



# HYDRO GD Series

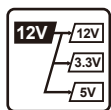
450W / 550W / 650W



## Introduction

Hydro GD 80 Plus® Gold Power Supply is designed to maximize cooling efficiency with unique ventilation hole design and built with premium components, to provide excellent cooling and quiet performance. This Hydro GD series also features changeable logos that allow DIY enthusiasts to match the logo with the rest of the hardware.

## Features



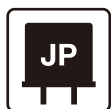
### DC-DC Module Design

Provide supreme efficiency and voltage stability



### Ribbon Cable

Easy Installation, neat build

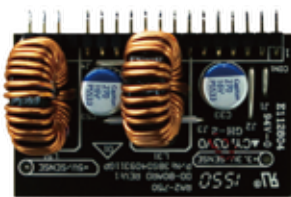


### 100% Japan-made E-cap

Reliable power and prolonged life span

- Complies with ATX12V v2.4 & EPS12V v2.92
- High efficiency  $\geq 90\%$
- Active PFC  $\geq 0.9$
- Advanced air-flow design in silent operation
- Comply with 80PLUS® Gold Certified
- 120mm silent fan
- +12V Single-rail design
- Ribbon cables for the need of enthusiasts and games
- Full Japanese electrolytic capacitors
- Complete protection: OCP, OVP, SCP, OPP, OTP
- Global safety approved

## Product Overview



### DC – DC Module Design

Both of +3.3V and +5V DC – DC module combined +12V SR circuit offers supreme efficiency, voltage stability and high system compatibility especially in cross regulation (unbalance load) mode.



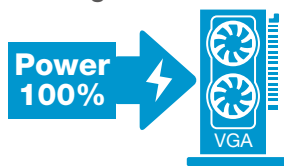
### 100% Japan-made E-Cap

Japan-made electrolytic capacitors endure over 100° C degree temperature, it ensures safety on spare parts for prolong lifespan and reliability.

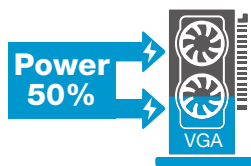
### Powerful +12V Single Rail

VGA card is a component which needs greedy and stable power supporting most. A single +12V rail design offers VGA cards full power individually and to avoid any overloading conditions.

#### Single +12V rail

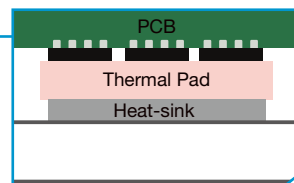


#### Multi.+12V rail



### All Black Fix Cables

All black round cable for connecting mainboard and ribbon cables for peripherals, give your system a polished look.



### 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.

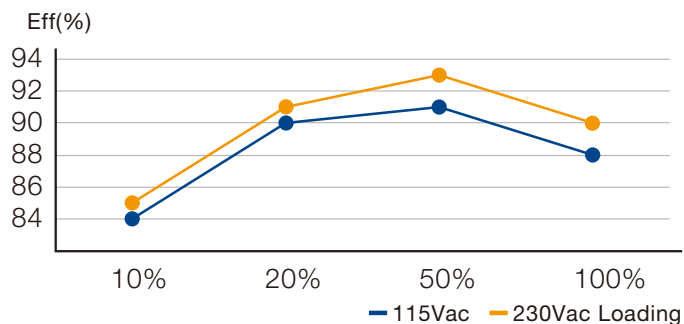
### Choose Your Logo

The FSP Hydro GD series features changeable logos. DIY Enthusiasts can choose either a blue, red or green logo to complement the rest of the system hardware. Out of the box, the logo is blue. Builders can apply either a red or green sticker over the original blue logo to fit their preferences.

