

What is Power Combo device?

Phanteks' patented Power Combo is designed to maximize your power output by allowing you to connect two power supplies. Higher end power supply can cost a fortune, but the Power Combo is cost efficient and provides maximum power and efficiency. With the ability to combine two power supplies, the Power Combo can give you a higher maximum power output than all the power supplies in the market while still maintaining stability and performance. A true plug and play, the Power Combo requires no cutting and splicing of the wires.

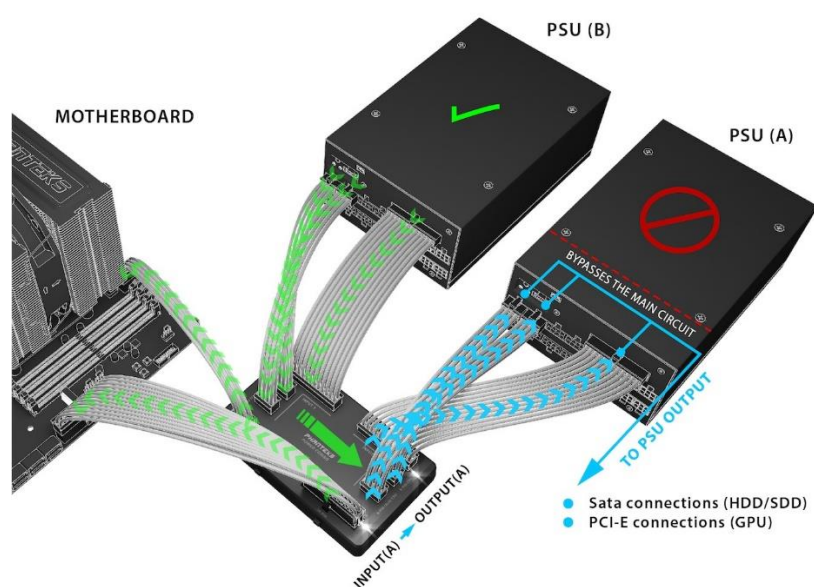
How is the Power Combo more cost efficient than buying a high wattage PSU?

When you are upgrading your system, you will need a more powerful PSU to distribute the power to the components. With the Power Combo, you will be able to use your old PSU with another new PSU to combine the overall power output, this will save you on cost.

For EX: Your existing PSU (750W) + Power Combo + New PSU (750W) = 1500W

If the Power Combo only connects to MB 24pin and CPU 8pin, what happens to the Graphic Card PCI-E and SATA when there is a fault in one of the PSU?

If one of the power supply(A) units develops an internal fault or fails, the working power supply(B) unit automatically takes over and bypass the malfunctioning main circuit of the failed power supply(A) and supplies the load to the SATA and PCI-e devices. In other words, the input (A) on the Power Combo will automatically function as an output (A).



How does the redundancy feature work?

Phanteks' Power Combo allows two power supplies to combine power to one motherboard. If one of the power supply(A) units develops an internal fault or fails, the working power supply(B) unit automatically takes over and bypass the malfunctioning main circuit of the failed power supply(A) and supplies the load to the SATA and PCI-e devices. In other words, PSU (B) will power SATA and PCI-e connections of PSU (A) through the Power Combo.

The Power Combo redundancy allows uninterrupted system operation in the event of failure to one of the power supply. This allows the system to be powered up, but only if the available power of the working power supply is higher than the required power from the system.

When a failure occurs in one of the power supply, the status is communicated by the Power Combo's indicator light changing from white to red.

Which scenarios could cause the Power Combo's redundancy feature not to work?

In most cases of power supply failures, the power supply's protection will activate on the main circuit and the Power combo's redundancy feature is able to keep your system in operation as long as the second PSU has sufficient power to supply your PC systems on its own. There are some rare scenarios when the second PSU won't be able to power the devices that are connected to failed PSU.

Examples:

- Water damage to the PSU. This could cause short-circuit on the entire board (including the connectors unit).
- When short-circuit occurs in the connected cables (faulty cables)

What are the different types of scenarios that the Power Combo is used for?

Scenario 1: Power Upgrade and Cost Saving

When you are upgrading your system you will need a more powerful PSU to distribute the power to the components. With the Power Combo you will be able to use your old PSU with another new PSU to combine the overall power output rather than tossing your old one and purchasing a one larger wattage PSU.

For EX:

Your existing PSU (750W) + Power Combo + New PSU (750W) = 1500W

Scenario 2: Redundancy Feature

If you are running a critical system or server, the redundancy feature in the Power Combo minimize the chance of a complete computer shutdown or failure. The Power Combo redundancy allows uninterrupted system operation in the event of failure to one of the power supply. This allows the system to be powered up, but only if the available power of the working power supply is higher than the required power from the system.

Scenario 3 – Mining Systems

Bitcoin Mining can be very power intensive. One PSU will be able to run your system but if that one PSU fails then the whole system will shut down. *With the Power Combo, you can have two PSU to power you GPUs and if one fails the second PSU will help keep your system running. Adding the Power Combo to your mining rig will give you the security of knowing your system will not be interrupted when one PSU fails. The redundancy feature will allow for hot-swapping of PSU's should one unit fail without hampering the functioning of the unit/system.

**Please check the correct power consumption needed for your system. Power Combo redundancy feature will only work if the available power of the working power supply is higher than the required power from the system.*