones. Connect the 6-pin PCI Express connector marked "PCI-E" to your PCI Express graphics card if needed. **Note: Please consult the user manual supplied with**

**your PCI Express graphic card for detailed usage instructions.**

**NOTE:** For Neo HE 500 and Neo HE 550 only. When using dual graphic card systems (i.e. SLI), we recommend that the PCI connectors be attached as follows: one PCI connector to one of the first two 6-pin sockets and the second PCI connector to one of the next three sockets to the right.

10. Connect the power cord to the power supply.

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