



Q&A: Corsair Professional Series HX650W

Why the successor to the HX620W more than lives up to its predecessor's reputation

The launch of the Corsair Professional Series HX650W signals the end-of-life for the Corsair HX620W, which was the first PSU that Corsair launched in 2006. The HX620W quickly established the company as a major player in this sector, thanks to its compelling combination of class-leading performance, matched with build and component quality that was second to none. It acquired worldwide critical acclaim in the technical press and set a new standard, by which other power supplies would be judged.

As Corsair makes the transition from the HX620W to the new Professional Series HX650W, we felt that it was important to explain why we are stopping production of a power supply with such an important and illustrious history, and to reassure the market that its successor more than lives up to the HX620W's reputation – and in fact succeeds it in terms of performance and specifications.

Questions:

Why is the HX650W superior to the HX620W?

The HX650W is based on the same highly-respected platform as the HX620W, but with several key upgrades to ensure even better performance. This allows the HX650W to generate more power than the HX620W (650W versus 620W), with more current available on the critical +12V rail (52A / 624W), leading to better support for today's multi-core CPUs and 3D graphics cards. The enhanced design of the HX650W also leads to greater energy-efficiency (80 PLUS BRONZE), which reduces electricity usage and results in less energy wasted as heat, allowing for quieter cooling. In addition, the HX650W includes a greater number of SATA power connectors (9 versus 8 on the HX620W), and PCI-E connectors (4 versus 2), enhancing the PSU's ability to support the latest enthusiast PC configurations.

The HX650W retains the same premium build quality and component quality ethos as the HX620W, including up-rated components and 105°C capacitors, and it is tested to the same rigorous quality standards. This guarantees continuous output at 100% load at an ambient temperature of 50°C, ensuring unflinching performance even in the most demanding PCs.

Why did we make the transition?

Corsair is committed to providing the highest-quality power supplies on the market. Although the HX620W is still one of the best-performing PSUs in its segment, we felt the time was right to update the model with even greater performance, while retaining all the aspects that made the HX620W such a popular and well-respected power supply.

Is the HX650W a replacement for the HX620W, or its successor?

The HX650W is the successor to the HX620W in every way, since it offers better performance and efficiency. The updated design provides more power, including a greater amount of power on the critical +12V rail; higher energy-efficiency contributing to lower temperatures and quieter cooling; a greater number of SATA and PCI-E connectors; and a longer warranty of 7 years, compared to 5 for the HX620W.

Corsair Professional Series HX650W versus Corsair HX620W – making the best, better.

	Corsair Professional Series HX650W	Corsair HX620W	HX650W Advantage
Total Power	650W continuous at 50°C	620W continuous at 50°C	A higher power output means better support the latest PC platforms.
+12V current	52A (624W)	50A (600W)	A more powerful +12V rail provides better support for today's multi-core processors and graphics cards
Efficiency	80 PLUS Bronze (82% or higher)	80 PLUS (80% or higher)	An updated circuit design leads to increased energy-efficiency, and less heat and noise
Cooling	120mm thermally-controlled fan	120mm thermally-controlled fan	Same, low-noise cooling technology, but more efficient HX650W produces less heat and therefore benefits from quieter cooling
SATA connectors	9	8	Higher number of SSDs and other storage devices supported
PCI-E connectors	4	2	Better support for high-end, dual-graphics solutions
Warranty	7 Years	5 Years	Longer warranty reinforces Corsair's commitment to superior product quality

Corsair Professional Series HX650W Specifications:

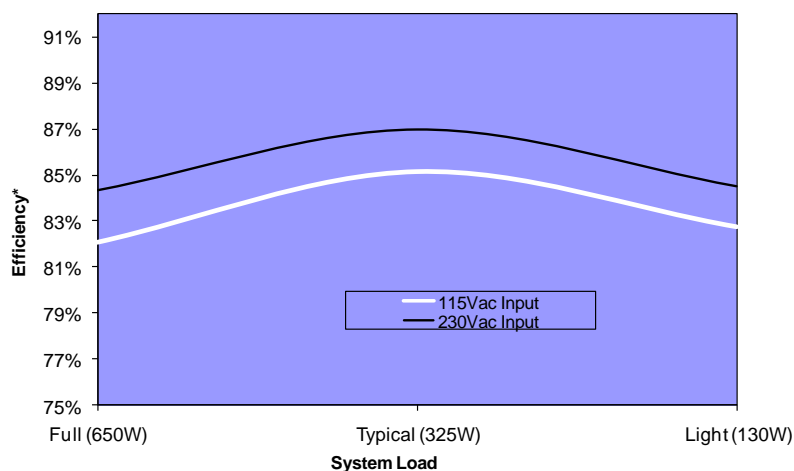
Model	CMPSU-650HX				
AC INPUT	100-240V ~ 10A 50/60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5Vsb
MAX Current	24A	30A	52A	0.8A	3A
Max Combined Wattage	170W	624W	9.6W	15W	
	650W				

Corsair Professional Series HX650W Modular Cable Set:

	QUANTITY	LENGTH	CONNECTORS PER CABLE	TOTAL CONNECTORS
PCI-E	2	600mm	2	4
SATA	3	700mm	3	9
PERIPHERAL	2	850mm	5	10*

* Floppy cable connector is attached to the end of peripheral cable

CMPSU-650HX Efficiency



CMPSU-650HX Noise level

