Hydro PTM PRO Series

650W / 750W / 850W / 1000W / 1200W

Capacitor
450V, 105°C
High Durability

Triple CPU
Power Connectors
Only 850/1000/1200W

80 PLUS PLATINUM

Intel Latest CPU Ready

10 YEAR WARRANTY

IEC62368 READY

Off-Wet

Introduction

Compared to the previous generation, Hydro PTM PRO is an IEC62368 certified PSU that has been greatly improved in its safety design as well as a more compact dimension without compromising its efficiency. And has exclusive Off-Wet technology, the conformal coating which protects the power supply and its internal components from dust, humidity, stains and harsh environments, the Hydro PTM PRO series are tested to work perfectly even in 95% relative humidity.
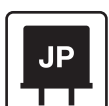
Features

Full Modular
Easy Installation, neat build

Ribbon Cable
Easy Installation, neat build

100% Japan-made E-cap
Reliable power and prolonged life span

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

· Unique product ID with changeable side stickers for DIY enthusiasts and gamers
· Intelligent fan speed control circuit design
· Advanced thermal layout design
· Complies with newest ATX12 v2.5 & EPS12 v2.92 standards
· High efficiency ≧ 92%
· Active PFC ≧ 99%
· High Wattages with 80PLUS® Platinum Certification
· Powerful +12V single rail design
· Ribbon cables for the need of enthusiasts and gamers
· Full Japanese electrolytic capacitors
· Support 6+2 pin PCI-Express Connectors
· Complete Protections: OCP, OVP, SCP, OPP, UVP, OTP
· Global Safety Approved

Product Overview

*650W/750W

❶ Server grade design
Copper bars joint mainboard and daughter board to increase conversion efficiency.

❷ 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 system airflow.

❸ 3.3V & 5V DC-DC module design
Not only maximize total 12V rating but also minimize the voltage regulation for all rails.

❹ Off-Wet technology
The conformal coating which protects the power supply and its internal components from dust, humidity, stains and harsh environments, the Hydro PTM PRO series are tested to work perfectly even in 95% relative humidity.

Full modular design with ribbon cables
Neat build and easy installation to enhance cooling performance.

User friendly connector allocation
To connect MB with 20+4 pin & PCI-e pin easily, no cable mess in case.

Conformal coating from the inside out
Hydro PTM PRO is covered with conformal coatings to guarantee reliable performance in a harsh environment.

❺ Eco semi-fanless function
When Eco switch is on, the fan will not operate until the loading is over 30%.

❻ 5V Standby circuit
It provides stable 3A output to enable high conversion efficiency.

