

Testing Report - Performance - Efficiency

Date 01/10/2018

Efficiency Load 50%

93.88

Everange Efficiency Load 10% - 100%

91.81

General Evaluation

83.81/100

Manufacturer	Deepcool
Model	GamerStorm DQ850-M
Serial	-
Type	ATX 12V 2.92 / V2.31
PFC	Active

Specification	Value	
Input Voltage (Volt AC)	100-240	
Input Current (Ampere)	12.0	
Input Frequency (Hz)	47/63	
Output Power (Watt)	850	
	Ampere	Watt
Output +12V MBPH	25A	850W
Output +12V CPU	25A	
Output +12V VGA1	40A	
Output +12V VGA2	40A	
Output +5V	22A	120W
Output +3.3V	22A	
Output +5Vsb	2.5A	12.5W
Output -12V	0.3A	3.6W

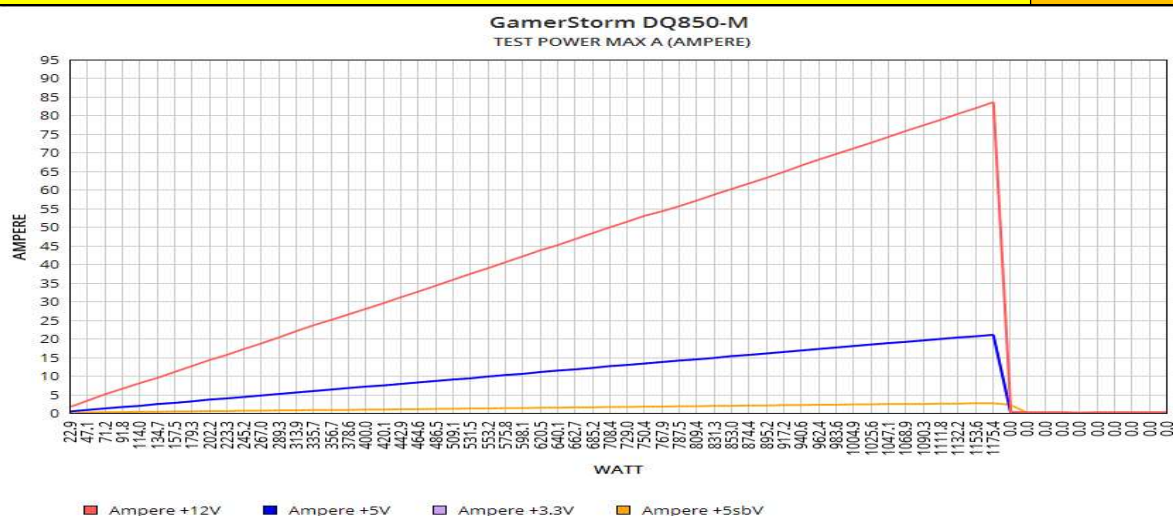


Measurement conditions (pure sine wave):

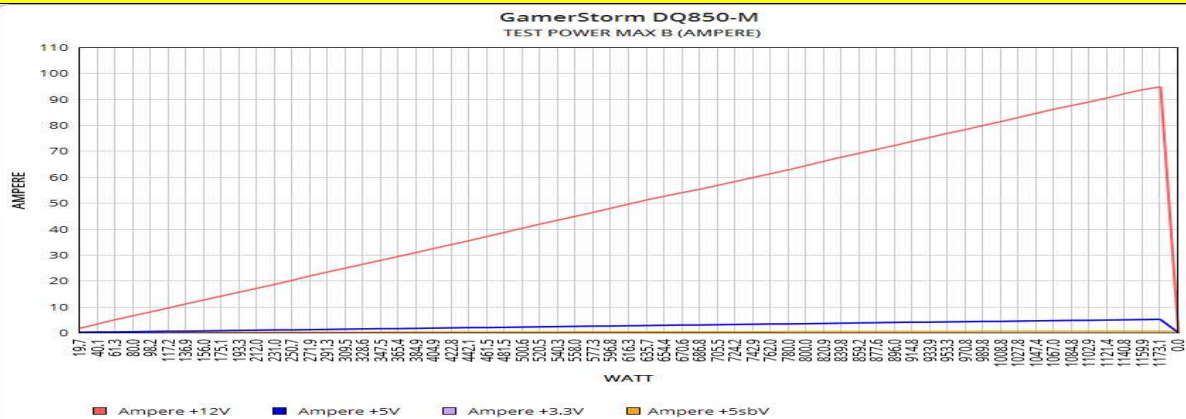
220V / 50Hz

Power Max Ampere A - Value [+12V-100A]-[+5V-25A]-[+3.3V-25A]-[+5Vsb-3A]

