



EVO_Blue Series

550W & 650W & 750W

EVOlutionary power, EVOlutionary performance

090220-002



Design Concept



The EVO_Blue power supply equipped with a whisper-quiet 140mm fan with five user-adjustable setting LED that lights up to express each users' unique personality. Distinctive power housing design not only makes it one-of-the-kind power supply, but also helps in accelerating thermal dissipation by channeling cool air directly to the heat source to ensure maximum cooling and decreases overall noise level.

The EVO_Blue power supply delivers crisp and clean power to cutting-edge devices with a dedicated 12 volt rail, the foundation to a stable gaming PC. Its Intelligent Cable Management feature enables users to use only the cables needed while keeping chassis free of clutter to increase overall system airflow and reduces heat build-up.

Gaming PC today demands the ultimate in power delivery system, Evo_Blue.





EVO_Blue Series



W0307 650W

W0308 750W

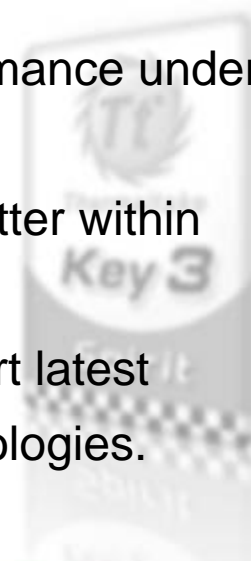




Unique Selling Point



1. Oversized 14cm whisper-quiet ball bearing fan dramatically reduces overall PC noise, increase system thermal efficiency.
2. Intelligent variable speed controlled fan automatically increases or decreases fan speed to adjust to different system loading.
3. Modular cable sockets with blue LEDs backlight & five user-adjustable LED environmental lighting effects.
4. Robust and dedicated single +12V output provides superior performance under all types of system loading.
5. Cable Management improves internal airflow by reducing cable clutter within PC to promote accelerated heat removal.
6. Features dual 8-pin PCI-E & dual 6-pin PCI-E connectors to support latest Nvidia 2-way / 3-way SLI & AMD 2-way / 3-way CrossFire X technologies.





Self Expression – User Adjustable LED Fan



14cm color-shift LED Fan



Passionate Red.



Laid Back Blue.



Tranquil Green.



Hyper Mode.



Determination Mode.



External switch makes changing color easy.



Modular socket with Blue LED Backlight

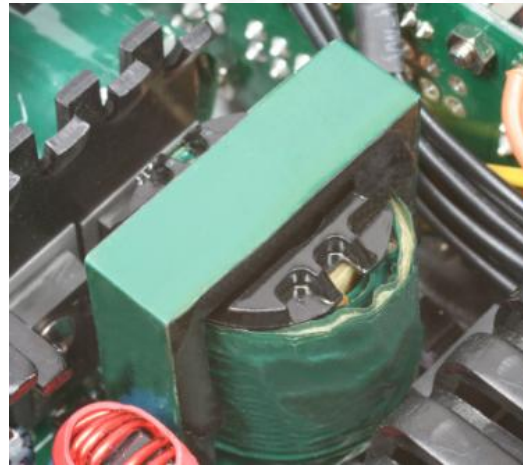


Modular socket panel with blue LED backlight ushers in an unique user experience during assembly and everyday use.