❼ Reliable quality you can trust
Selected 450V, 105℃ electrolytic capacitor provides superior reliability under intense current operation environment.
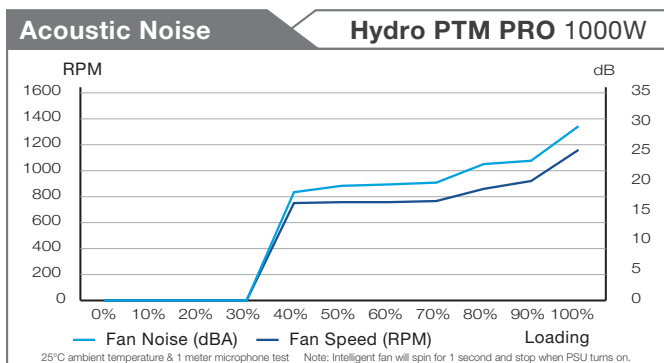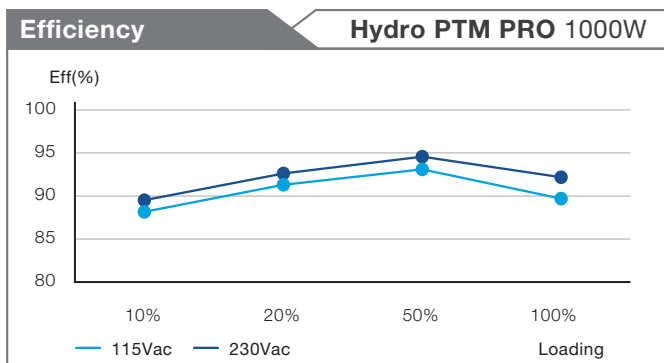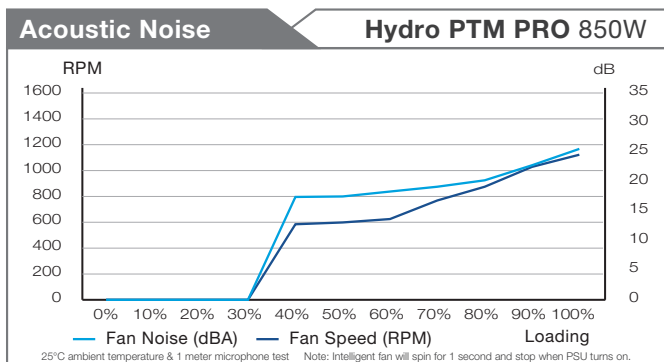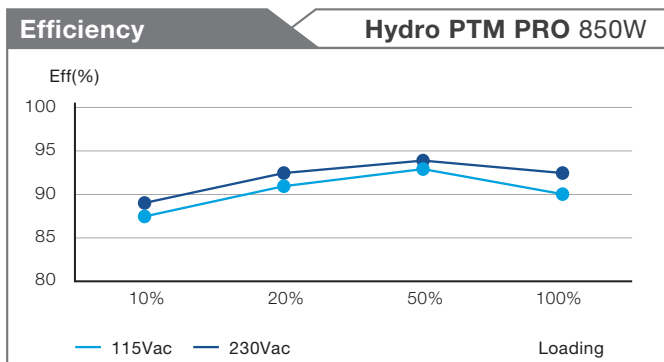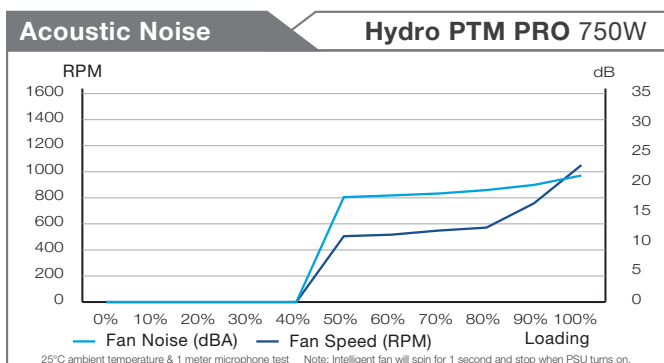
Intelligent fan speed circuit control design with 0dBA function

Performance

Efficiency — Hydro PTM PRO 650W

Acoustic Noise — Hydro PTM PRO 650W

25°C ambient temperature & 1 meter microphone test   Note: Intelligent fan will spin for 1 second and stop when PSU turns on.

Efficiency — Hydro PTM PRO 750W

Acoustic Noise — Hydro PTM PRO 750W

25°C ambient temperature & 1 meter microphone test   Note: Intelligent fan will spin for 1 second and stop when PSU turns on.

Efficiency — Hydro PTM PRO 850W

Acoustic Noise — Hydro PTM PRO 850W

25°C ambient temperature & 1 meter microphone test   Note: Intelligent fan will spin for 1 second and stop when PSU turns on.

Efficiency — Hydro PTM PRO 1000W

Acoustic Noise — Hydro PTM PRO 1000W

25°C ambient temperature & 1 meter microphone test   Note: Intelligent fan will spin for 1 second and stop when PSU turns on.

Performance

Efficiency	Hydro PTM PRO 1200W

Eff(%) — 115Vac, 230Vac — Loading (10%, 20%, 50%, 100%)

Acoustic Noise	Hydro PTM PRO 1200W

RPM / dB — Fan Noise (dBA), Fan Speed (RPM) — Loading (0% to 100%)

25°C ambient temperature & 1 meter microphone test   Note: Intelligent fan will spin for 1 second and stop when PSU turns on.

Rating

650W

AC Input	100-240Vac~ 10-5A 50-60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	54.17A	0.3A	3A
Max Combined Power	120W		650W	18.6W	
Total Power	650W				

750W

AC Input	100-240Vac~ 10-5A 50-60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	62.5A	0.3A	3A
Max Combined Power	120W		750W	18.6W	
Total Power	750W				

850W

AC Input	100-240V~ 11-5.5A 50-60Hz (Not for China)				
	200-240V~ 5.5A 50-60Hz (Only for China)				
DC Output	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	70.83A	0.3A	3A
Max Combined Power	120W		850W	18.6W	
Total Power	850W				

1000W

AC Input	100-240V~ 13-6A 50-60Hz (Not for China)				
	200-240V~ 6A 50-60Hz (Only for China)				
DC Output	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	83.33A	0.3A	3A
Max Combined Power	120W		1000W	18.6W	
Total Power	1000W				