Rating: 7.91/10

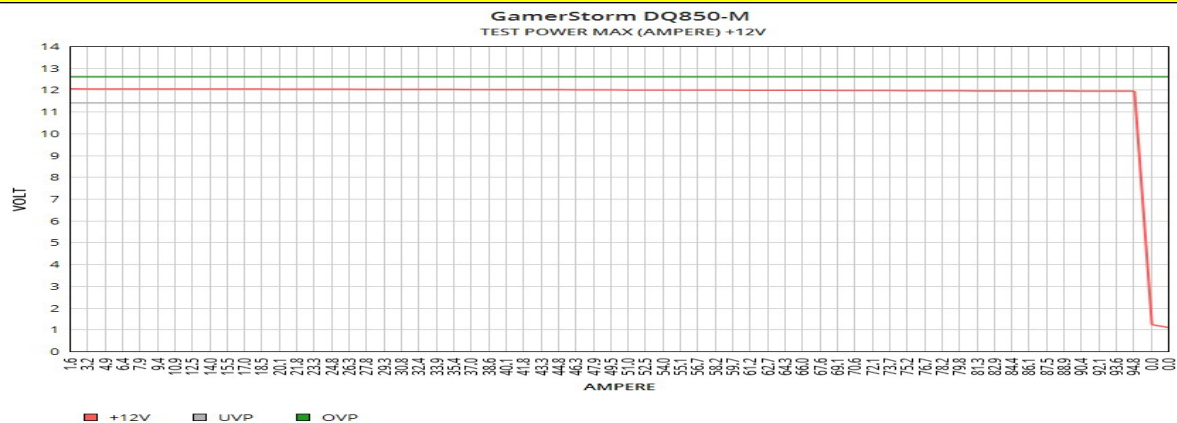


Power Max Ampere B - Value [+12V-100A]-[+5V-5A]-[+3.3V-5A]-[+5Vsb-1A]



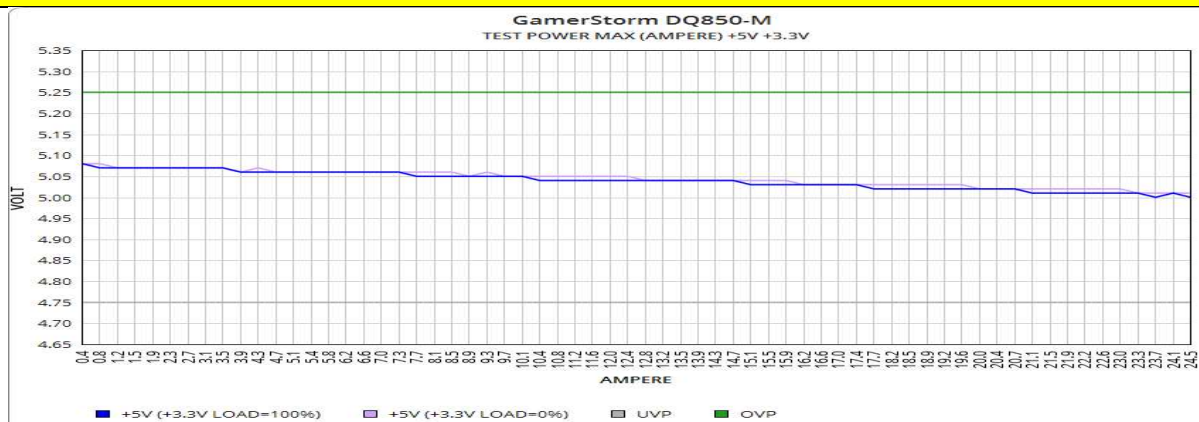
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Power Max Ampere 12V - Value [+12V-100A]-[+5V-0A]-[+3.3V-0A]-[+5Vsb-0A]



