



HYDRO G Series

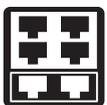
650W / 750W / 850W



Introduction

FSP Hydro G series stands for the needs of PC DIY enthusiasts and gamers who want a high end PSU with stylish ID design but do not want to compromise electronic performance at all. By server grade circuit and advanced thermal layout design, Hydro G series deliver full load (wattage) at 50°C ambient temperature. Silent operation is considered by intelligent fan speed control circuit design with 0dBA function to fulfill gamers need in playing games.

Features



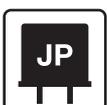
Full Modular

Easy Installation, neat build



Ribbon Cable

Easy Installation, neat build



100% Japan-made E-cap

Reliable power and prolonged life span

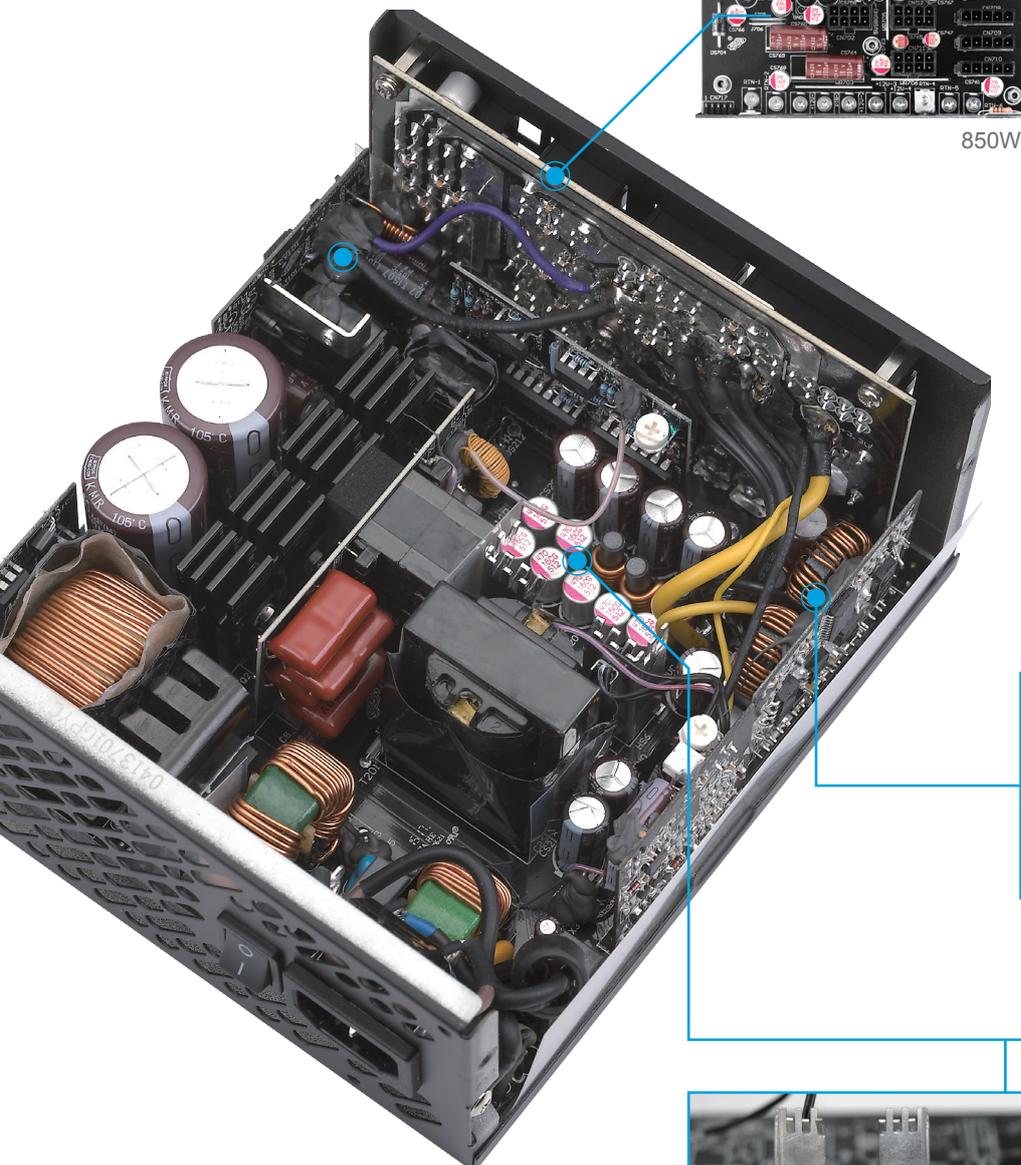


Zero Noise

Intelligent fan speed control circuit design with 0dBA function

- Unique product ID with changeable side stickers for DIY enthusiasts and gamers
- Intelligent fan speed control circuit design with 0dBA function
- Server grade circuit and advanced thermal layout design
- Complies with newest ATX12V & EPS12V standards
- High efficiency $\geq 90\%$