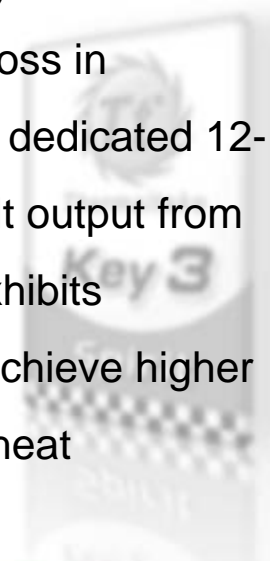




Robust Single +12V

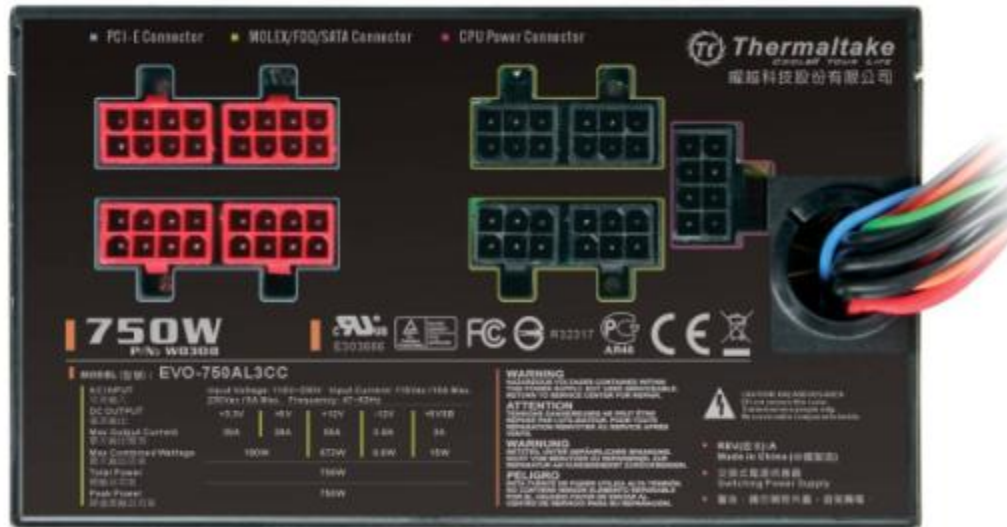


Power distribution loss factor, power loss due power trapped in improperly distributed multiple rail system, has long been view as an acceptable form of power loss in traditional power design. Evo_Blue series power supply, engineered with dedicated 12-volt rail (without a 240VA limit) is capable of delivering 100% of the 12-volt output from the PSU to computer components, while traditional power design often exhibits distribution loss of up to 30%. This enables Evo_Blue power supplies to achieve higher power efficiency to decrease power energy bill and dramatically reduces heat generated.

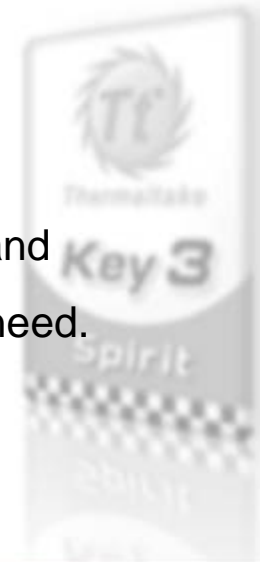




Modular Cable Management



The Modular Cable Management design improves internal airflow and reduces system clutter by allowing you to use only the cables you need.










Uniquely chassis








Output Connector



Connector Type						
	Wattage	20+4pin Main Connector	4-pin +12V CPU Connector	8pin +12V CPU Connector	8pin PCI-E Connector	6pin PCI-E Connector
W0306	550W	1	1	1	1	2
W0307	650W	1	1	1	2	2
W0308	750W	1	1	1	2	2

Connector Type				
	Wattage	SATA Connector	Peripheral Connector	Floppy Connector
W0306	550W	4	6	1
W0307	650W	4	6	1
W0308	750W	6	6	1



Cable Length



MODELS	Connector Type	Connectors & Cable length
550W 650W 750W	24pin	1 x 20+4pin Main connector(650mm)
	ATX 12V 4pin	1 x ATX 12V 4pin connector(650mm)
	EPS 12V 8pin	1 x EPS 12V 8pin connector(650mm)
550W 650W 750W	Molex & FDD	3 x Peripheral & 1 x FDD connectors (500mm + 150mm + 150mm + 150mm) 3 x Peripheral (500mm + 150mm + 150mm)
550W 650W	SATA	2 x S-ATA connectors (500mm + 150mm) 2 x S-ATA connectors (500mm + 150mm)
750W	SATA	3 x S-ATA connectors (500mm + 150mm + 150mm) 3 x S-ATA connectors (500mm + 150mm + 150mm)
550W	PCI-E 6pin	2 x 6pin PCI-E connectors (500mm)
	PCI-E 8pin	1 x 8pin PCI-E connectors (500mm)
650W 750W	PCI-E 6pin	2 x 6pin PCI-E connectors (500mm)
	PCI-E 8pin	2 x 8pin PCI-E connectors (500mm)
550W	PCI-E 8pin to 6pin adapter	1 x 8pin to 6pin PCI-E adapter (100mm)
650W 750W	PCI-E 8pin to 6pin adapter	2 x 8pin to 6pin PCI-E adapter (100mm)





Specification



GENERAL INFO	
Model	W0306 / W0307 / W0308
Type	Intel ATX 12V 2.3 & EPS 12V 2.91
Max. Output Capacity	500W / 600W / 700W
Peak Output Capacity	550W / 650W / 750W
Color	Black
Dimension (W/H/D)	150mm x 86mm x 160mm
PFC	Active PFC
Power Good Signal	100-500 msec
Hold-up Time	16msec (minimum) at 80% of full load at 230Vac input
AC INPUT	
Input Current	550W: 6A@115Vac, 3A@230Vac 650W: 8A@115Vac, 4A@230Vac 750W: 10A@115Vac, 5A@230Vac
Input Frequency Range	47Hz ~ 63 Hz
Input Voltage	550W: 115Vac- 230Vac 650W / 750W: 100Vac- 240Vac
ENVIRONMENTAL	
Operating Temperature	10 °C to +50 °C
Operating Humidity	20% to 90%,non-condensing
Storage Temperature	-20 °C to +70 °C
Storage Humidity	5% to 95%, non-condensing
Cooling System	1400±10%R.P.M.
MISCELLANEOUS	
Efficiency	75% (min.) at full load (typical) and 115Vac input.
MTBF	100,000 hrs minimum
Safety Approval	UL, TUV, CE, FCC,BSMI,GOST
PCI-E CONNECTOR	
550W	6Pin x 2, 8Pin x 1
650W/ 750W	6Pin x 2, 8Pin x 2





