

**APEVIA**

# PREMIER

PREMIER SERIES POWER SUPPLY



650W Premier Power

850W Premier Power

1000W Premier Power

USER'S MANUAL

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# 1. Product Features

- a. Semi-modular GOLD power supply
- b. 80+ GOLD certified for 90%+ efficiency
- c. RGB fan lighting function: 366 selectable RGB lighting modes
- d. Stable and reliable
- e. Cosmic black casing
- f. Supports single 12v output for higher power usage
- g. Supports Dual / Quad / Multi core CPU'S
- h. Ample +12V output, enhanced +12V current capability broadens utilization possibilities.
- i. Multi CPU technologies supported, 6-pin and 8-pin PCI-E connectors to support all GPU platforms.
- j. Built in 1x 135mm silent automatically thermal fan speed controlled RGB fan.
- k. Dimensions: 150mm x158mm x 86mm (5.9"x 6.2"x 3.4") W x L x H
- l. Heavy-duty protections, including OVP (Over Voltage Protection) OPP (Over Power Protection), SCP (Short Circuit Protection)
- m. Built-in APFC (Active Power Factor Correction) rates> 0.9
- n. DC to DC converter design, provides superior dynamic response, greater system stability and maximizes the 12V DC rail output

## 2. Product Specifications:

- a. AC input voltage: 100-240V
- b. AC input frequency: 60Hz/50Hz
- c. Operating temperature: The power supply should be operated in an ambient temperature of 0°C to 40°C
- d. DC output:

Model	650W Premier Power				
AC Input	100-240V , 8A / 4A , 50-60Hz				
DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	54.1A	0.3A	3A
Combined Power	100W		650W	3.6W	15W
Total Power	650W				
Model	850W Premier Power				
AC Input	100-240V , 10A / 5A , 50-60Hz				
DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	66A	0.3A	3A
Combined Power	100W		850W	3.6W	15W
Total Power	850W				
Model	1000W Premier Power				
AC Input	100-240V , 15A / 7.5A , 50-60Hz				
DC Output Voltage	+3.3V	+5V	+12V	-12V	+5Vsb
Max Output Current	20A	20A	83.3A	0.3A	3A
Combined Power	100W		1000W	3.6W	15W
Total Power	1000W				

### 3. Overall Performance:

- a. Hold up time: 14ms at full load normal line input voltage.
- b. Switching frequency: 50KHz at normal line input.
- c. Stability: +/- 5% for 24KHR after warm up.

### 4. Protections:

- a. Under voltage protection.

If an under voltage fault occurs, the supply will latch all DC outputs into a shutdown state when +12V,+5V & +3.3V outputs under 60% of its maximum value.

- b. Over voltage protection

Output	Minimum	Nominal	Maximum	Unit
+12 VDC	13.4	15.0	17	Volts
+5 VDC	5.70	6.3	7.0	Volts
+3.3 VDC	3.70	4.2	4.8	Volts

- c. Short circuit

An output short circuit is defined as any output impedance less than 0.1 ohms. The power supply shall shut down and latch off for shorting the +3.3 VDC,+5 VDC or +12 VDC rails.

Shorts between main output rails and +5VSB shall not cause any damage to the power supply. The power supply shall either shut down and latch off or fold back for shorting the negative rails.+5VSB must be capable of being shorted indefinitely, but when the short is removed, the power supply shall recover automatically or by cycling PS\_ON#. The power supply shall be capable of withstanding a continuous short-circuit to the output without damage or overstress to the unit.