- Active PFC $\geq 99\%$
- High wattages with 80PLUS® gold certification
- Powerful single +12V rail design
- Advanced full modular design with ribbon cables
- Full Japan-made electrolytic capacitors
- SLI and Crossfire ready
- Quiet and long-lasting 135mm FDB fan
- Full protections: OCP, OVP, SCP, OPP, UVP, OTP
- Global safety approved

Product Overview



850W

Server grade design

Copper bars joint mainboard and daughter board to increase conversion efficiency.

User friendly connector allocation

To connect MB with 24 pin & PCI-e pin easily, no cable mess in case.

Full modular design with ribbon cable

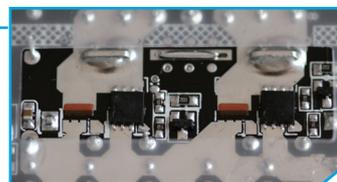
Neat build and easy installation, enhance cooling performance.



3.3V & 5V DC – DC module design

Not only maximize total 12V rating but also minimize the voltage regulation for all rails.

Intelligent fan speed control circuit design with 0dBa function



Special heat sink design for 12V switching circuit

A new heat dissipation design that conducts heat through a thermal pad on the bottom of the power supply, transforming the whole PSU chassis into a heat-sink and cooled by system airflow.



