

Thermaltake Toughpower Server Edition

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Thermaltake Toughpower Server Edition

1. Introduction

1.1 Statement

We live up to the promise of our Thermaltake logo in our unending quest for excellence. If you have any suggestion or comments, please access our website: <http://www.thermaltakeusa.com> or Email them to: support@thermaltakeusa.com

We appreciate your kind feedback and you will receive a prompt response from our customer service team. Please take time in familiarizing yourself with the power supply, it's connectors and the contents of this manual before proceeding with the installation of the power supply unit.

Should you have any questions regarding the content of the manual, please contact Thermaltake directly. Failure to follow the proper procedures may cause severe bodily harm or damage to your system.

1.2 Warning and Caution

Do not pull the AC power cord when the power supply is in use, it may harm or damage your components.

Do not store power supply in a high humidity/temperature environment.

High voltage circuitries are in use in the power supply. Do not attempt to open the power supply unit casing unless you are an authorized service technician or trained professional electrician.

Failure to comply with or within any of the warnings and cautions covered in this manual, will void all warranties and guarantees for this Power Supply unit.



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2. Product Features

2.1 Voltage Regulation

Output Voltage	+5V	+3.3V	+12V	-12V	+5VSB
Line Reg.	±1%	±1%	±1%	±1%	±1%

2.2 Components - Japanese & USA industrial grade components (cooling fan, capacitor, MOSFET, driver IC, output connectors & etc.)

** Most components are made in Japan & USA, special designed to handle industrial environment and extreme stress conditions.

2.3 (Redundant Only) – The unit features a warning sub-system that includes LED indicator, buzzer alarm, TTL signal & etc. Alert signals are guides for the user to troubleshoot the power supply. The TTL signals include: Power Good signal and PFD (Power Fail Detect) signal. In case of the cooling fan should failed during operation, the PFD signal will be activated.

2.4 (Redundant Only) – When redundant modules are in normal and steady condition it balances the load and share through its parallel design. This design will increase the life and reliability of the power supply unit.

3. Installation

- 3.1 To prevent electrical shocks make sure the power supply unit is TURN OFF, disconnect the power cord.
- 3.2 Make sure proper mounting tool and bracket to ensure the fitting on the chassis and mounting screw holes are match.
- 3.3 When attaching power supply connectors to Motherboard, please refer to Motherboards manufacturer instruction, some pin out may differ from different motherboard



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manufacturer. *Wrongfully plugged connector may cause undetectable problem.

- 3.4 Thermaltake Toughpower Server Edition are full range power supply. It runs on 110V ~ 240V input (Universal Input).
- 3.5 Before power on, please make sure all attached connectors are properly in place and securely tighten.
- 3.6 (Redundant Only) – Before covering the chassis you may want to test if the redundant module set up is working.
 - 3.6.1 To ensure the redundant set up is working. When powering up the redundant power supply the (LED indication) is on GREEN. Simply power off one of the power redundant module, Warning alarm will sound (LED indication is on RED) - Blinking. Even if one of the modules is unattached, power supply will continue to power the system. Means redundant function is fully utilized and will continue to back up the other power supply without disturbing the system operation.
 - 3.6.2 To reset the alarm by pressing the reset button on the chassis where the wires lead to the power supply buzzer reset.
 - 3.6.3 Insert back the modules that slide out earlier for testing. Once the modules properly place and lock, alarm should stop buzzing.

4. Hot-Swap Procedures

- 4.1 Locate the failed modules by checking the (LED indication) at the back of the modules. IF (RED or NO LED Light) means the module is defective.
- 4.2 Please wear appropriate electric safety gloves to ensure no aftershock or power leakage on your power supply.

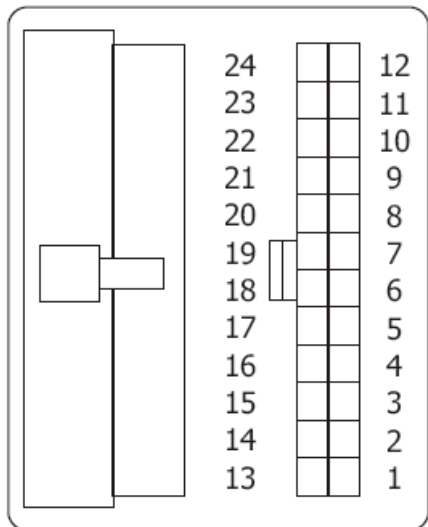


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- 4.3 Unlock the module by pushing the tab aside and pull out the defective module.
- 4.4 To replace the proper or identical Toughpower Server Edition module please refer the part number and label located on top of the module or visit <http://www.thermaltake.com> to search for correct model and part number.
- 4.5 Place the NEW power module back into the slot, as previously removed. Plug in the power cord.
- 4.6 GREEN LED should be lit, from the back of the NEW replaced module.
- 4.7 Status LED should be on solid GREEN.