Rating

1200W

AC Input	110-240V~ 14-9A 50-60Hz			(Not for China)	
	200-240V~ 9A 50-60Hz			(Only for China)	
	100-240V~ 15-9A 50-60Hz			(Only for Japan)	
DC Output ⎓	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	100A	0.3A	3A
Max Combined Power	120W		1200W	18.6W	
Total Power	1200W				

Specifications
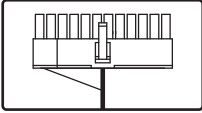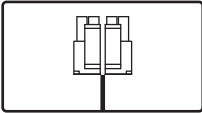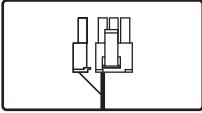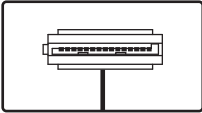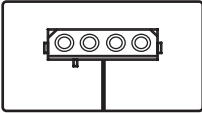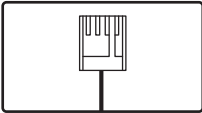
	HPT2-650M	HPT2-750M
Model	HPT2-650M	HPT2-750M
Type	ATX	ATX
PFC	Active PFC	Active PFC
Input Voltage	100V-240V	100V-240V
Input Current	10-5A	10-5A
Input Frequency	50-60Hz	50-60Hz
Output Capacity	650W	750W
Max. Output Power	650W	750W
Fan Type	FDB Fan, 135mm	FDB Fan, 135mm
Efficiency	92%	92%
MTBF	100,000 Hrs	100,000 Hrs
Protection	OCP, OVP, OPP, SCP, OTP	OCP, OVP, OPP, SCP, OTP
Weight		
Dimension(L×W×H)	150 x 170 x 86mm	150 x 170 x 86mm

Specifications
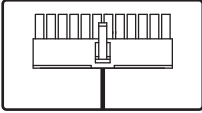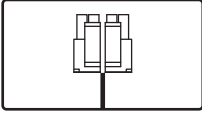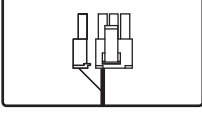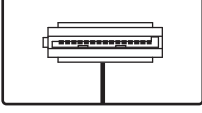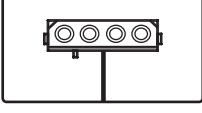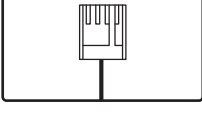
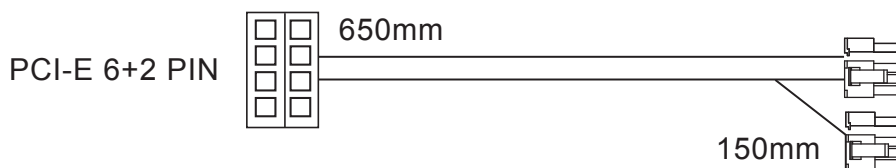| Model	HPT2-850M	HPT2-1000M	HPT2-1200M
Type	ATX	ATX	ATX
PFC	Active PFC	Active PFC	Active PFC
Input Voltage	100V-240V	100V-240V	110V-240V
Input Current	11-5.5A	13-6A	14-9A
Input Frequency	50-60Hz	50-60Hz	50-60Hz
Output Capacity	850W	1000W	1200W
Max. Output Power	850W	1000W	1200W
Fan Type	FDB Fan, 135mm	FDB Fan, 135mm	FDB Fan, 135mm
Efficiency	92%	92%	92%
MTBF	100,000 Hrs	100,000 Hrs	100,000 Hrs
Protection	OCP, OVP, OPP, SCP, OTP	OCP, OVP, OPP, SCP, OTP	OCP, OVP, OPP, SCP, OTP
Weight			
Dimension(L×W×H)	150 x 190 x 86mm	150 x 190 x 86mm	150 x 190 x 86mm

Connectors

	650W	750W	850W
20+4 PIN	1	1	1
4+4 PIN	2	2	3
6+2 PIN	4	6	8
SATA	12	14	14
MOLEX	3	5	5
FLOPPY	1	1	1

Connectors

	1000W	1200W
24 PIN	1	1
4+4 PIN	3	3
6+2 PIN	8	8
SATA	14	14
MOLEX	5	5
FLOPPY	1	1

FSP

Cable Length

650W

20+4 PIN	600mm
4+4 PIN	700mm X2
PCI-E 6+2 PIN	500mm / 150mm
PCI-E 6+2 PIN	650mm / 150mm
SATA	500mm 155mm 155mm 155mm X2
SATA/MOLEX	500mm 155mm 155mm 100mm
SATA/MOLEX/FLOPPY	500mm 155mm 155mm 155mm