## Performance

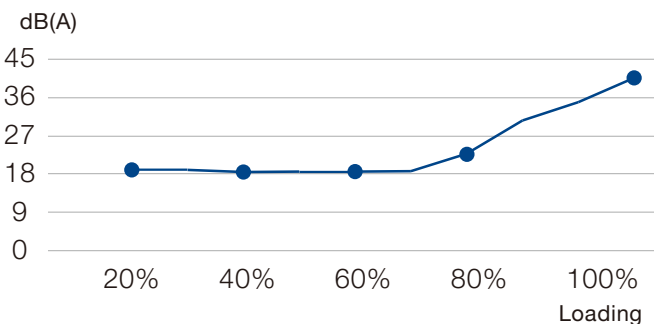
Efficiency

HYDRO GD 650W



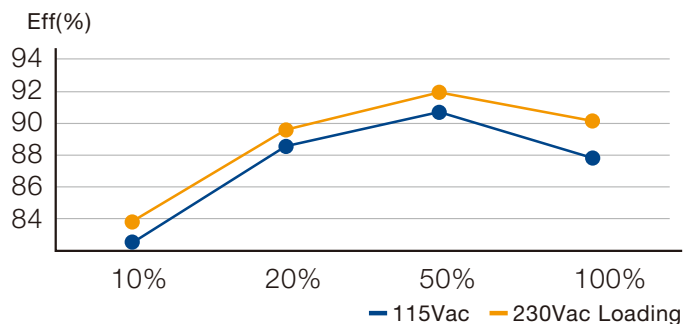
Acoustic Noise

HYDRO GD 650W



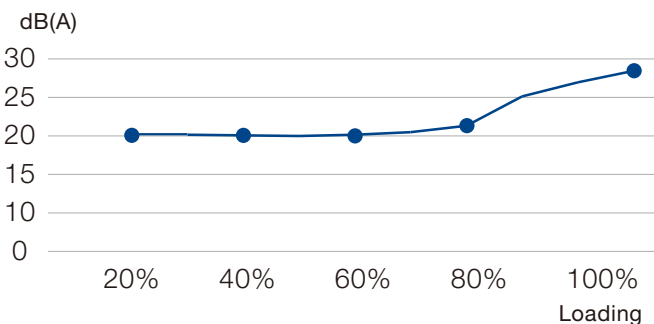
Efficiency

HYDRO GD 550W



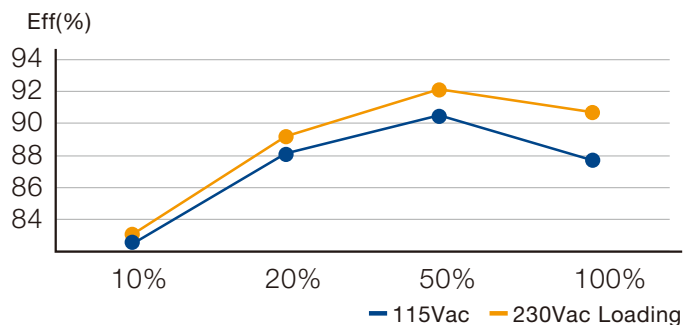
Acoustic Noise

HYDRO GD 550W



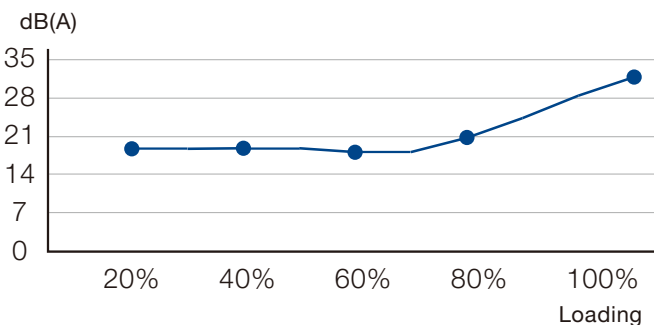
Efficiency

HYDRO GD 450W



Acoustic Noise

HYDRO GD 450W



## Rating

### 650W

<b>AC Input</b> 交流输入	100-240Vac~ 10-5A 60-50Hz				
<b>DC Output</b> 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
<b>Max Output Current</b> 最大电流	20A	20A	54.16A	0.3A	3A
<b>Max Combined Power</b> 最大功率	130W		650W	3.6W	15W
<b>Total Power</b> 额定功率	650W				

### 550W

<b>AC Input</b> 交流输入	100-240Vac~ 8-4A 60-50Hz				
<b>DC Output</b> 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
<b>Max Output Current</b> 最大电流	20A	20A	45.84A	0.3A	3A
<b>Max Combined Power</b> 最大功率	100W		550W	3.6W	15W
<b>Total Power</b> 额定功率	550W				

### 450W

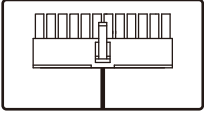
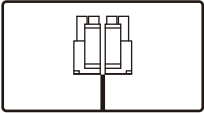
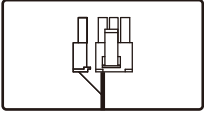
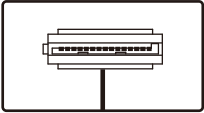
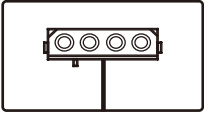
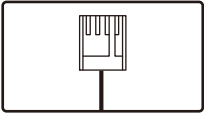
<b>AC Input</b> 交流输入	100-240Vac~ 8-4A 60-50Hz				
<b>DC Output</b> 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
<b>Max Output Current</b> 最大电流	20A	20A	37.5A	0.3A	3A
<b>Max Combined Power</b> 最大功率	100W		450W	3.6W	15W
<b>Total Power</b> 额定功率	450W				