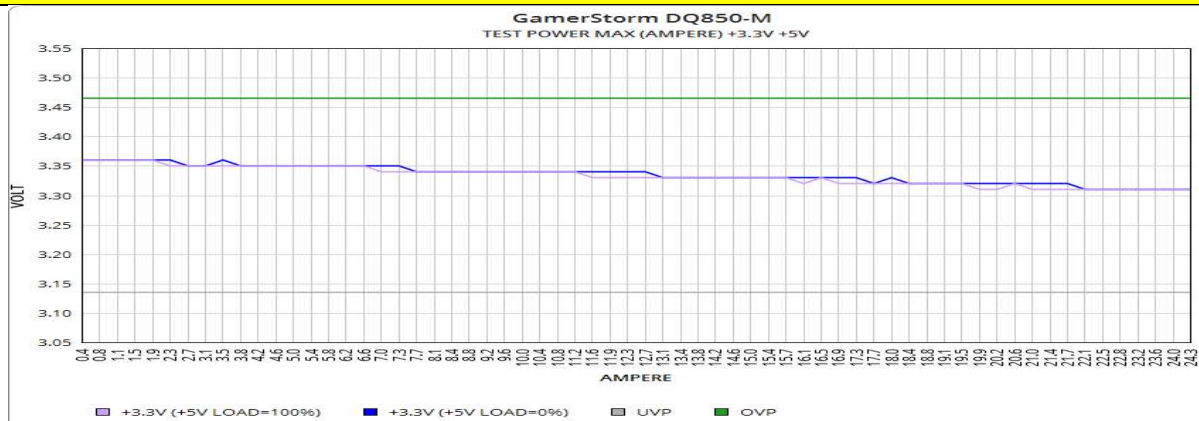
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Power Max Ampere 5V - Value [+12V-0A]-[+5V-25A]-[+3.3V-0A]-[+5Vsb-0A]



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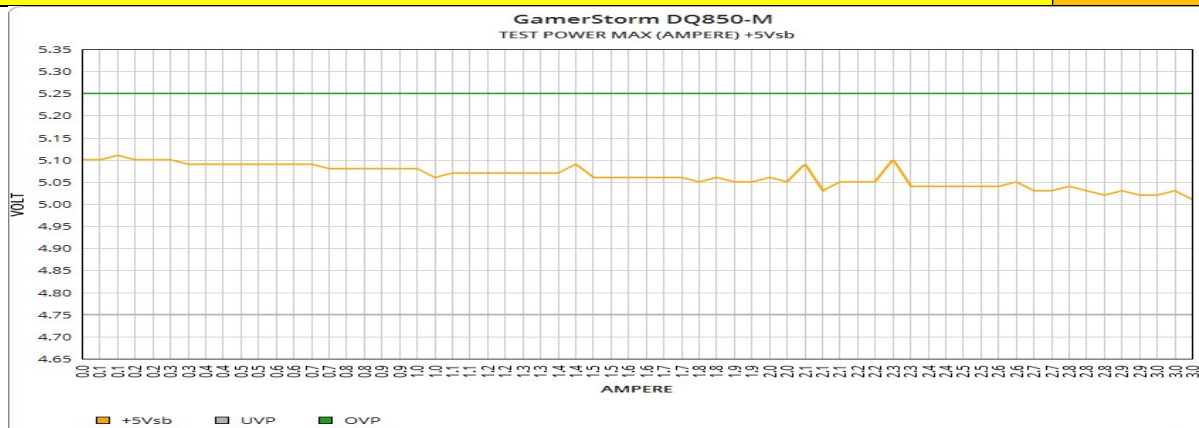
Power Max Ampere 3.3V - Value [+12V-0A]-[+5V-0A]-[+3.3V-25A]-[+5Vsb-0A]



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Power Max Ampere 5Vsb - Value [+12V-0A]-[+5V-0A]-[+3.3V-0A]-[+5Vsb-3.0A]

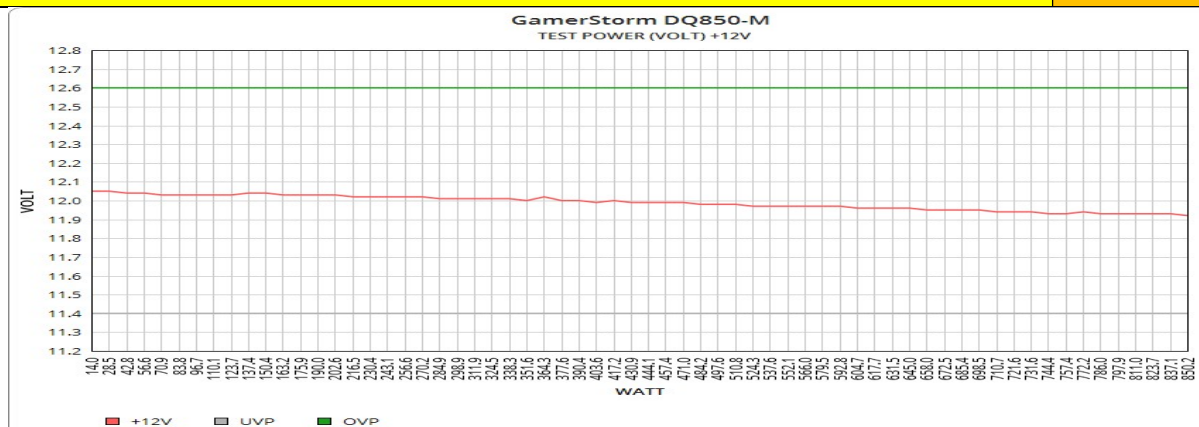
Rating: 8.89/10



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Power (Voltage 12V) - Value [+12V-64A]-[+5V-10A]-[+3.3V-10A]-[+5Vsb-2A]

