ASUS AURA SYNC

RGB MSI MYSTIC LIGHT SYNC

GIGABYTE RGB FUSION READY

RGB Sync Edition

80 PLUS GOLD

TOUGHPOWER GRAND RGB 750W

DATASHEET

Patented
RGB 256 Colors PSU Fan

80 PLUS GOLD

Smart Zero Fan

ASUS AURA SYNC

Low Ripple Noise

RGB msi MYSTIC LIGHT SYNC

Fully Modular Flat Cables

GIGABYTE RGB FUSION READY

100% Japanese Capacitors

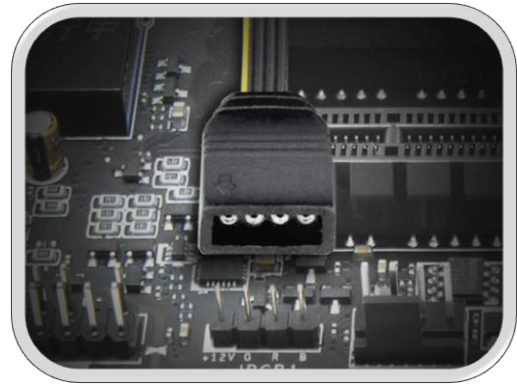10 YEAR WARRANTY Thermaltake

❖ Features

- Patented 256 colors Riing 14 RGB fan with five lighting modes, built-in memory and RGB sync function.
- Smart Zero Fan: Minimizes undesired noise.
- <30mV low ripple noise design.
- Extremely strict voltage regulation < $\pm$2%
- Fully modular low-profile flat black cables.
- 100% high quality Japanese 105°C/221°F capacitors.
- 80 PLUS®Gold certified up to 90% efficiency.
- 10 year warranty
- 750W continuous output at 50°C/122°F operating environment.
- High amperage single +12V rail design.
- Intel C6/C7 states & ErP ready
- Built-in industry grade protections: OCP, OVP, UVP, OPP, SCP, OTP
- Dimension: 150mm(W)x86mm(H)x160mm(D).
- Safety approvals: CE/cTUVus/TÜV SÜD/FCC/CCC/BSMI/EAC certifications.
- Compatible with the latest Intel ATX 12V 2.4 & SSI EPS 12V 2.92 standards.

❖ Highlight Features

**Synchronizing all RGB lighting devices
on your system with the +12V RGB header.
(+5V RGB header is not supported by this model)**

Sync All Your RGB

Compatible with: ASUS AURA SYNC, msi MYSTIC LIGHT, GIGABYTE RGB
FUSION, BIOSTAR VIVID LED DJ and ASRock RGB LED ready motherboards.

❖ Highlight Features

RGB options available at your fingertips for easy use.

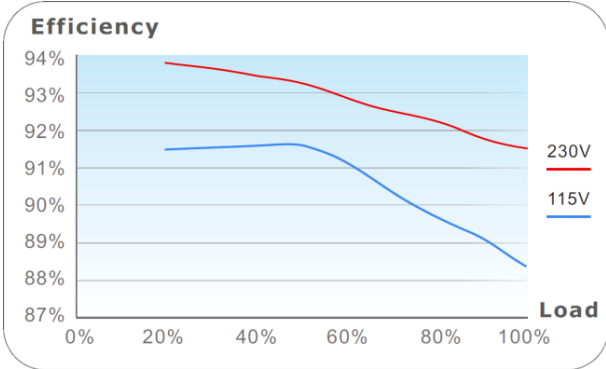RGB Cycle Mode   Solid Red   Solid Green   Solid Blue   Solid White   LEDs Off
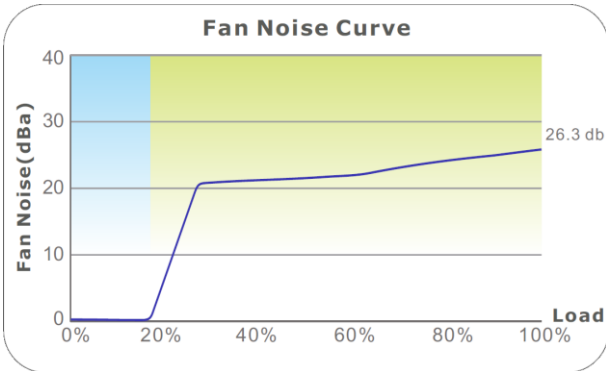
Patented 256 Colors Riing 14 RGB Fan