Cable Length

750W

Connector	Length
20+4 PIN	600mm
4+4 PIN	700mm X2
PCI-E 6+2 PIN	500mm X2 / 150mm
PCI-E 6+2 PIN	650mm / 150mm
SATA	500mm 155mm 155mm 155mm X2
SATA/MOLEX	500mm 155mm 155mm 100mm
SATA/MOLEX/FLOPPY	500mm 155mm 155mm 155mm
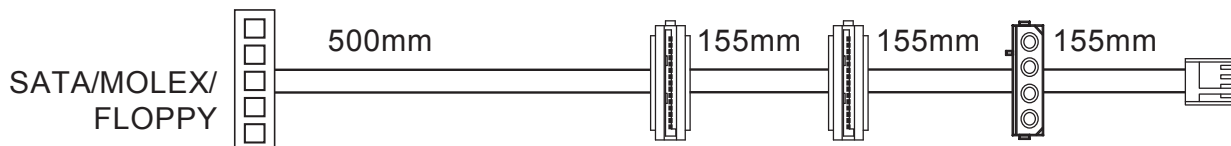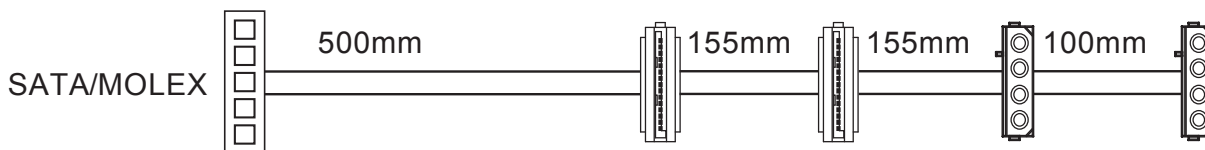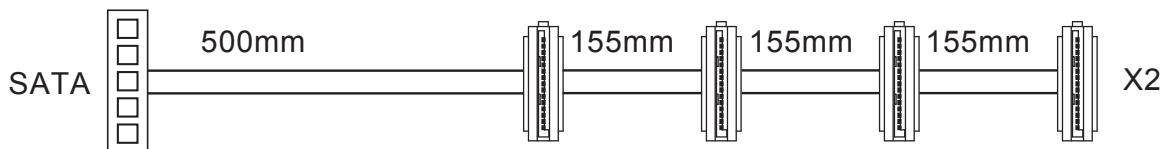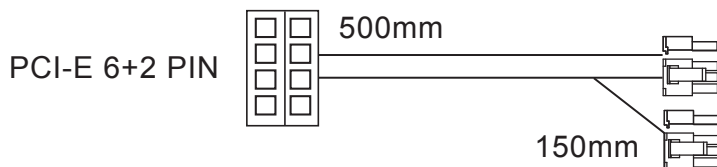