Product Overview

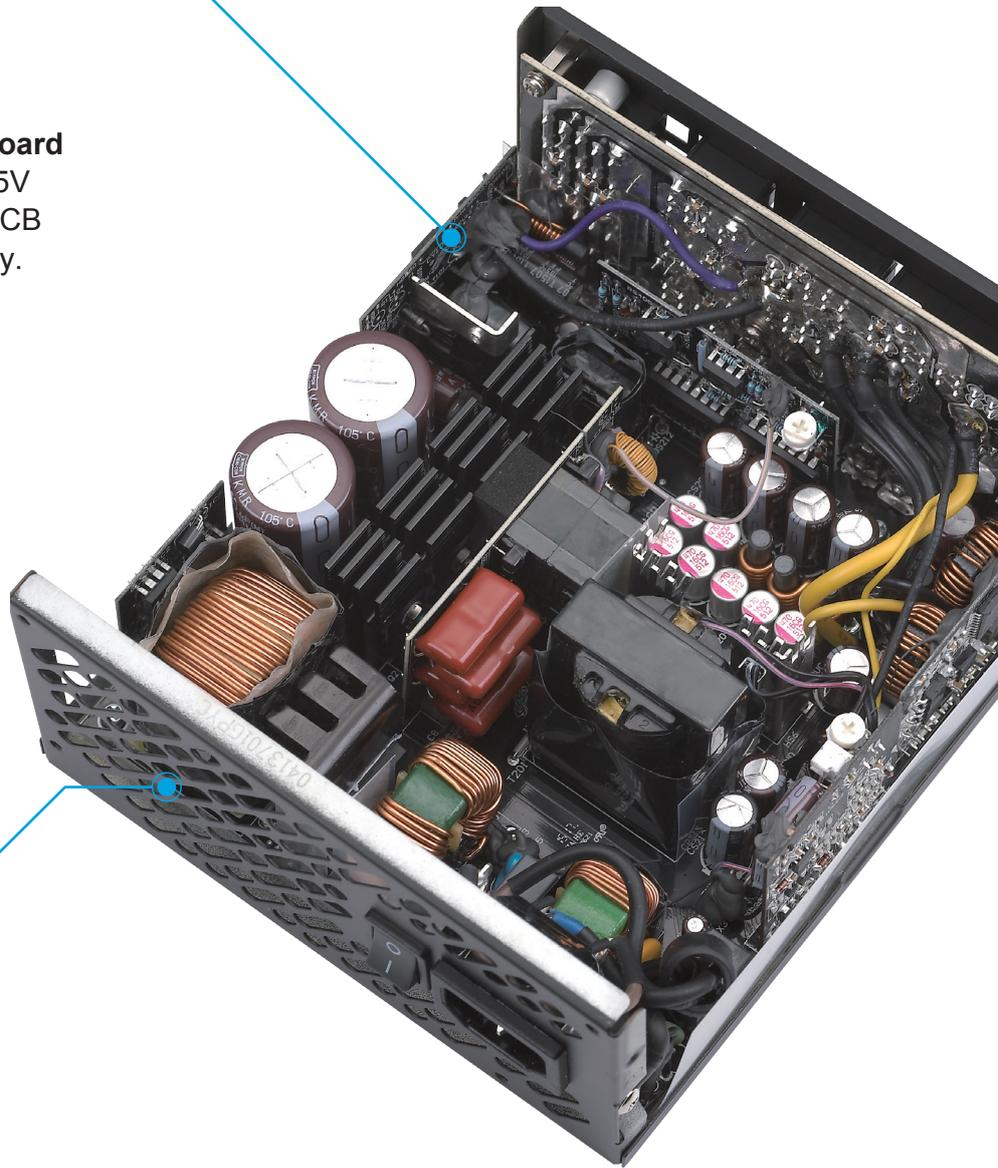
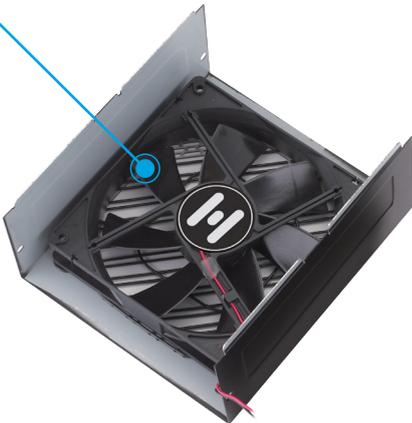


5V standby circuit on separate board

In order to stabilize 3.5A output of 5V standby, Hydro G adopts vertical PCB design to optimize airflow effectively.

135mm FDB fan

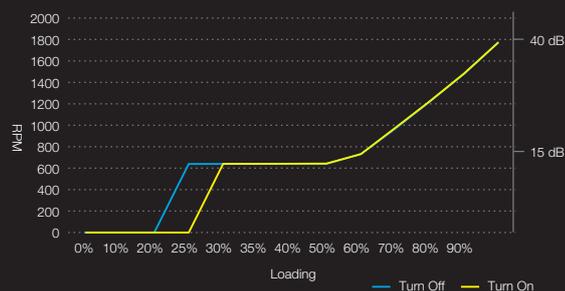
Quiet and durable cooling.



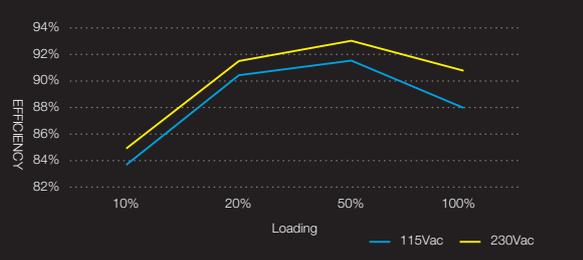
Unique dissymmetry ID and vent-hole design

To minimize fan speed and acoustic from turbulence.