TOUGHPOWER GRAND RGB GOLD series features a patented 256 colors Riing 14 RGB fan with five lighting modes, LEDs off mode and built-in memory.
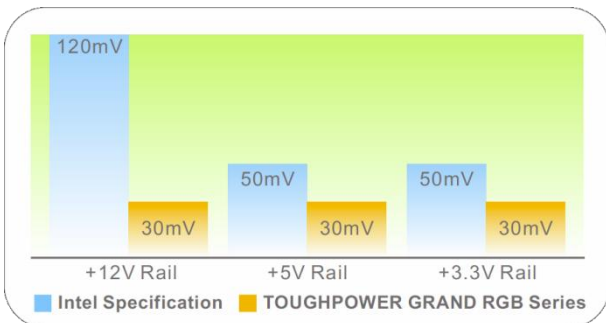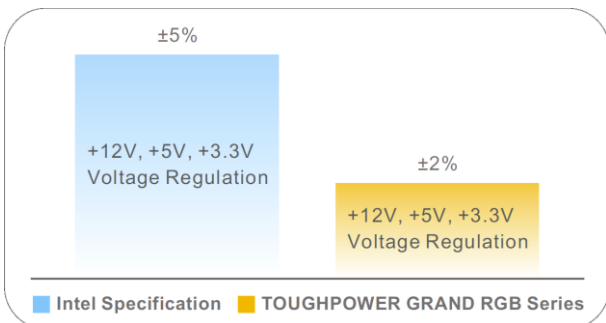
❖ Highlight Features

80 PLUS Gold Certified Efficiency
Delivers top end efficiency under real world load conditions.
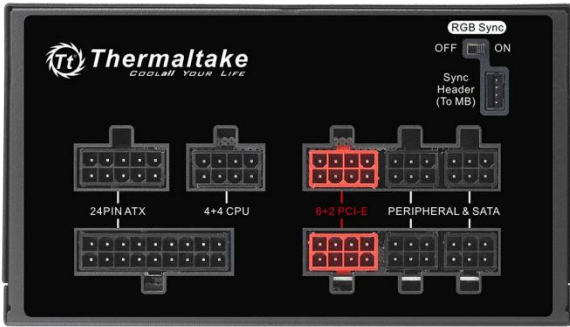

Ultra Quiet Smart Zero Fan
Minimize undesired noise.

<30mV Low Ripple Noise Design
Top-end build quality with low ripple noise.

Extremely Strict Voltage Regulation < ±2%
Provides steady clean power through exceptional voltage stability.
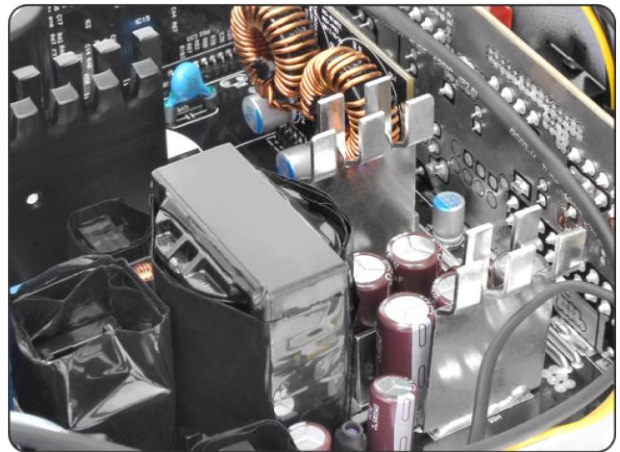
❖ Highlight Features

Fully Modular Low-Profile Flat Black Cables
Makes cable management easier, reduces clutter and increases airflow inside the chassis.

100% High Quality Japanese 105°C/221°F Capacitors.
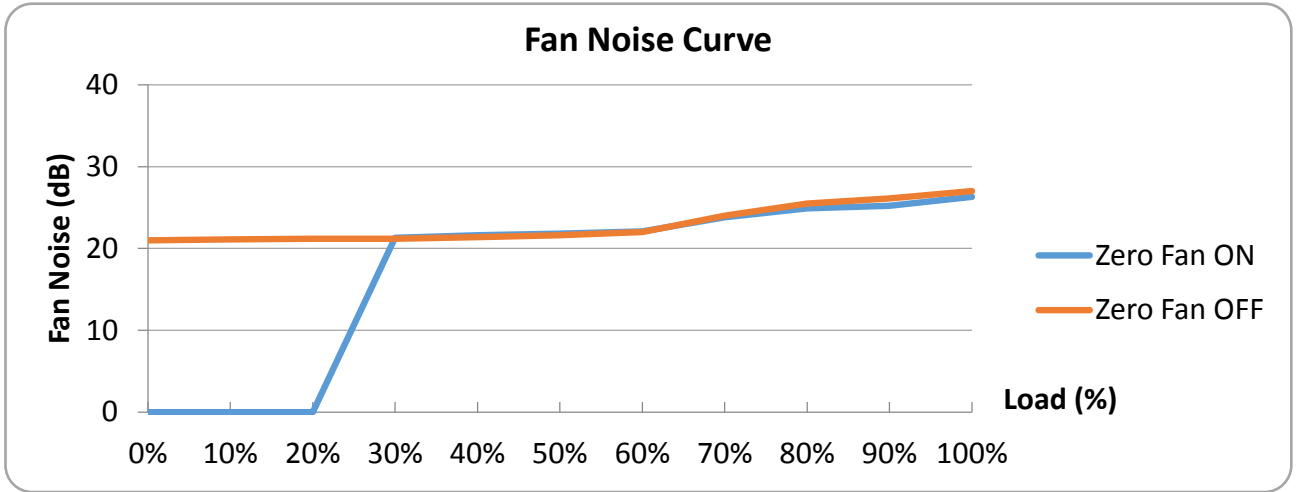Improves the durability and offers the highest stability and reliability.
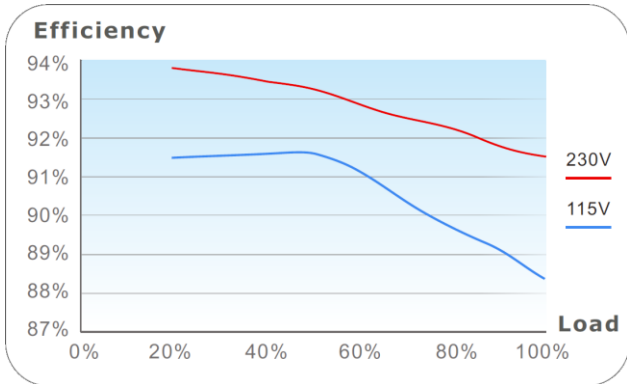
High Amperage Single +12V Rail & DC to DC Design
Powerful single +12V rail and DC to DC design for the best compatibility.