5. Pinout

5.1 Main Power Connector (24 pin)

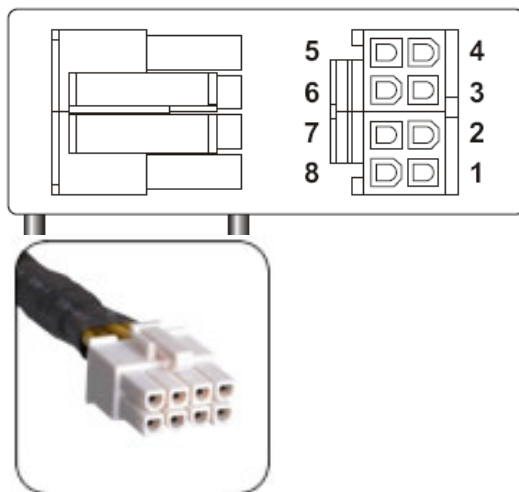


Voltage	Color			Color	Voltage
+3.3V	Orange	1	13	Orange	+3.3 V
+3.3V	Orange	2	14	Blue	-12 V
COM	Black	3	15	Black	COM
+5V	Red	4	16	Green	PS_ON#
COM	Black	5	17	Black	COM
+5V	Red	6	18	Black	COM
COM	Black	7	19	Black	COM
PWR_ON	Gray	8	20	N/C	N/C
+5Vsb	Purple	9	21	Red	+5 V
+12VDC	Yellow	10	22	Red	+5 V
+12VDC	Yellow	11	23	Red	+5 V
+3.3 V	Orange	12	24	Black	COM



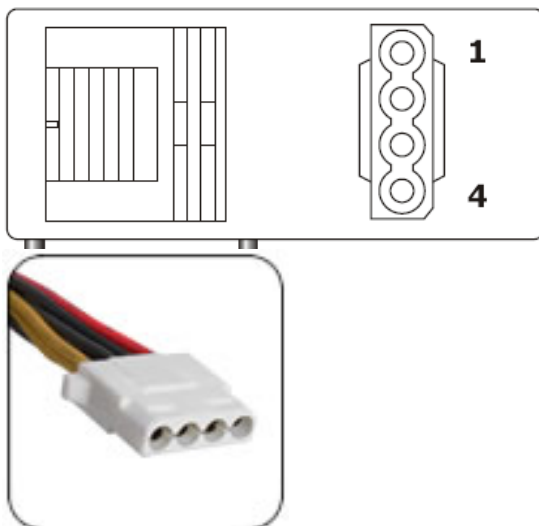
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5.2 CPU Connector (8 pin)



Color	Signal	Pin
Black	GND	1
Black	GND	2
Black	GND	3
Black	GND	4
Yellow	+12VDC	5
Yellow	+12VDC	6
Yellow	+12VDC	7
Yellow	+12VDC	8

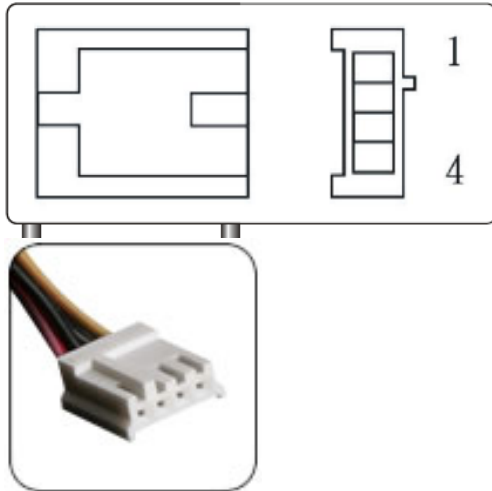
5.3 Peripheral Connector (4 pin)



Color	Signal	Pin
Yellow	+12VDC	1
Black	COM	2
Black	COM	3
Red	+5VDC	4

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5.4 Floppy Disk Connector (4 pin)



Color	Signal	Pin
Red	+5VDC	1
Black	COM	2
Black	COM	3
Yellow	+12VDC	4

6. **Contact Us** ~ For Further Technical Supports or General Inquiries, please contact us at:

Thermaltake Technologies Inc.

Toll Free: (800)988-1088

Email: Support@thermaltakeusa.com

7. **Warranty Information**

All power supply products from Thermaltake Technologies Inc. automatically carry a 5-year warranty from the date of purchase. If no proof of purchase can be presented upon request, Thermaltake cannot be held responsible for warranty service. If the unit is dead on arrival or is missing parts, the user has 10 days from the receiving date to report to Thermaltake for an advanced RMA service.

(Terms and Conditions apply)



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For more detail information please visit:

<http://thermaltakeusa.com/support/warranty/ps.htm>