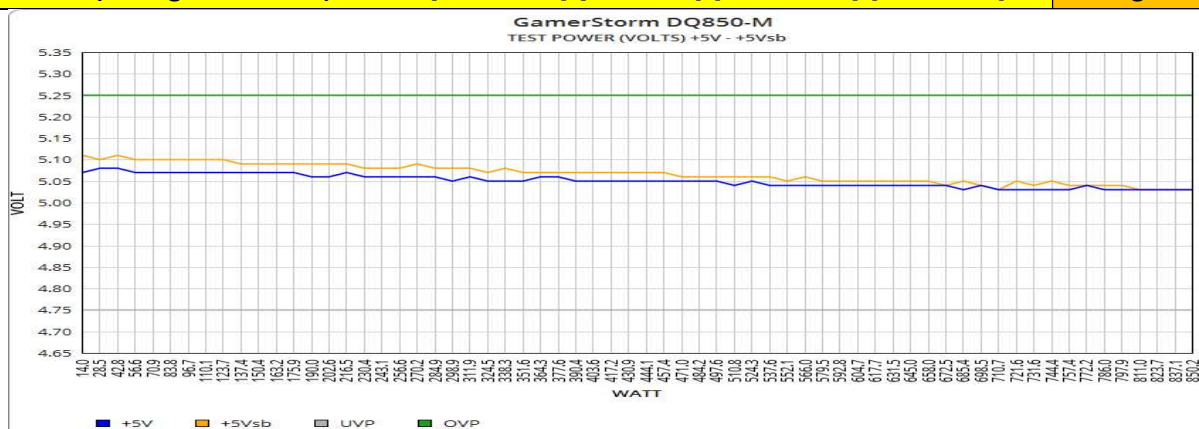
Rating: 8.66/10



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Power (Voltage 5V + 5Vsb) - Value [+12V-64A]-[+5V-10A]-[+3.3V-10A]-[+5Vsb-2A]

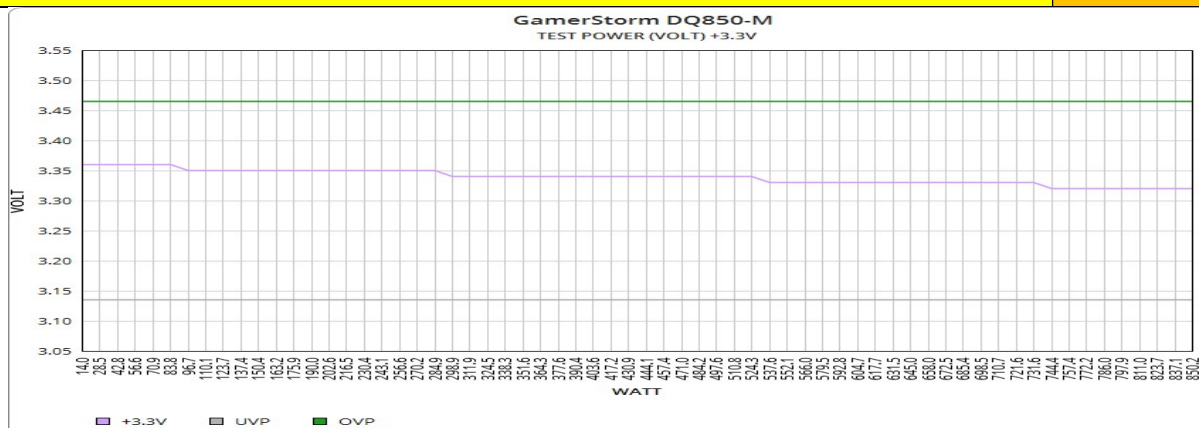
Rating: 9.54/10



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Power (Voltage 3.3V) - Value [+12V-64A]-[+5V-10A]-[+3.3V-10A]-[+5Vsb-2A]