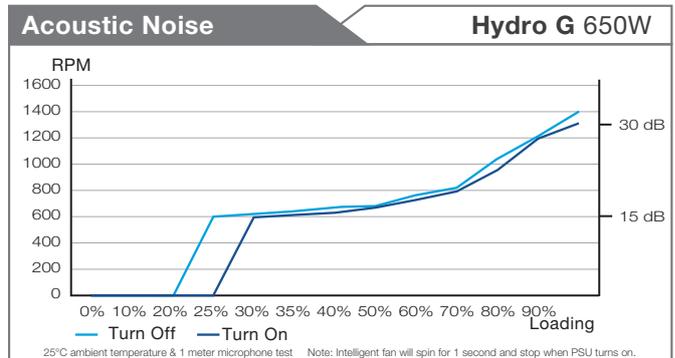
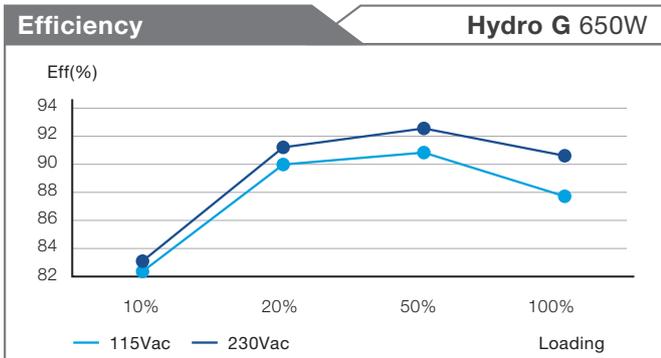
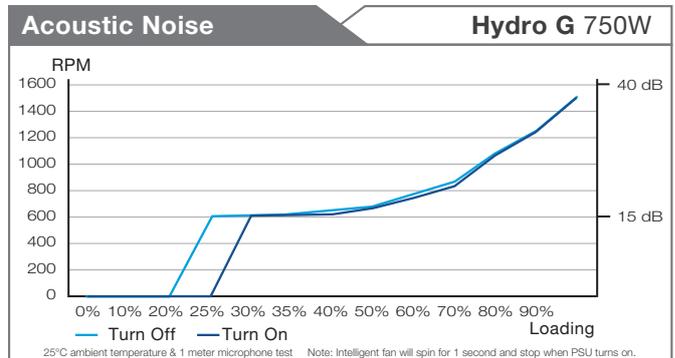
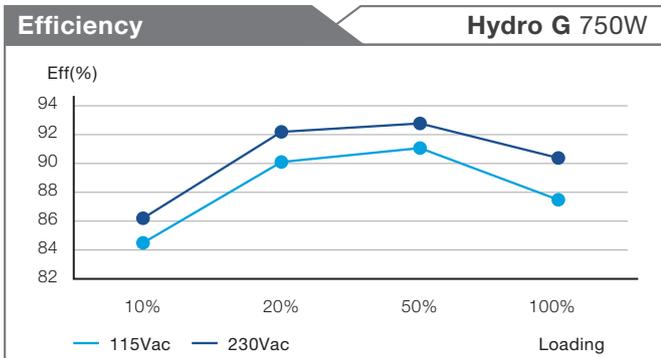
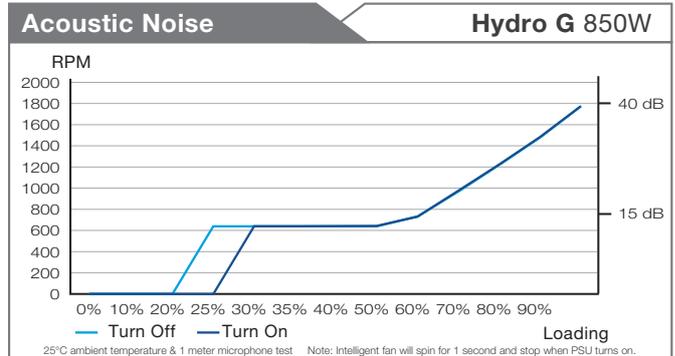
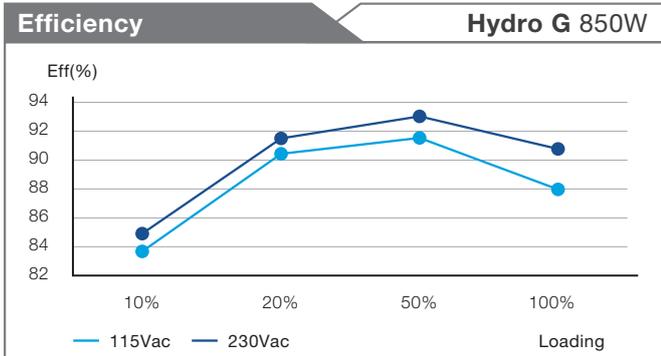
Acoustic Noise