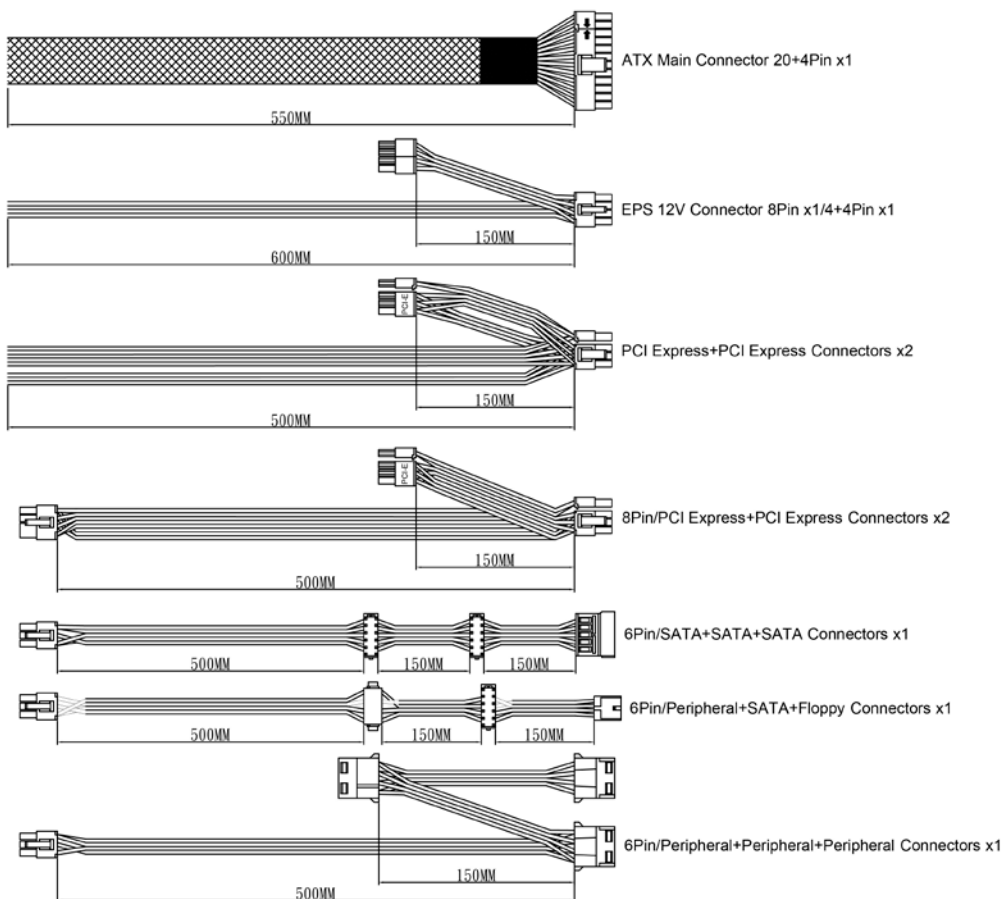
d. Over-power protection

The power supply will be shut down and latch off when output power is 110%~150%

## 5. Dimensions:

150mm x 158mm x 86mm (5.9" x 6.2" x 3.4") W x L x H

## 6. Description of Connectors:



## 7. RGB Fan Lighting Function: 366 Selectable RGB Lighting Modes

- a. Click RGB button on the back side of PSU to switch 366 modes.
- b. Pressing and holding the button for 3 seconds is to return to the first automatic playable mode. (The RGB light will flash once indicating it has reset back to first automatic playable mode)
- c. Pressing and holding the button for more than 4 seconds is to turn off RGB light on the fan. (The RGB light will flash twice indicating it is on "off" mode)  
Press the RGB button again to start up RGB modes.

## 8. Precautions:

Warning! To avoid the risk of electrical shock, unauthorized persons need the following precautions:

- a. Do not open the power supply case!
- b. Avoid exposure to humidity.

## 9. Information:

Thank you for purchasing a high-quality Apevia product! Please visit our website at

<http://www.apevia.com> for complete warranty information and future support for your

product. For the latest release information, or should you have any questions, please visit our website, or contact us at:

Support Phone Number: 1-909-718-0789

Support E-mail: [support@apevia.com](mailto:support@apevia.com)

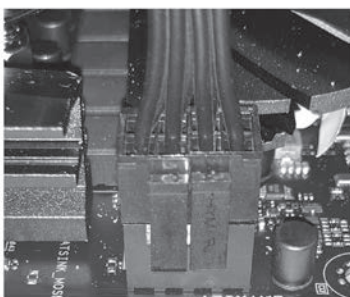
## 10. Installation:

### STEP 1



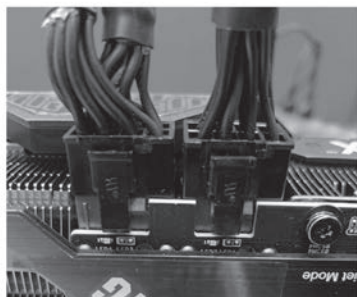
Plug the 24-pin connector onto the motherboard.

### STEP 2



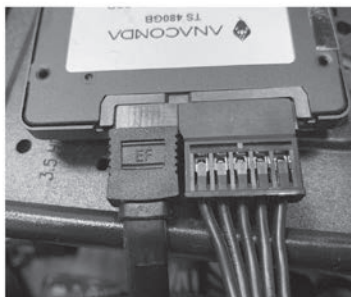
4-pin or 8-pin (4+4pin) + 12V connector used for CPU only.

### STEP 3



PCI express connector for video card only.

### STEP 4



SATA connectors used for hard drive, CD-ROM and cooling fans.



## 11. Troubleshooting:

If power supply fails to operate properly, please check the following before requesting for an RMA:

- a. Please make sure the power supply and power cord is connected properly.
- b. Please make sure the power cord is plugged into the power socket.
- c. Please make sure the power supply I/O button is switched to the “ I ” position.
- d. Please check if all the connectors (motherboard, floppy and peripherals) are connected properly.
- e. Please allow 5 seconds interval before turning the power on again when power supply is switched off manually (setting the I/O switch to the “ O ” position)

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