

User's Manual

ZM1250-PLATINUM



Ultra High Efficiency Power Supply

※ To ensure safe and easy installation, please read the following precautions.

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Ver. 1.0

1. Warnings and Safety Precautions



Neglecting the following may cause serious injury or death.

- ▶ Opening the cover of the product while the power cord is plugged into an outlet may cause electrocution or critical damage to the product.
- ▶ Handling the power cord with wet hands may cause electrocution.
- ▶ Inserting fingers or metallic objects into the cooling fan may cause injury or electrocution.



Neglecting the following may cause minor injuries, degrade product conditions or cause malfunction.

- ▶ Operating the product in an extremely cold or hot environment can degrade product performance and lifespan.
- ▶ Exposure to liquids may cause malfunction.
- ▶ Operation in a humid or non-ventilated environment may reduce product lifespan.
- ▶ Plugging the main power connector P1 into the motherboard while the product is connected to the AC power source may cause damage to the motherboard.
- ▶ Make sure that the connectors are connected to their designated locations, and that the connectors are not oriented in the wrong direction when connecting the DC output connectors.
- ▶ Please use gloves to prevent injuries during installation.
- ▶ Product designs and specifications may be revised without prior notification to improve quality and performance.

Disclaimer) Zalman Tech Co., Ltd. is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alteration, repair, improper installation, or improper testing.

2. Components



Power Supply



Four Screw



Five Cable Ties



AC Power Cord

Manual

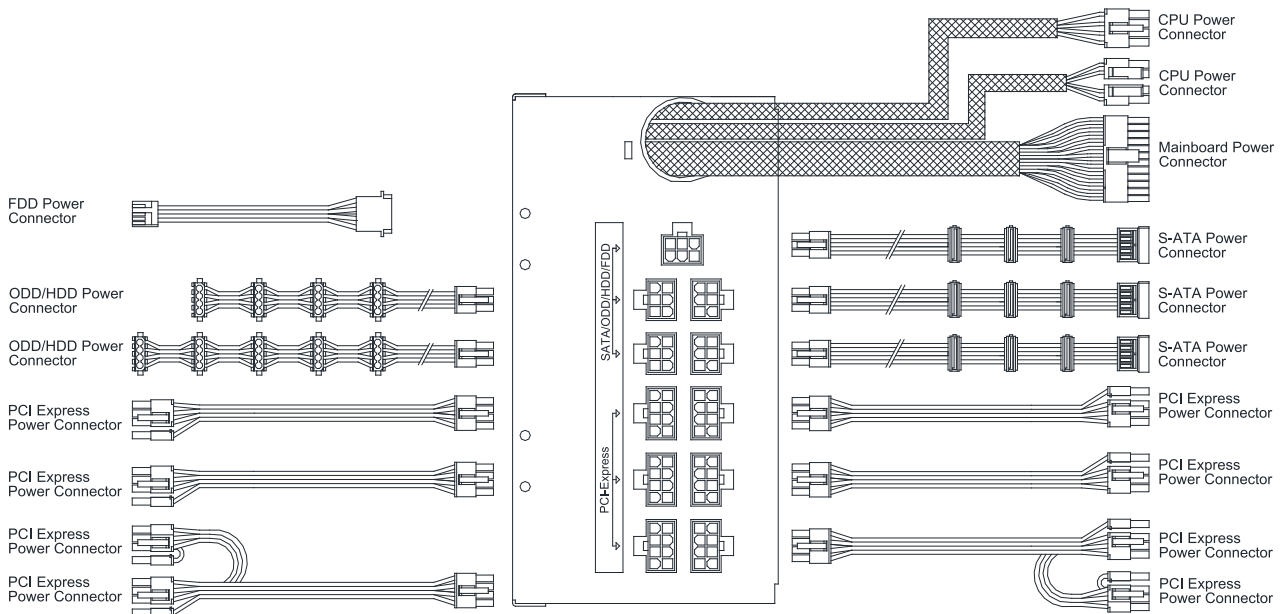
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3. Specification

1) ZM1250-Platinum Electrical & Physical Specification

AC Input Range	Voltage	100 ~ 240VAC ±10		V _{out}	Output Load Rating Combined			Combined Power	
	Frequency	47~63Hz			I _{min}	I _{max}	I _{peak}		
AC Input Current	100VAC	15A		+3.3V	0.0A	25A	82.5W	150W	1250W
	240VAC	7.5A		+5V	0.0A	25A	125W		
PFC Type	Active PFC			+12V1	1.0A	45A	540W	1250W	
Power Factor	MAX 99%			+12V2	0.0A	65A	780W		
Efficien	MAX 93% @ 230VAC, Typical load			-12V	0.0A	0.8A	9.6W		
DC Output Voltage Regulation	V _{out}	Stable Range		At Full Load	+5VSB	0.0A	4.0A	20W	
	+3.3VDC	±3%	+3.21 ~ +3.40V		Ambient Temperature				
	+5VDC	±3%	+4.85 ~ +5.15V		Operation	10 ~ +50°C			
	+12V1DC	±3%	+11.64 ~ +12.36V		Stored	-20 ~ +70°C			
	+12V2DC	±3%	+11.64 ~ +12.36V		Ambient Humidity				
	-12VDC	10%	-10.8 ~ -13.0V		Operation	20% ~ 90% RH			
	+5VSB	±3%	+4.85 ~ +5.15V		Stored	5 ~ 95% RH			
DC Output Ripple & Noise	V _{out}	Standard Range		At Full Load	Protection Funtions				
	+3.3VDC	50mV			Over-Voltage Protection (OVP)				
	+5VDC	50mV			Under-Voltage Protection (UVP)				
	+12V1DC	120mV			Over-Current Protection (OCP)				
	+12V2DC	120mV			Short-Circuit Protection (SCP)				
	-12VDC	120mV			Over-Temperature Protection(OTP)				
+5VSB	50mV		Over-Power Protection (OPP)						
Power Good Delay	100~500ms			Demention	200 (L) * 150 (W) * 86 (H) mm				
Hold-UP Time	>16ms @70% Load, 115Vac			MTBF	>100,000 hours @25°C				

2) ZM1250-Platinum Cable Specification



4. Certification