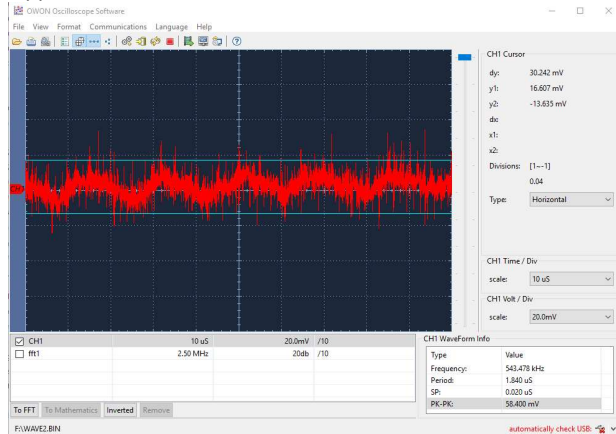
Rating: 9.70/10



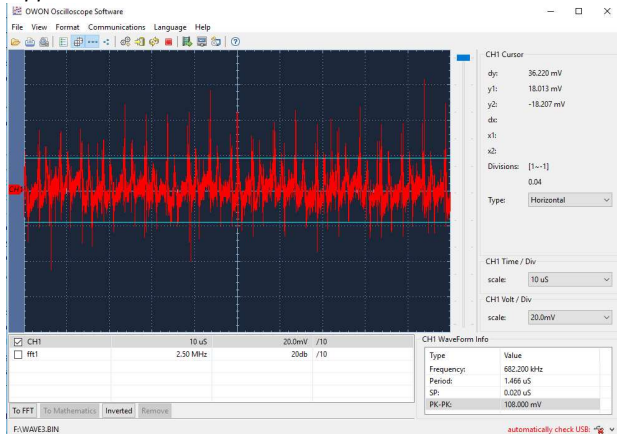
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Ripple (Voltage Pk-Pk) - Value [+12V-32A]-[+5V-5A] - [+3.3V-5A]-[+5Vsb-0.1A]

Ripple +12V – 30.24 mV

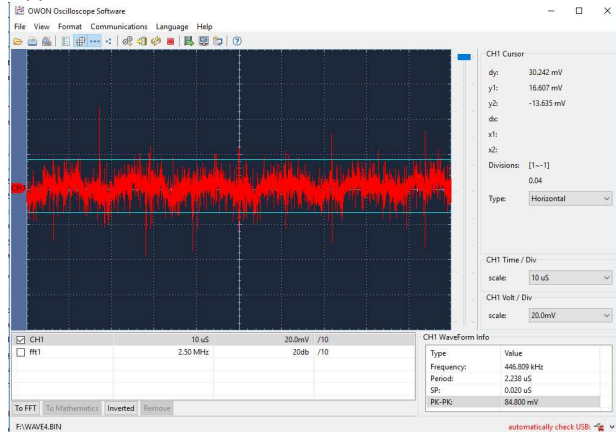


Ripple +5V – 36.22 mV

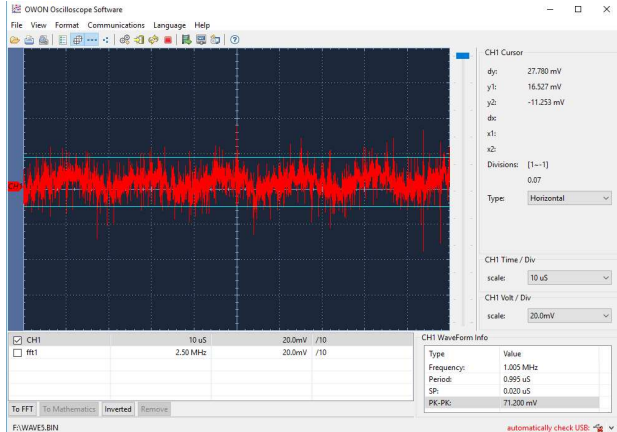


Ripple (Voltage Pk-Pk) - Value [+12V-32A]-[+5V-5A] - [+3.3V-5A]-[+5Vsb-0.1A]

