

HYDRO PTM X PRO Series





Introduction

FSP HYDRO PTM X PRO series features 12VHPWR Connector and complies ATX3.0 with PCIe 5.0 is fully modular low noise power supplies with 130mm length deliver up to 1200W and high efficiency 80 Plus[®] Platinum 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 PTM X PRO series power supplies. Besides, for demanding PC upgrades, you can have all the connections needed from HYDRO PTM X PRO series power supplies.

Features



High Power Density

Compact yet powerful, up to 1200W in a 130 mm case.

L	LC
To	pology

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

Fully Modular Design

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

- · Complies with ATX 12V V3.0 & EPS 12V V2.92
- \cdot Efficiency \geq 92% @ typical load
- \cdot Active PFC \geq 0.9
- \cdot 450V, 105°C Japanese bulk capacitors
- · Japanese electrolytic capacitors
- · +12V single-rail design
- \cdot +5V & 3.3V DC to DC module design
- \cdot Eco semi-fanless fan control switch
- · 120mm fluid dynamic bearing (FDB) fan
- · Fully modular cabling design
- Black flat cables
- Changeable side stickers for DIY enthusiasts and gamers
- Complete protection: OCP/OVP/OPP/SCP/OTP



Product Overview

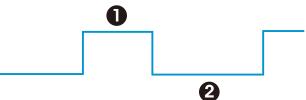
New ATX PSU Specifications

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 1200W in 130mm case

Compared to general high-efficiency & high wattage PSU 190mm length, the Hydro PTM X PRO series delivers over 1200W with shorter size of 130mm.



150mm

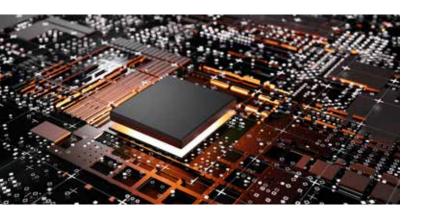
Eco Semi-fanless Fan Control Switch Under 30% loading, you will enjoy 0 dBA experience when eco semi-fanless fan control switch is on, and get the benefit of long lifespan from a 120mm fluid dynamic bearing fan.

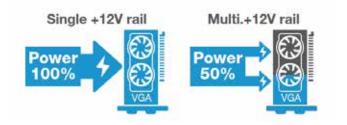






Product Overview





LLC Half Bridge Topology

The LLC Half Bridge Topology allows for zero voltage switching of the main switches thereby dramatically lowering switching losses and boosting efficiency.

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.



Changeable Side Sticker Includes unique side stickers for DIY enthusiasts and gamers.



Off-Wet, Off-Dust and Off-Stain

The Hydro PTM X 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.





ATX 3.0

Product Overview

450V, 105°C Japanese Bulk Capacitors

450V, 105°C Japanese Bulk 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.



12VHPWR Connector, Multiple ESP12V and PCIe Connectors

Hydro PTM X PRO series features 12VHPWR connector, multiple ESP12V and PCIe connectors, it's ready to deliver full power to 12V power-hungry components in a PC build.



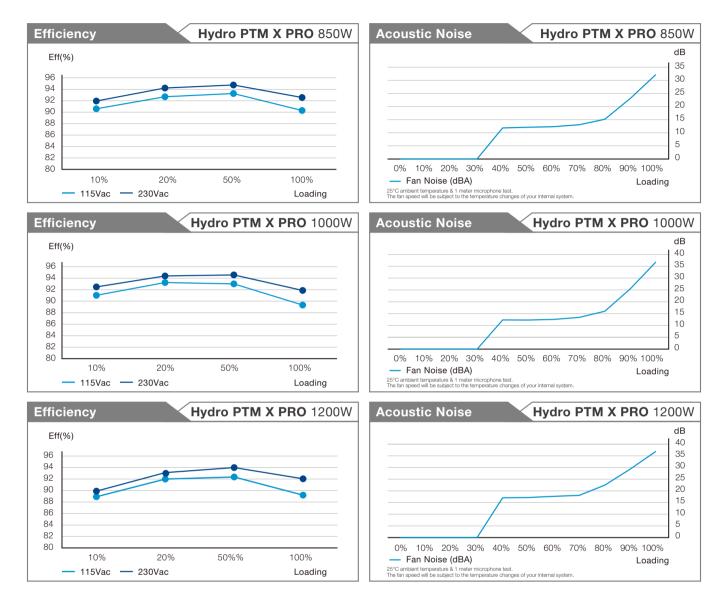
Fully Modular Design with Black Flat Cable Hydro PTM X PRO series is designed fully modular that not just saves user's time for installation, but also provides your system a neat and tidy look for cable management. More than that, the all black flat cables gives it a stylish and quality look.