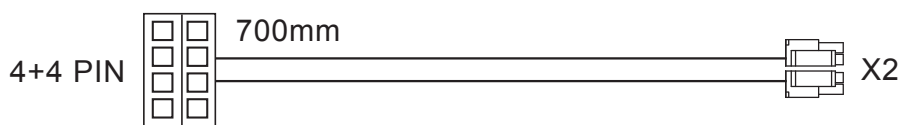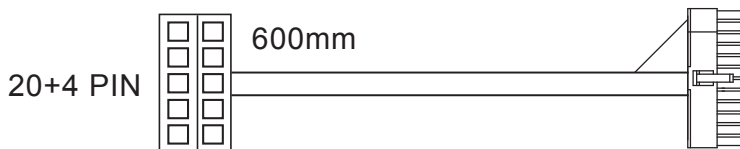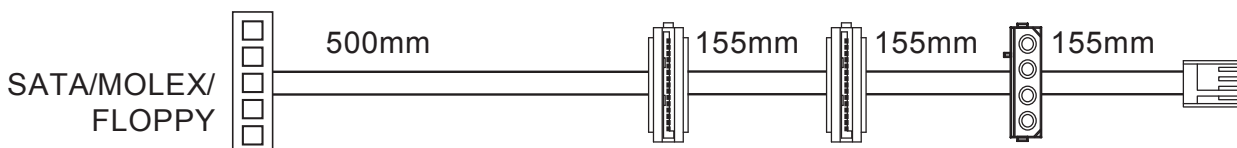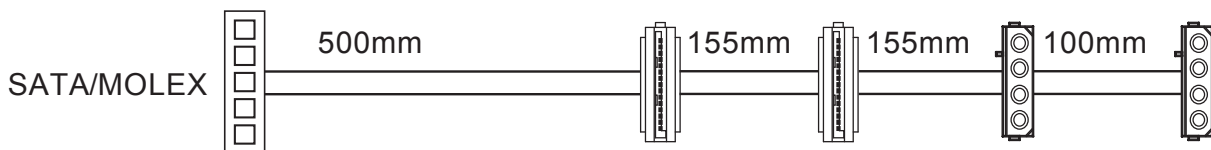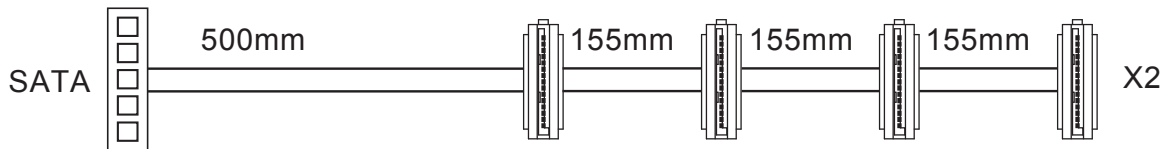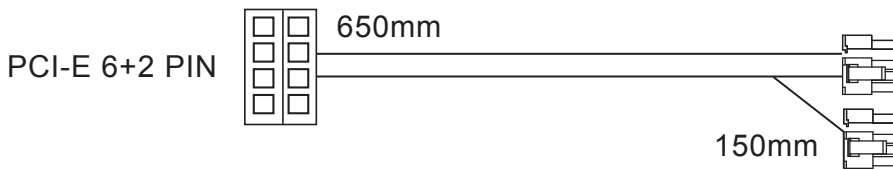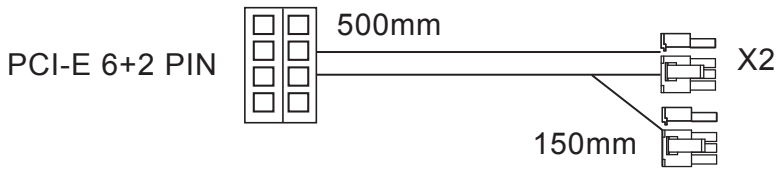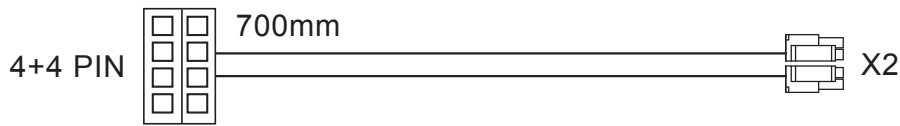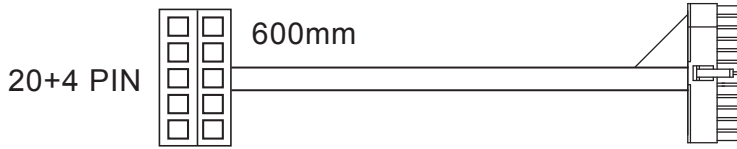
Cable Length