## Specifications



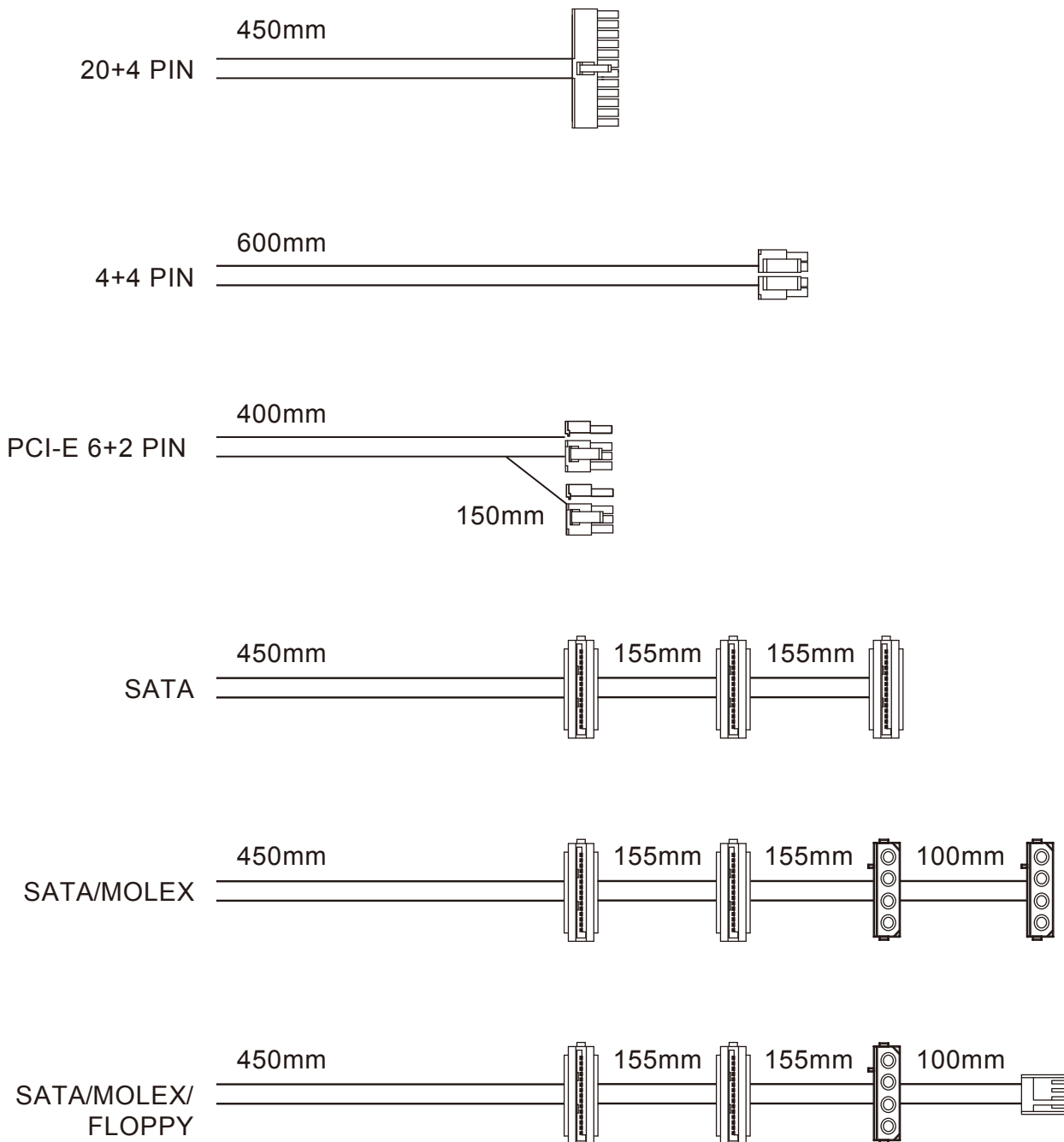
	<b>450W</b>	<b>550W</b>	<b>650W</b>
Model	HGD450	HGD550	HGD650
Type	ATX	ATX	ATX
PFC	Active PFC	Active PFC	Active PFC
Input Voltage	100V-240V	100V-240V	100V-240V
Input Current	8-4A	8-4A	10-5A
Input Frequency	60-50Hz	60-50Hz	60-50Hz
Output Capacity	450W	550W	650W
Max. Output Power	450W	550W	650W
Fan Type	Double Ball Bearing Fan, 120mm		
Efficiency	90%		
MTBF	100,000 Hrs		
Protection	OCP, OVP, SCP, OPP, OTP		
Weight			
Dimension(L×W×H)	150*150*86 mm		

## Connectors

	450W	550W	650W
 <p>24 PIN</p>	1	1	1
 <p>4+4 PIN</p>	1	1	1
 <p>6+2 PIN</p>	2	4	4
 <p>SATA</p>	7	7	7
 <p>MOLEX</p>	3	3	3
 <p>FLOPPY</p>	1	1	1