Efficiency



Performance





HYDRO G Series

650W / 750W / 850W

Rating

850W	AC Input 交流输入	100-240Vac~ 11-5.5A 50-60Hz				
	DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
	Max Output Current 最大电流	25A	25A	70.83A	0.5A	3.5A
	Max Combined Power 最大功率	150W		850W	6W	17.5W
	Total Power 额定功率	850W				

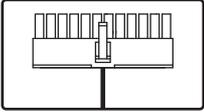
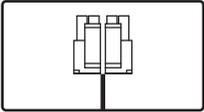
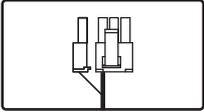
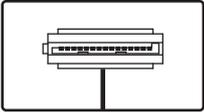
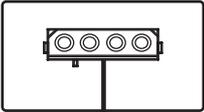
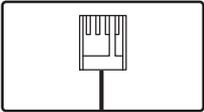
750W	AC Input 交流输入	100-240Vac~ 10-5A 50-60Hz				
	DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
	Max Output Current 最大电流	25A	25A	62.5A	0.5A	3.5A
	Max Combined Power 最大功率	150W		750W	6W	17.5W
	Total Power 额定功率	750W				

650W	AC Input 交流输入	100-240Vac~ 8.5-4A 50-60Hz				
	DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
	Max Output Current 最大电流	25A	25A	54.16A	0.5A	3.5A
	Max Combined Power 最大功率	150W		650W	6W	17.5W
	Total Power 额定功率	650W				

Specifications

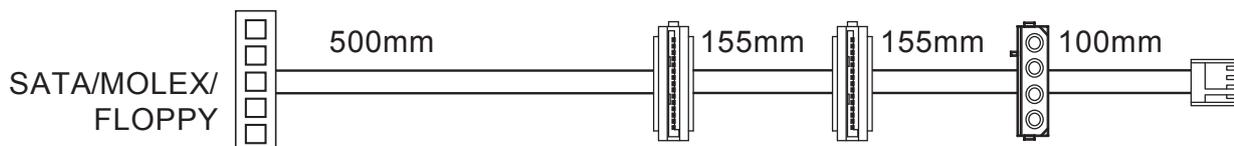
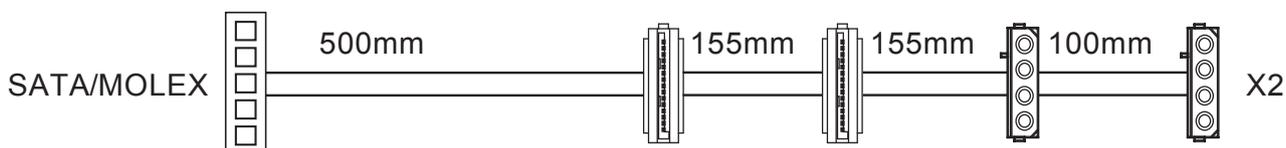
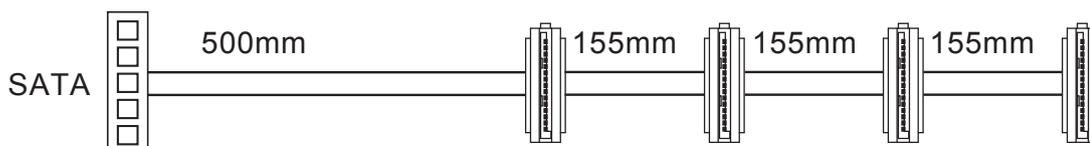
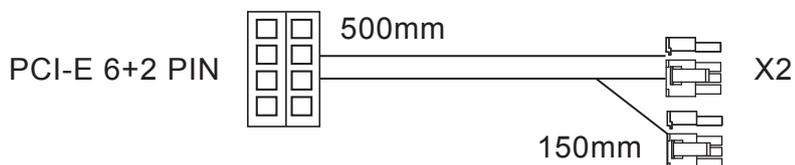
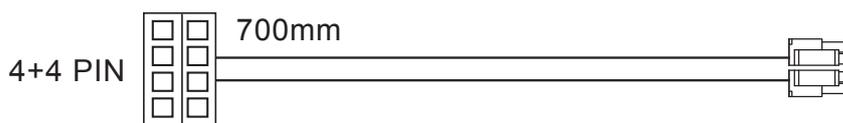
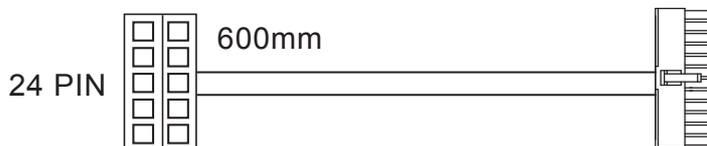
			