850W/1000W/1200W

20+4 PIN   600mm

4+4 PIN   700mm

4+4 PIN   700mm

PCI-E 6+2 PIN   500mm   X2
150mm

PCI-E 6+2 PIN   650mm   X2
150mm

SATA   500mm   155mm   155mm   155mm   X2

SATA/MOLEX   500mm   155mm   155mm   100mm   X2

SATA/MOLEX/
FLOPPY   500mm   155mm   155mm   155mm
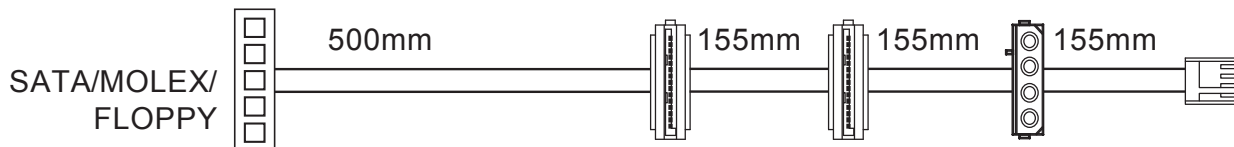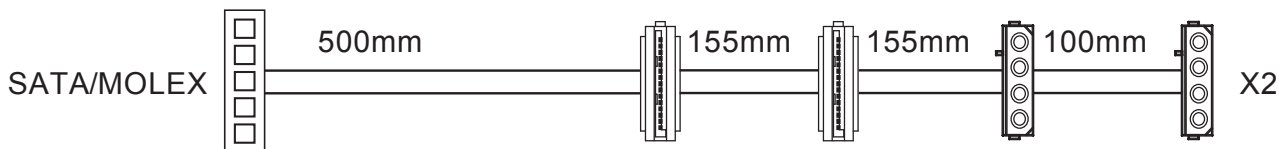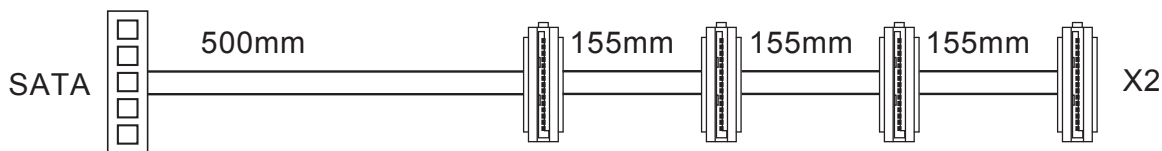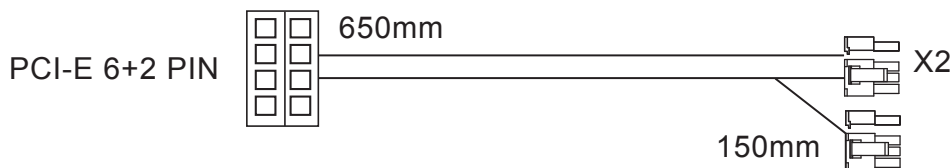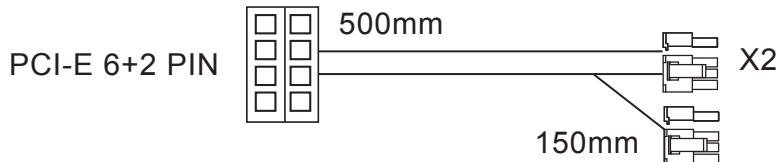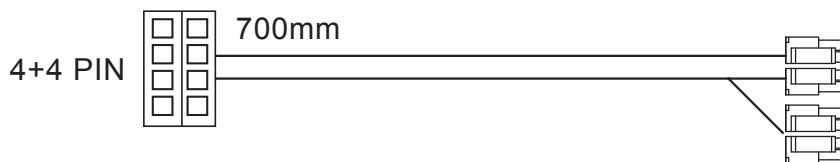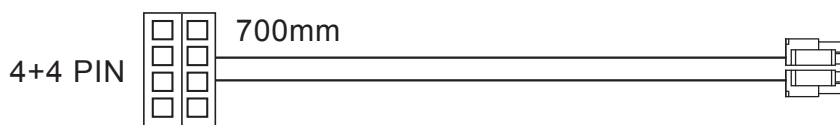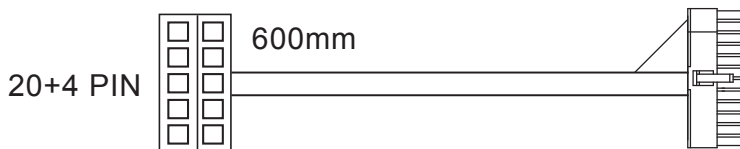
Package Information

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UPC Code	84568501068 1	84568501069 8	84568501070 4
Shipping Dimensions (L×W×H)			
Shipping Weights			
Master Pack Dimension (L×W×H)			
Master Pack Quantity	5 retail boxes per master package		
Master Pack Weight			15.82 kg
Pallet Quantity			
Country of Origin	China		
Warranty	10 Years		
Additional Information			

Model	HPT2-1000M	HPT2-1200M	HPT2-1200M-JP
EAN Code	471322452278 9	471322452279 6	JAPAN Only
UPC Code	84568501071 1	84568501072 8	
Shipping Dimensions (L×W×H)			
Shipping Weights			
Master Pack Dimension (L×W×H)			
Master Pack Quantity	5 retail boxes per master package		
Master Pack Weight	16 kg	16.26 kg	16.26 kg
Pallet Quantity			
Country of Origin	China		
Warranty	10 Years		
Additional Information			