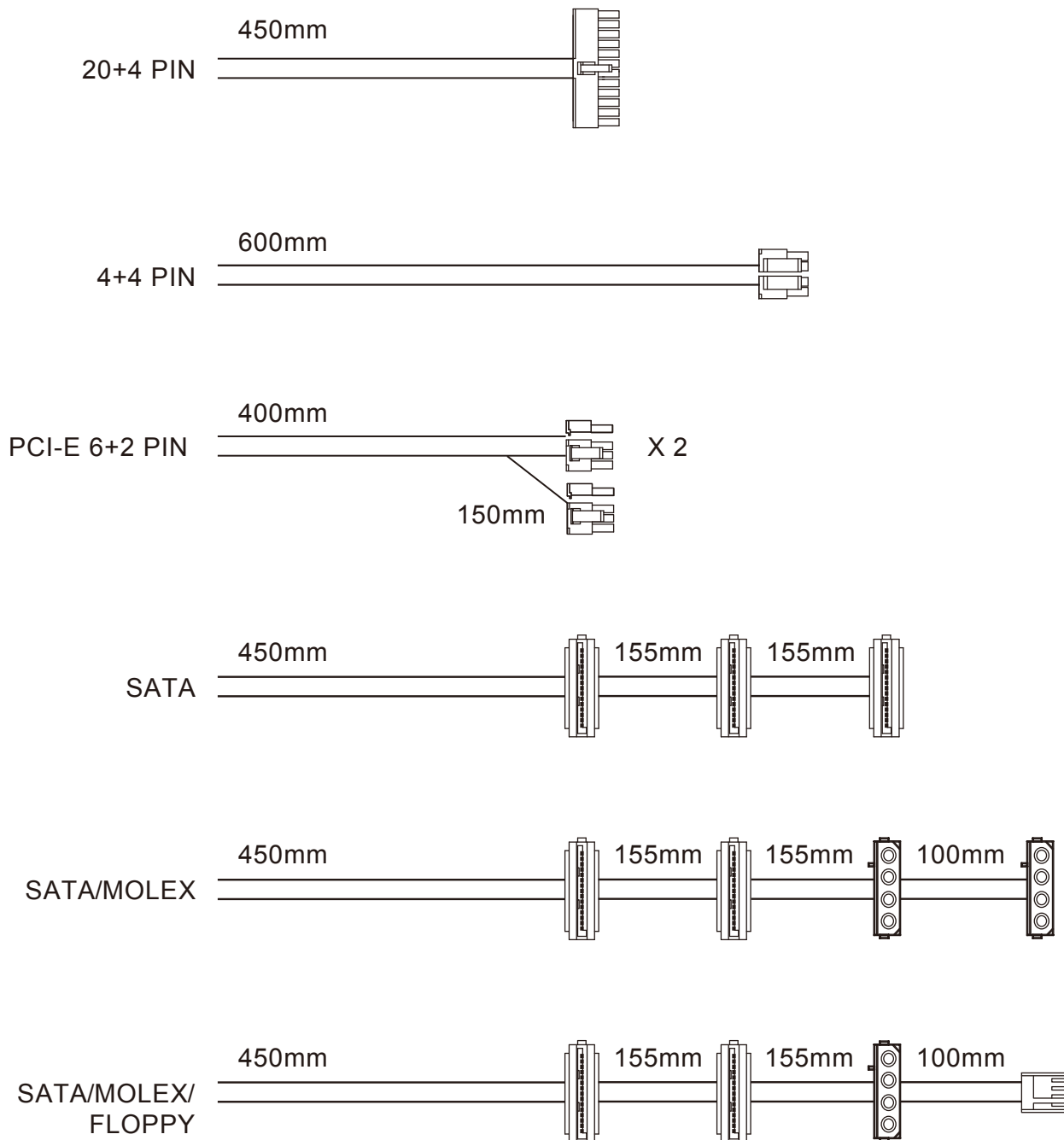
## Cable Length

### 450W



## Cable Length

### 550W / 650W







# HYDRO GD Series

450W / 550W / 650W

## Package Information

Model	HGD450	HGD550	HGD650
EAN Code	471322452134 8	471322452135 5	471322452136 2
UPC Code	84568500989 0	84568500990 6	84568500991 3
Shipping Dimensions (L×W×H)	mm		
Shipping Weights	kg	kg	kg
Master Pack Dimension (L×W×H)	mm		
Master Pack Quantity	retail boxes per master package		
Master Pack Weight	kg	kg	kg
Pallet Quantity	( retail boxes × master boxes)		
Country of Origin	China		
Warranty	5 Years		
Additional Information	650W: 550W: 450W:		