Performance







Rating

850W							
	AC Input	100-240V~ 11-5.5A 50-60Hz (Not for China)					
	交流输入	200-240V~ 5.5A 50-60Hz (Only for China)					
	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	120W 850\		850W	18.6W		
	Total Power 额定功率	850W					
1000W	AC Input	100-240V~ 13-6A 50-60Hz (Not for China)					
	交流输入	200-240V~ 6A 50-60Hz (Only for China)					
	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		
	Total Power 额定功率	1000W					
1200W	AC Input 交流输入	100-240V~ 14-9A 50-60Hz (Not for China)					
		200-240V~ 9A 50-60Hz (Only for China)					
	DC Output 直流输出	+3.3V	+5V	+12V	-12V	+5Vsb	
	Max Output Current 最大电流	20A	20A	100A	0.3A	3A	
	Max Combined Power 最大功率	120W		1200W	18.6W		
	Total Power 额定功率	1200W					



HYDRO PTM X PRO Series 850W / 1000W / 1200W



Specifications

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	850W	1000W	1000W			
Model	HPT3-850M	HPT3-1000M	HPT3-1200M			
Туре	ATX	ATX	ATX			
PFC	Active PFC	Active PFC	Active PFC			
Input Voltage	100-240V ; 200-240V	100-240V ; 200-240V	100-240V ; 200-240V			
Input Current	11-5.5A ; 5.5A	13-6A ; 6A	14-9A ; 9A			
Input Frequency	50-60Hz	50-60Hz	50-60Hz			
Output Capacity	850W	1000W	1200W			
Max. Output Power	850W	1000W	1200W			
Fan Type	FDB fan, 120mm	FDB fan, 120mm	FDB fan, 120mm			
Efficiency	92%	92%	92%			
MTBF	100,000 Hrs	100,000 Hrs	100,000 Hrs			
Protection	OCP,OVP	OCP,OVP	OCP,OVP			
	OPP, SCP, OTP	OPP, SCP, OTP	OPP, SCP, OTP			
Dimension(L×W×H)	130×150×86 mm	130×150×86 mm	130×150×86 mm			
Warranty	10 years	10 years	10 years			
Additional Information	850W www.fsplifestyle.com/en/product/HydroPTMXPRO850W_GEN5.html 1000W www.fsplifestyle.com/en/product/HydroPTMXPRO1000W_GEN5.html 1200W www.fsplifestyle.com/en/product/HydroPTMXPRO1200W_GEN5.html					





Connectors

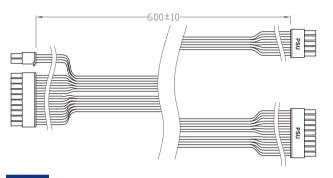
	850W	1000W	1200W
	1	1	1
MB 20+4 PIN			
	2	2	2
CPU 4+4 PIN			
	4	4	4
PCIe 6+2 PIN			
	1	1	1
PCIe 12+4 PIN			
	12	12	12
SATA			
	3	3	3
MOLEX			
	1	1	1
FLOPPY			



Cable Length

850W/1000W/1200W

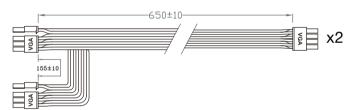
Motherboard



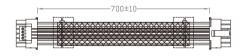
CPU



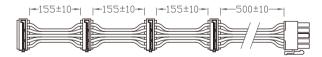
PCIe 6+2 Pin



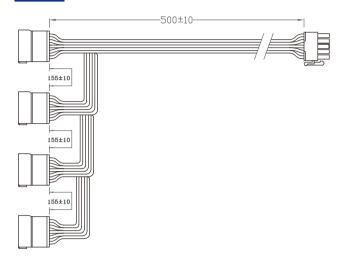
PCIe 12+4 Pin



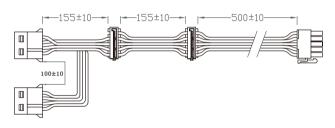
SATA



SATA



SATA / MOLEX



SATA / MOLEX / FLOPPY