Ripple +3.3V – 30.24 mV

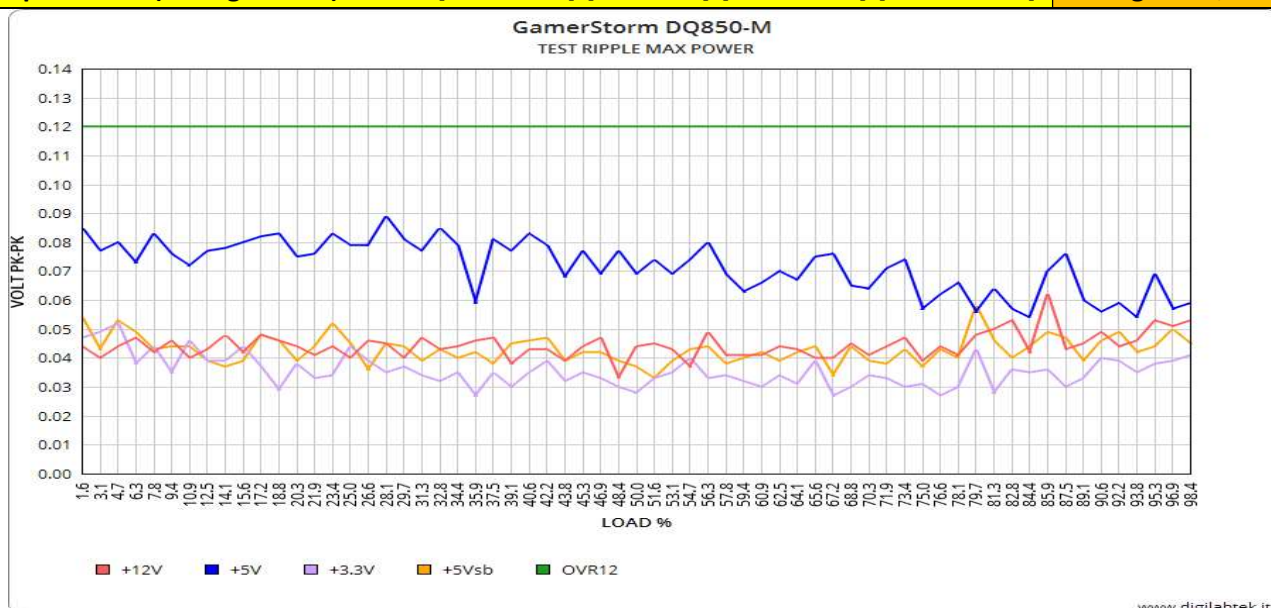


Ripple +5Vsb – 27.78 mV



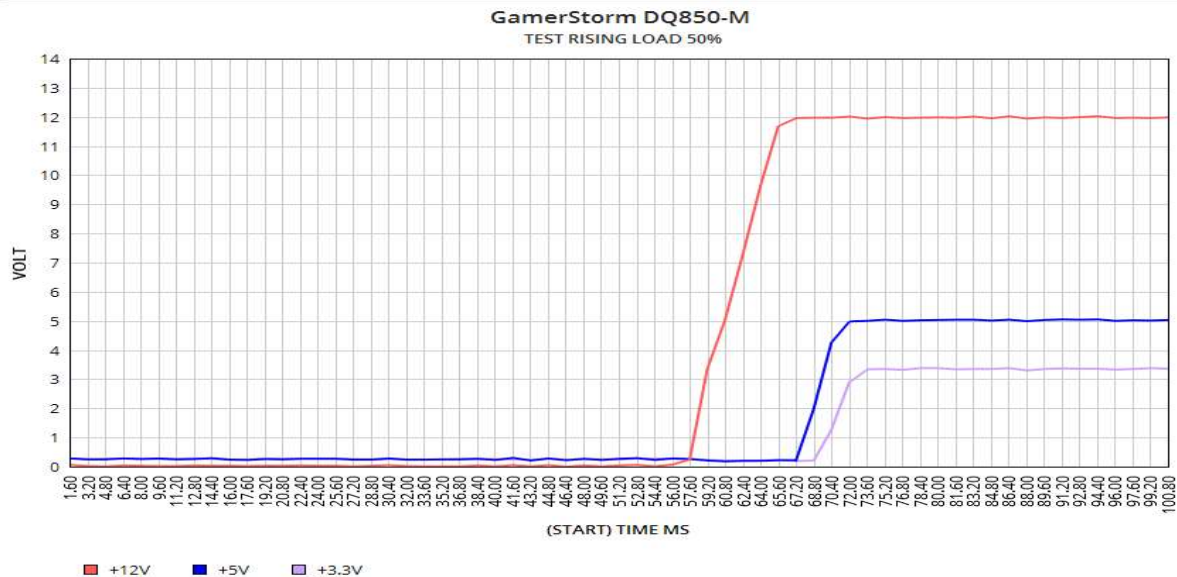
Spike noise (Voltage Pk-Pk) - Value [+12V-64A]-[+5V-10A]-[+3.3V-10A]-[+5Vsb-0.1A]

Rating: 8.63/10



Rising (Voltage) - Value [+12V-32A]-[+5V-5A]-[+3.3V-5A]-[+5Vsb-1A]

