





# Introduction

FSP HYDRO Ti PRO series features 12VHPWR Connector and complies ATX 3.0 with PCIe 5.0 is fully modular low noise power supplies with 150mm length deliver up to 1000W and high efficiency 80 Plus<sup>®</sup> Titanium power to your PC build. With the half-bridge LLC topology circuit design and 450V, 105°C Japanese main bulk capacitors, PC parts receive premium power input from HYDRO Ti PRO series power supplies. Besides, for demanding PC upgrades, you can have all the connections needed from HYDRO Ti PRO series power supplies.

# **Features**



High Power Density Compact yet powerful.

LLU	
Topology	

LLC Half-Bridge Topology



**450V, 105°C Japanese Bulk Capacitors** Reliable power and prolonged life span



**Quiet and Durable Cooling** FDB(Fluid Dynamic Bearing) fan with low noise and long-lasting life span

- Complies with ATX12V V3.0 & EPS12V V2.92
- $\cdot$  Efficiency  $\geq$  94% @ typical load
- Active PFC  $\geq 0.9$
- · 450V, 105°C Japanese bulk capacitors
- · Japanese electrolytic capacitors
- Industrial-grade design with conformal coating application
- · +12V single-rail design
- · +5V & 3.3V DC to DC module design
- $\cdot$  Eco semi-fanless fan control switch
- 135mm fluid dynamic bearing (FDB) fan
- $\cdot$  Fully modular cabling design
- $\cdot$  Black flat cables
- Complete protection: OCP/OVP/OPP/SCP/OTP



#### Fully Modular Design

Easy to install and can significantly reduce cable clutter in the case.





## **Product Overview**

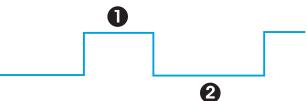
#### **New ATX PSU Specifications**

Updated ATX 3.0 specifications for the next-generation hardware power demands.

#### Unleash the full power:

#### Deliver power excursion 200% of PSU size

To get the best possible performance from the next-gen PCIe 5 desktop graphics cards and the processors.



#### Peak Power: 2000W ;

Time for Power Excursion: 100 µs Constant Power: 817W ; Time Constant: 900 µs \*1000W PSU for example.

#### A New 12VHPWR Connector

The PCIe Gen 5 (12+4) pin connector and the 12+4 pin cable.



- \* Rated current up to 9.2A per contact with all 12 power contacts
- \* Fully isolated terminals
- \* The 12VHPWR connector that uses 16AWG wires.

#### High Power Density – Up to 1000W in 150mm case

Compared to general high-efficiency & high wattage PSU 170mm length, this series delivers high power with shorter size of 150mm.



150mm

#### Eco Semi-fanless Fan Control Switch Under 50% loading, you will enjoy Zero RPM experience when eco semi-fanless fan control switch is on, and get the benefit of long lifespan from a 135mm fluid dynamic bearing fan.







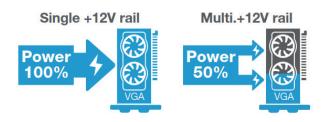
# **Product Overview**





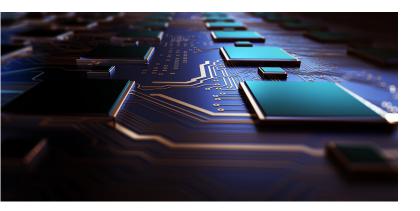
#### Off-Wet, Off-Dust and Off-Stain

The Hydro Ti PRO series is covered with a conformal coating which protects it from dust, stains, and humidity. It's guaranteed to offer better and reliable performance in harsh environments and is tested to work in environments up to 95% relative humidity.



#### Unleash +12V Power Output

VGA card is a power-hungry component that needs most power. A single +12V rail design can deliver stable power and avoid any overloading conditions.



#### Half-bridge LLC Topology

The half-bridge LLC topology allows for zero voltage switching of the main switches thereby dramatically lowering switching losses and boosting efficiency.



# **Product Overview**

#### 450V, 105°C E-capacitors

450V, 105°C Japanese E-capacitors have better quality, protecting your equipment from the infamous capacitor leakage problem and also increasing the life-span of your equipment.

#### 3.3V & 5V DC-DC Module Design -

DC to DC modules to improve the reliability, and enable greater compatibility with low ripple noise to effectively reduce interference of system components, prolonging system lifetime.







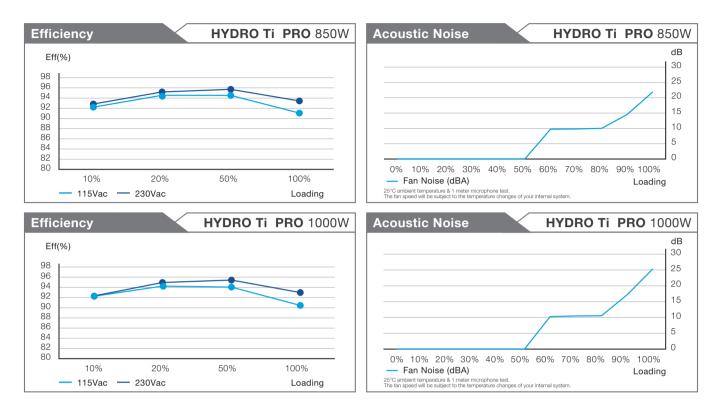
## Changeable Side Sticker

Includes unique side stickers for DIY enthusiasts and gamers.