Output Table



INPUT VOLTAGE: 550W 115V~230V 650W/750W: 100V~240V, FREQUENCY: 47Hz~63Hz								
MODEL	Voltage	+3.3V	+5V	+12V	-12V	+5Vsb	TOTAL POWER	PEAK POWER
W0306	MAX Load	30A	28A	36A	0.8A	3A	500W	550W
	Combined Wattage	140W		432W	9.6W	15W		
W0307	MAX Load	30A	28A	48A	0.8A	3A	600W	650W
	Combined Wattage	180W		576W	9.6W	15W		
W0308	MAX Load	30A	28A	56A	0.8A	3A	700W	750W
	Combined Wattage	180W		672W	9.6W	15W		





Product Appearance



Top View



Front View



Bottom View



Side View



Back View





System Compatibility Test



Environment :



Main Board	ASUS STRIKER 2 EXTREME ASUS P6T ASUS P5Q
CPU	Intel C2Q Q9550 Intel i7(1366) D965 Intel Core CPUX6800 Intel PD920
Graphic Card	550W & 650W & 750W supports NVIDIA single GTX 280 / GTX 285 / GTX 295 / AMD HD 4870 series Also supports older model of NVIDIA & .AMD graphic cards.
Memory	Kingston DDR3 1066 1GHz x 2
Hard Drive	WD 750G 7200RPM x 2 Raid 0 mode
Optical Drive	DVD-ROM x 1
Software	3D Mark

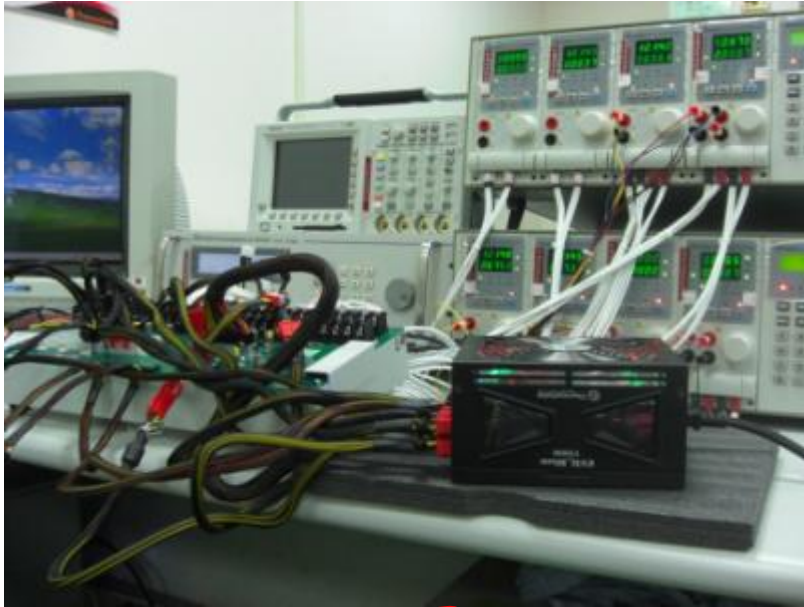
Result :

PASS

All the EVO_Blue PSU are tested to ensure the best compatibility.

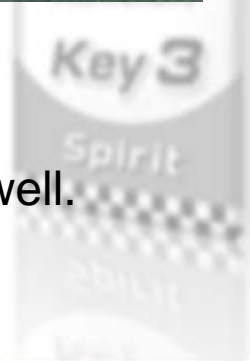


Electrical Function Test



Result : **PASS**

All the EVO_Blue PSU are tested to ensure any function are work well.