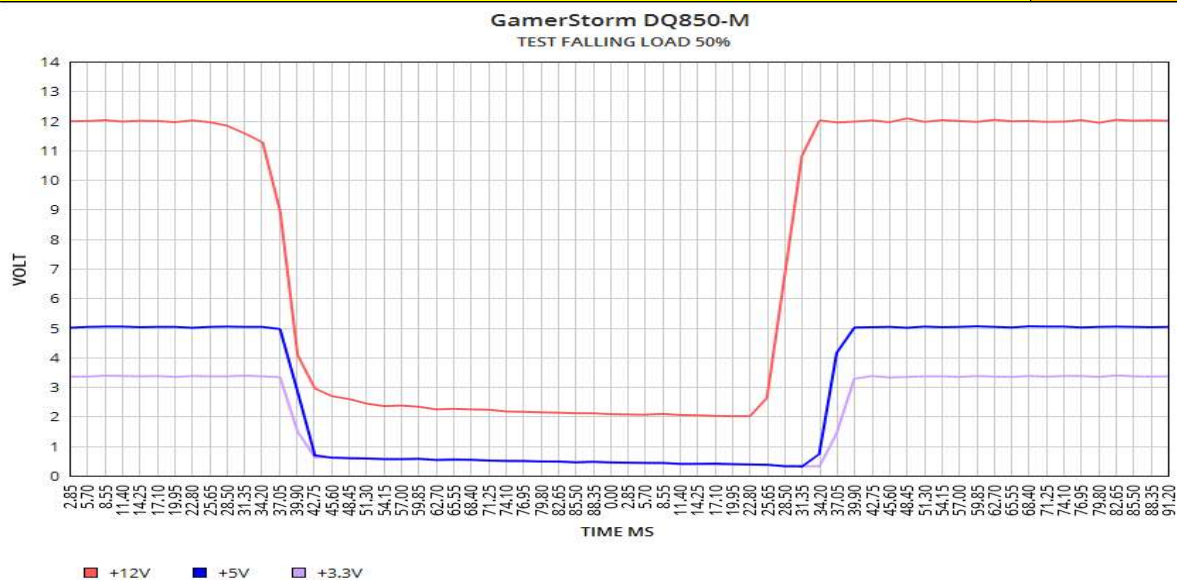
Rating: 6.13/10



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Falling (Voltage) - Value [+12V-32A]-[+5V-5A]-[+3.3V-5A]-[+5Vsb-1A]