❖ Fan Noise

Fan Noise Curve

❖ ECO Design

80 PLUS®Gold Certified Efficiency
Delivers top end efficiency under real world load conditions.

Supports Energy Star 5.0* energy standard
Toughpower Grand RGB Gold series is suitable for use in Energy Star-compatible computers.

Supports Intel Deep Power Down C6 Status
Helps your PC system operate more power efficiently.

Corresponds to the EU directives on WEEE and RoHS
Thermaltake considers its full impact on the environment during manufacturing and maintains green facilities to ensure Toughpower Grand RGB Gold series meets WEEE & RoHS requirements.

❖ Output Specification

AC Input	Input Voltage: 100V - 240V~ Input Current: 10A Frequency: 50Hz - 60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5VSB
Max Output Current	22A	22A	62.5A	0.3A	3A
Max Output Power	120W		750W	3.6W	15W
Total Power	750W				

❖ Total Output Connector

Connector / Wattage	Main Power Connector (24Pin)	ATX 12V (4+4Pin)	SATA (5Pin)	PCI-E (6+2Pin)	Peripheral (4Pin)	FDD Adapter	RGB Sync Cable
750W	1	1	9	4	4	1	1

Wattage	Connector Type	Connector Quantity & Cable Length
750W	Main Power (24pin)	1 x 24pin Main connector (600mm)
	ATX 12V (4+4pin)	1 x ATX 12V 4+4pin connector (650mm)
	PCI-E (6+2pin)	2 x PCI-E 6+2pin connectors (500mm + 150mm) 2 x PCI-E 6+2pin connectors (500mm + 150mm)
	SATA	3 x SATA connectors (500mm + 150mm + 150mm) 3 x SATA connectors (500mm + 150mm + 150mm) 3 x SATA connectors (500mm + 150mm + 150mm)
	Peripheral	4 x Peripheral connectors (500mm + 150mm + 150mm + 150mm)
	FDD Adapter	1 x Peripheral to FDD adapter cable (150mm)
	RGB Sync Cable	1 x RGB Sync connector + 1 x RGB Sync header (570mm + 80mm)

GENERAL INFO	
P/N	PS-TPG-0750FPCGxx-S
Model	TPG-750AH3FSGR
Type	ATX 12V v2.4 and EPS v2.92
Max. Output Capacity	750W
Peak Output Capacity	900W
Color	Black
Dimension (W/H/D)	150mm(W) x 86mm(H) x 160mm(D)
PFC	Active PFC
Power Good Signal	100-500 msec
Hold-Up Time	> 16msec at 100% of full load
AC INPUT	
Input Current	10A
Input Frequency Range	50Hz - 60Hz
Input Voltage	100V – 240V~
ENVIRONMENTAL	
Operating Temperature	0°C to + 50°C
Operating Humidity	20% to 90%,non-condensing
Storage Temperature	-40°C to + 70°C
Storage Humidity	20% to 95%, non-condensing
Cooling System	14cm hydraulic bearing fan
MISCELLANEOUS	
Efficiency	Meet 80 PLUS®Gold at 115Vac input.
MTBF	120,000 hrs minimum
Safety Approval	CE/cTUVus/TÜV SÜD/FCC/CCC/BSMI/EAC
PCI-E CONNECTOR	
PCI-E 6+2pin	4

❖ Total Protection

Voltage Source	Over Voltage Protection	Under Voltage Protection	Over Current Protection
	Protection Point		
+3.3V	4.3Vmax	Not lower than 2.0~2.4V	24.2A min.; 35.2A max.
+5V	6.5Vmax	Not lower than 3.3~3.7V	24.2A min.; 35.2A max.
+12V	15.5Vmax	Not lower than 8.5~9.5V	59.62A min.; 86.72A max.
Over Power Protection	Protection at 110%~160% over peak load.		
Over Temperature Protection	Triggered by heating up TH3 thermistor to 85°C/185°F		
Short Circuit Protection	Activated when any DC rails short circuited.		