



TOUGHPower GRAND 系列
電源供應器

TOUGHPower GRAND RGB 850W GOLD

EAN: 4717964406880

Patented
RGB 256 Colors
PSU Fan

Smart Zero Fan

Low Ripple Noise

Fully Modular
Flat Cables

100% Japanese
Capacitors



❖ Highlights

- Patentierter 256 Farben Ring 14 RGB Lüfter mit Fünf Beleuchtungs Modi und eingebautem Speicher
- Smart Zero Fan
- <30mV low ripple noise design.
- Extreme Spannungsregelung < $\pm 2\%$
- Voll modulare flache Kabel
- Japanischer High quality Haupt Kondensator
- 80 PLUS® Gold zertifiziert (90% Effizienz)
- 10 Jahre Garantie
- Super Starke 12V Schiene
- Schutzschaltungen: OCP, OVP, UVP, OPP, SCP, OTP
- Sicherheitszertifikate: CE/cTUVus/TÜV SÜD/FCC/CCC/BSMI/EAC
- Kompatibel mit den neuesten Intel ATX 12V 2.4 & SSI EPS 12V 2.92 Standards

❖ Output Specification

AC Input	Input Voltage: 100V - 240V~ Input Current: 12A Frequency: 50Hz - 60Hz				
DC Output	+3.3V	+5V	+12V	-12V	+5VSB
Max Output Current	22A	22A	70.9A	0.3A	3A
Max Output Power	120W		850W	3.6W	15W
Total Power	850W				

❖ Total Output Connector

Connector						
P/N	Main Power Connector (24Pin)	ATX 12V (4+4Pin)	SATA (5Pin)	PCI-E (6+2Pin)	Peripheral (4Pin)	FDD Adapter
SPR-0850F-R	1	2	12	6	4	1

Wattage	Connector Type	Connector Quantity & Cable Length
850W	Main Power (24pin)	1 x 24pin Main connector (600mm)
	ATX 12V (4+4pin)	2 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) 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)



TOUGHPower GRAND **RGB** 850W GOLD

GENERAL INFO	
P/N	PS-SPR-0850FPCBEU-R
Short P/N	SPR-0850F-R
Model	SPR-850AH3FSB-R
Type	ATX 12V v2.4 and EPS v2.92
Max. Output Capacity	850W
Peak Output Capacity	1020W
Color	Black
Dimension (W/H/D)	150mm(W) x 86mm(H) x 170mm(D)
PFC	Active PFC
Power Good Signal	100-500 msec
Hold-Up Time	> 16msec at 100% of full load
AC INPUT	
Input Current	12A
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 bei 115V
MTBF	120,000 hrs minimum
Safety Approval	CE/cTUVus/TÜV SÜD/FCC/CCC/BSMI/EAC
PCI-E CONNECTOR	
PCI-E 6+2pin	6



❖ 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	77.99A min.; 113.44A max.
Over Power Protection	Protection at 110%~160% over peak load.		
Over Temperature Protection	85°C		
Short Circuit Protection	Activated when any DC rails short circuited.		