	650W	750W	850W
Model	HG650	HG750	HG850
Type	ATX	ATX	ATX
PFC	Active PFC	Active PFC	Active PFC
Input Voltage	100V-240V	100V-240V	100V-240V
Input Current	8.5A	10A	11A
Input Frequency	50-60Hz	50-60Hz	50-60Hz
Output Capacity	650W	750W	850W
Max. Output Power	650W	750W	850W
Fan Type	FDB Fan, 135mm	FDB Fan, 135mm	FDB Fan, 135mm
Efficiency	90%	90%	90%
MTBF	100,000 Hrs	100,000 Hrs	100,000 Hrs
Protection	OCP, OVP, OPP, SCP, UVP, OTP	OCP, OVP, OPP, SCP, UVP, OTP	OCP, OVP, OPP, SCP, UVP, OTP
Weight	2.46kg	2.6kg	2.73kg
Dimension(L×W×H)	150 × 170 × 86 mm	150 × 170 × 86 mm	150 × 170 × 86 mm

Connectors

	650W	750W	850W
 24 PIN	1	1	1
 4+4 PIN	1	1	1
 6+2 PIN	4	4	6
 SATA	10	12	12
 MOLEX	5	6	6
 FLOPPY	1	2	2

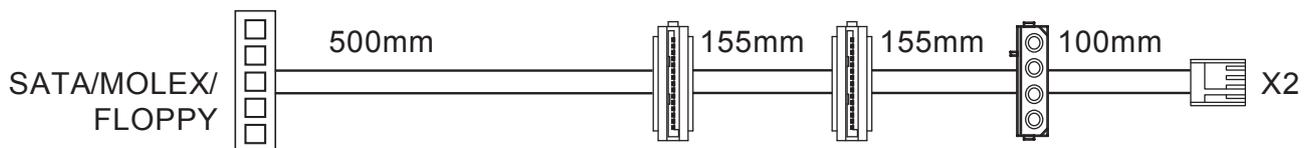
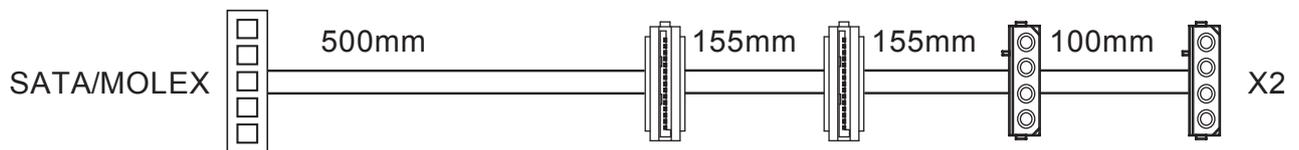
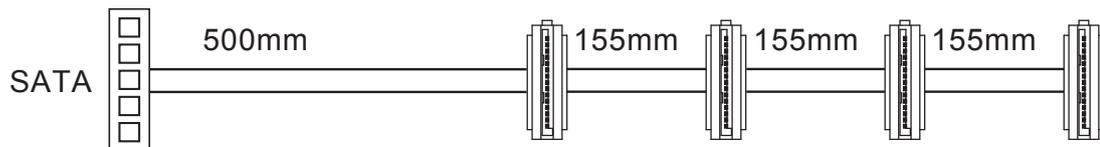
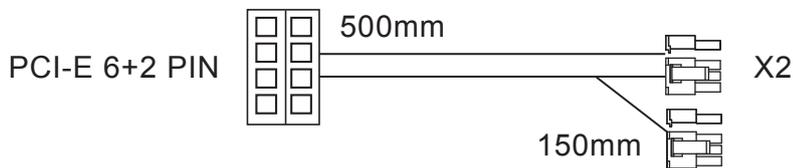
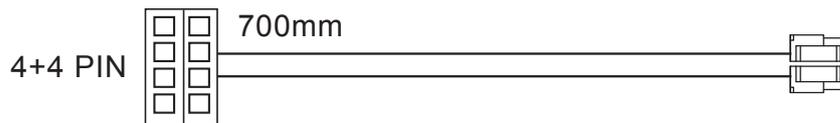
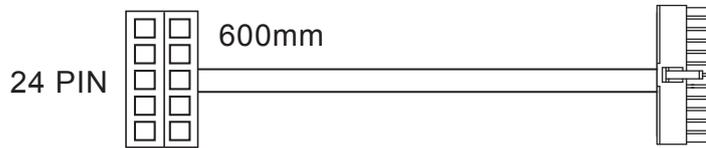
Cable Length

650W



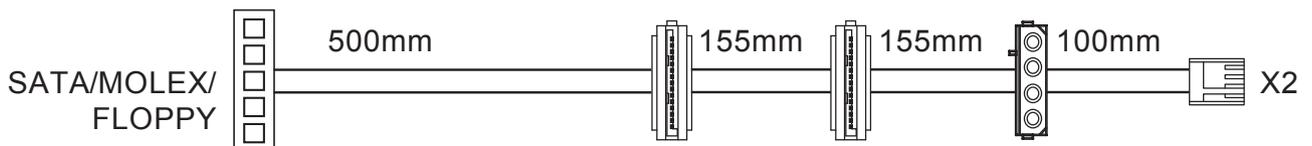
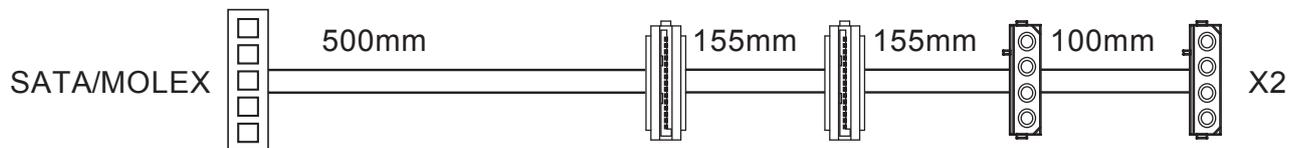
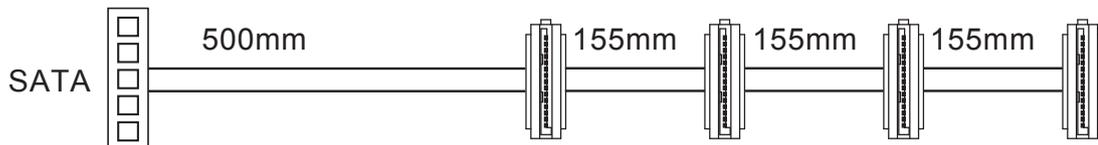
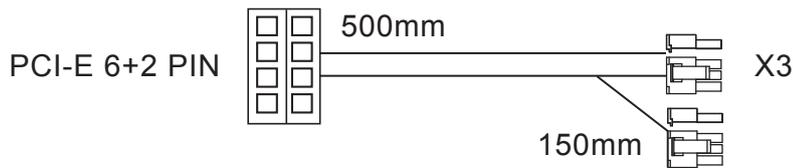
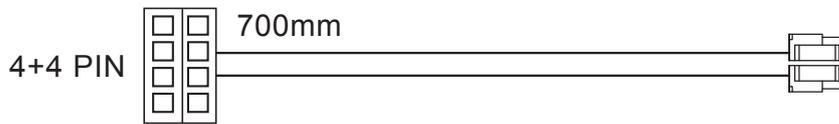
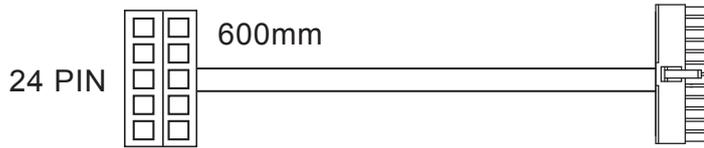
Cable Length