Thermal Test



- **550W Test Condition:**

Input voltage/Frequency: 115Vac/47Hz

Ambient Temperature: 50°C

Load Condition: +5V/10A ; +3.3V/9A ; +12V/33A ; -12V/0.8A ; +5Vsb/2.5A

- **650W Test Condition:**

Input voltage/Frequency: 115Vac/47Hz

Ambient Temperature: 50°C

Load Condition: +5V/20A ; +3.3V/20A ; +12V/34A ; -12V/0.8A ; +5Vsb/3A

- **750W Test Condition:**

Input voltage/Frequency: 115Vac/47Hz

Ambient Temperature: 50°C

Load Condition: +5V/25A ; +3.3V/25A ; +12V/37A ; -12V/0.8A ; +5Vsb/3A





Thermal Test – 550W Result



Location	SPEC	Temperature	Result
LF2	120	58.4	PASS
L11	120	46	PASS
LF1	120	45	PASS
BD1	120	59.3	PASS
Q10	120	52.8	PASS
Q15	120	57.2	PASS
HS1	120	48.2	PASS
R115	120	53.2	PASS
C38	75	34.3	PASS
TH1	120	73.5	PASS
R132	120	53.3	PASS
T1	120	62.6	PASS
D35	120	38.8	PASS
D19	120	44.2	PASS
D8	120	51.1	PASS
T4	120	45.9	PASS
Q7	120	58.8	PASS
Q11	120	51.3	PASS
U12	120	53	PASS
Q8	120	50	PASS
R76	120	53.5	PASS
D12	120	48.1	PASS
HS2	120	47.8	PASS
T2 wire	110	59.8	PASS
T2 Core	110	54.1	PASS

T5 Bottom	110	62.5	PASS
T3 Top	110	59.7	PASS
T3 Core	110	50.3	PASS
L4	120	45.4	PASS
L7	120	52.3	PASS
D9	110	66.9	PASS
D23	120	59.5	PASS
D17	120	61.2	PASS
D15	120	70.7	PASS
Hs3	120	59	PASS
L5	120	56.3	PASS
L8	120	54	PASS
L2	120	77.3	PASS
D16	120	81.4	PASS
D13	120	58	PASS
R96	120	49.5	PASS
R78	120	64.3	PASS
Fth3	120	51.7	PASS
Fq20	120	44	PASS
L9	120	41.8	PASS
L6	120	43.9	PASS
L1	120	58.7	PASS
AMBIENT		50°C	



Thermal Test – 650W Result



Location	SPEC	Temperature	Result
LF2	120	71.9	PASS
L11	120	53.7	PASS
LF1	120	57.7	PASS
BD1	120	76.9	PASS
Q10	120	47.6	PASS
Q15	120	59.9	PASS
HS1	120	49.8	PASS
R115	120	59.6	PASS
C38	75	35.3	PASS
TH1	120	76.7	PASS
R132	120	71.1	PASS
T1	120	45	PASS
D35	120	57	PASS
D19	120	62.7	PASS
D8	120	48	PASS
T4	120	73.1	PASS
Q7	120	72.6	PASS
Q11	120	57.8	PASS
U12	120	57.1	PASS
Q8	120	56.2	PASS
HS2	120	58.5	PASS
T2 wire	110	63.9	PASS
T2 Core	110	55.4	PASS

T3 Bottom	110	68.1	PASS
T3 Top	110	63.7	PASS
T3 Core	110	38.2	PASS
L4	120	56.1	PASS
L7	120	60.4	PASS
D9	110	77.8	PASS
D23	120	80	PASS
D17	120	78.1	PASS
D15	120	69.6	PASS
Hs3	120	65.5	PASS
L5	120	52.4	PASS
L8	120	66.7	PASS
L2	120	53.3	PASS
D16	120	79	PASS
Fq20	120	30.1	PASS
L1	120	67.3	PASS
AMBIEN	50°C		





Thermal Test – 750W Result



Location	SPEC	Temperature	Result
LF2	120	86.9	PASS
L11	120	65.1	PASS
LF1	120	53.6	PASS
BD1	120	60.5	PASS
Q10	120	53.8	PASS
Q15	120	50.4	PASS
HS1	120	55.2	PASS
R115	120	61.9	PASS
C38	75	37.1	PASS
TH1	120	96	PASS
R132	120	85.6	PASS
T1	120	86.2	PASS
D35	120	51.3	PASS
D19	120	54	PASS
D8	120	84.5	PASS
T4	120	44.5	PASS
Q7	120	91.3	PASS
Q11	120	91.4	PASS
U12	120	80	PASS
Q8	120	67.7	PASS
HS2	120	77.3	PASS
T2 wire	110	72	PASS
T2 Core	110	63.3	PASS

T3 Bottom	110	84.4	PASS
T3 Top	110	73.9	PASS
T3 Core	110	63.8	PASS
L4	120	62.2	PASS
L7	120	70.5	PASS
D9	110	87.5	PASS
D23	120	86.5	PASS
D17	120	94.4	PASS
D15	120	76	PASS
Hs3	120	70.9	PASS
L5	120	72.2	PASS
L8	120	91.7	PASS
L2	120	53.5	PASS
D16	120	83.6	PASS
Fq20	120	29.7	PASS
L1	120	81.6	PASS
AMBIENT	50°C		