# Performance







# Rating

50W AC Input 交流输入		100-240V~ 11-5.5A 50-60Hz		(Not for China, Korea)	
		200-240V~ 5.5A 50-60Hz			(Only for China, Korea)
DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current 最大电流	20A	20A	70.83A	0.3A	3A
Max Combined Power 最大功率		)W	850W	18.	6W
<b>Total Power</b> 额定功率	850W				
00W AC Input	100-240V~ 13-6A 50-60Hz		(Not for China, Korea)		
交流输入	200-240V~ 6A 50-60Hz			(Not for China, Korea)	
DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current 最大电流	20A	20A	83.33A	0.3A	3A
Max Combined Power 最大功率	120W		1000W	18.	6W
<b>Total Power</b> 额定功率	1000W				
	交流输入 DC Output 直流输出 Max Output Current 最大电流 Max Combined Power 最大功率 Total Power 额定功率 AC Input 交流输入 DC Output 直流输出 Max Output Current 最大电流 Max Combined Power 最大功率 Total Power	AC input 200-240   DC Output ::: +3.3V   直流输出 20A   Max Output Current 20A   Max Combined Power 120   最大功率 120   Total Power 200-240   放立 120   AC Input 200-240   反流输入 120   DC Output ::: 100-240   反流输入 200-240   DC Output ::: 100-240   反流输入 200-240   DC Output ::: +3.3   直流输出 200-240   DC Output ::: +3.3   直流输出 200-240   Max Output Current 20A   Max Combined Power 120   最大电流 120	AC Input    交流输入 200-240V~ 5.5A 50   DC Output 直流输出 +3.3V +5V   Max Output Current 最大电流 20A 20A   Max Combined Power 最大功率 20A 20A   Max Combined Power 最大功率 120V 100-240V   AC Input 交流输入 100-240V 13-6A 50   DC Output 直流输出 +3.3V +5V   Max Output Current 最大电流 +3.3V +5V   Max Output Current 最大电流 20A 20A   Max Combined Power 最大功率 12-00-24-00-00-00-00-00-00-00-00-00-00-00-00-00	AC Input 200-240V~ 5.5A 50-60Hz   DC Output	AC input 交流输入 200-240V~ 5.5A 50-60Hz (Only for C   DC Output 直流输出 +3.3V +5V +12V -12V   Max Output Current 最大电流 20A 20A 70.83A 0.3A   Max Combined Power 最大功率 12∪W 850W 18.   Total Power 额定功率 100-240V~ 13-6A 50-60Hz (Not for C   OC Output 互流输出 100-240V~ 13-6A 50-60Hz (Not for C   DC Output 直流输出 +3.3V +5V +12V -12V   Max Output Current 最大电流 13.3V +5V +12V -12V   Max Output Current 最大电流 20A 20A 83.33A 0.3A   Max Combined Power 最大功率 12UW 1000W 18.





# **Specifications**

	Proceeding of the second secon				
	850W	1000W			
Model	HTI-850M	HTI-1000M			
Туре	ATX	ATX			
PFC	Active PFC	Active PFC			
Input Voltage	100-240V ; 200-240V	100-240V ; 200-240V			
Input Current	11-5.5A ; 5.5A	13-6A ; 6A			
Input Frequency	50-60Hz	50-60Hz			
Output Capacity	850W	1000W			
Max. Output Power	850W	1000W			
Fan Type	FDB fan, 135mm	FDB fan, 135mm			
Efficiency	94%	94%			
MTBF	100,000 Hrs	100,000 Hrs			
Protoction	OCP,OVP	OCP,OVP			
Protection	OPP, SCP, OTP	OPP, SCP, OTP			
Dimension(L×W×H)	150×150×86 mm	150×150×86 mm			
Warranty	10 years	10 years			
Additional Information					





## **Connectors**

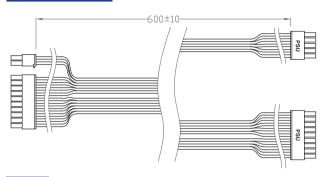
	850W	1000W
	1	1
MB 20+4 PIN		
	2	2
CPU 4+4 PIN		
	5	5
PCIe 6+2 PIN		
	1	1
PCIe 12+4 PIN		
	12	12
SATA		
	4	4
MOLEX		



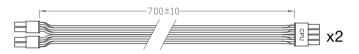
# **Cable Length**

## 850W/1000W

## Motherboard



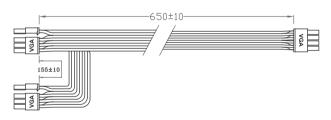
## CPU



## PCIe 6+2 Pin



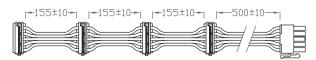
## PCIe 6+2 Pin



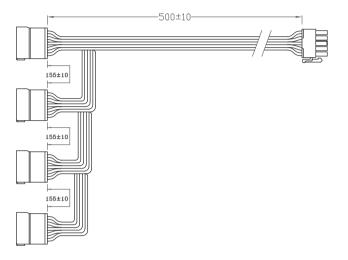
### PCIe 12+4 Pin



## SATA



## SATA



## SATA / MOLEX