750W



Cable Length

850W





HYDRO G Series

650W / 750W / 850W

Package Information

Model	HG650	HG750	HG850
EAN Code	471114048970 4	471114048969 8	471114048968 1
UPC Code	84568500773 5	471114048969 8	84568500771 1
Shipping Dimensions (L×W×H)	327 × 245 × 96 mm		
Shipping Weights	3.14kg	3.28kg	3.41kg
Master Pack Dimension (L×W×H)	540 × 275 × 351 mm		
Master Pack Quantity	5 retail boxes per master package		
Master Pack Weight	15.73kg	16.44kg	17.08kg
Pallet Quantity	200 (5 retail boxes × 40 master boxes)		
Country of Origin	China		
Warranty	5 Years		
Additional Information	http://www.fsplifestyle.com/series.php?LID=1&SID=532		

Media Review

Media	Award	Review Link
HardOCP USA		http://hardocp.com/article/2015/12/04/fsp_hydro_g_750w_power_supply_review/1#.VmVJnYrldU



FSP Hydro G 750W Power Supply Review

FSP has been a bit more pronounced on our PSU radar lately. Today we have its Hydro G 750 watt unit. From what we can tell by taking it apart, there is no water inside. It does however boast full wattage at 50c ambient temperatures, "server grade circuit," and an "advanced thermal layout design." Let's see how it fares our gauntlet.

The Bottom Line

The FSP Hydro G 750W is the first power supply we have seen from FSP in the Hydro G line and it certainly did start things off on a good foot today. Overall, this unit is not only a passing unit but it is one the most competitive with what FSP's competitors are offering we have seen to date. Looking at the Hydro G 750W, we see a unit that had excellent voltage regulation, excellent efficiency, excellent DC Output Quality, and very good/excellent build quality. Indeed, the only thing about this units performance today that was mediocre, but still passing, was the unit's Transient Load Test results. The only thing that was truly bad was the unit's documentation and, boy, that was bad. Otherwise, **the FSP Hydro G 750W came through our testing as a real winner and something that will provide FSP with a solid platform to be competitive with in this very crowded market.** With an expected price of \$119.99, the FSP Hydro G 750W looks to be a serious competitor that serious buyers should consider when they are looking for a solid 750W unit. From what we have seen today, users will likely be very happy with this unit in a wide variety of builds.

As of publishing this review, the FSP Hydro G 750 is just about a week out from going on sale in North America. It is listed for sale on the FSP's North American retail website but is currently listed as out of stock. It is priced at its MSRP of \$119.99. When it comes to comparing prices to the previously mentioned competitive PSUs, the Corsair RM750 is available right now for \$70 after a \$20 MIR, and it has undergone design changes since its introduction that would allow it to pass our testing suite. That said, it is a great deal for \$70 today.

However with Corsair's sell-off aside, which will not last for long, the FSP Hydro G 750 is an excellent introduction into the 750 watt PSU category. FSP is working hard to create solid competition which will make this segment much better, just like a professional should.

Cowcotland France		http://www.cowcotland.com/articles/1987/test-alimentation-fsp-hydro-g-750-watts.html
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