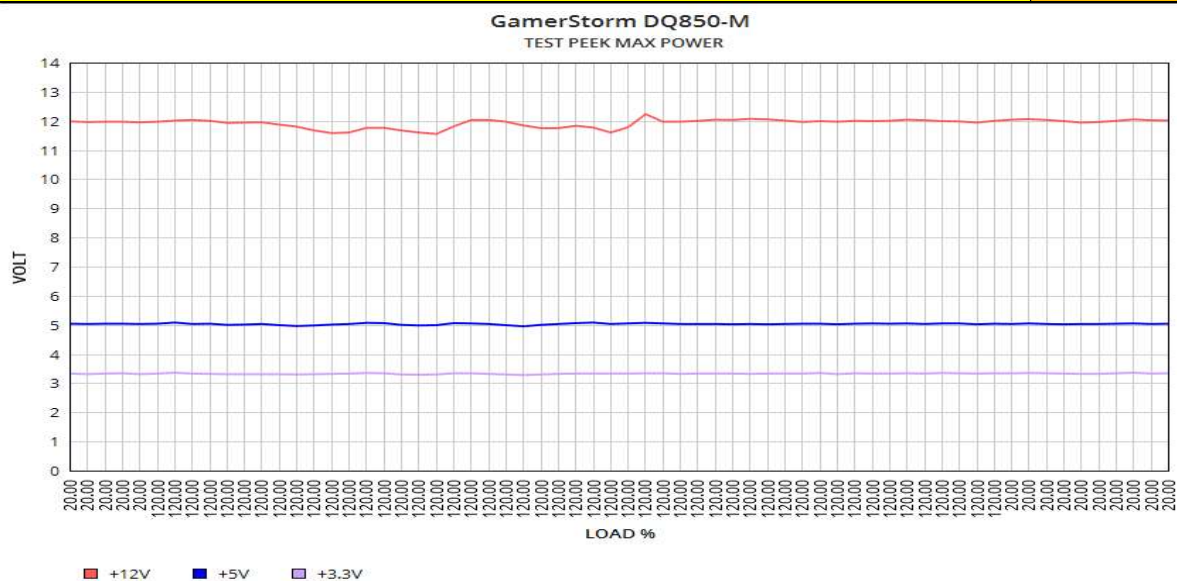
Rating: 7.63/10



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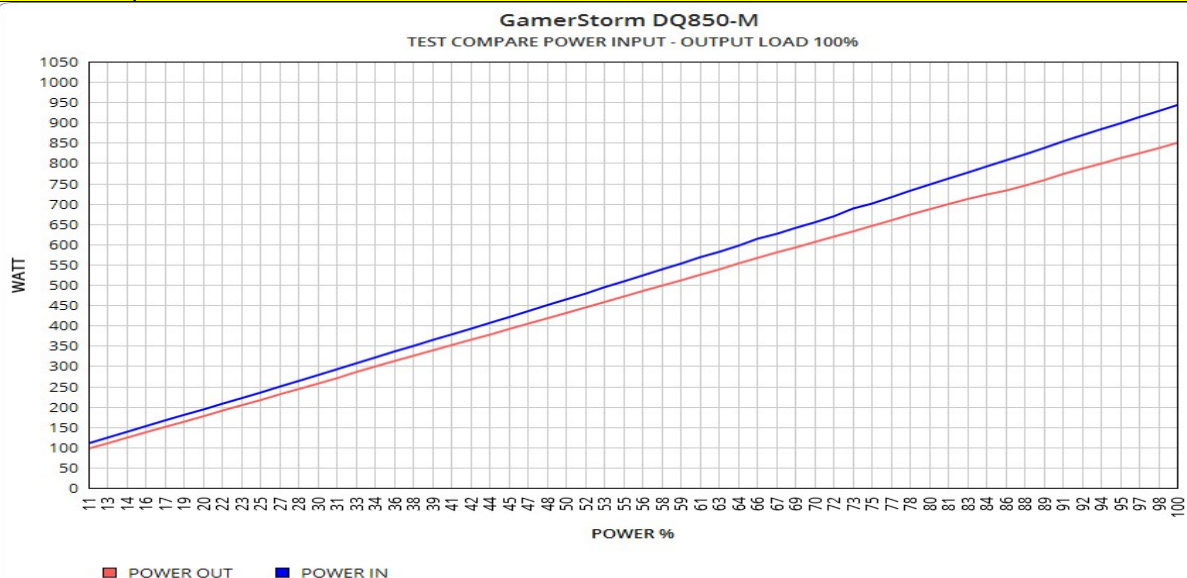
Peek (Voltage) - Value [+12V-64A]-[+5V-10A]-[+3.3V-10A]-[+5Vsb-2A]

Rating: 8.71/10



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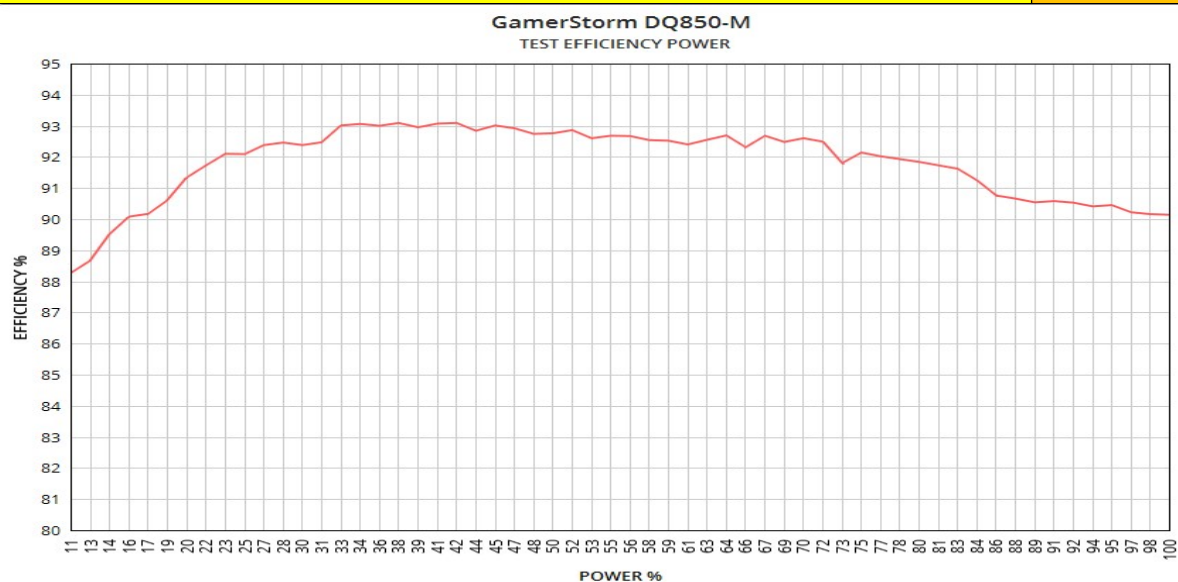
Compare Input and Output Power



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Efficiency Power Supply

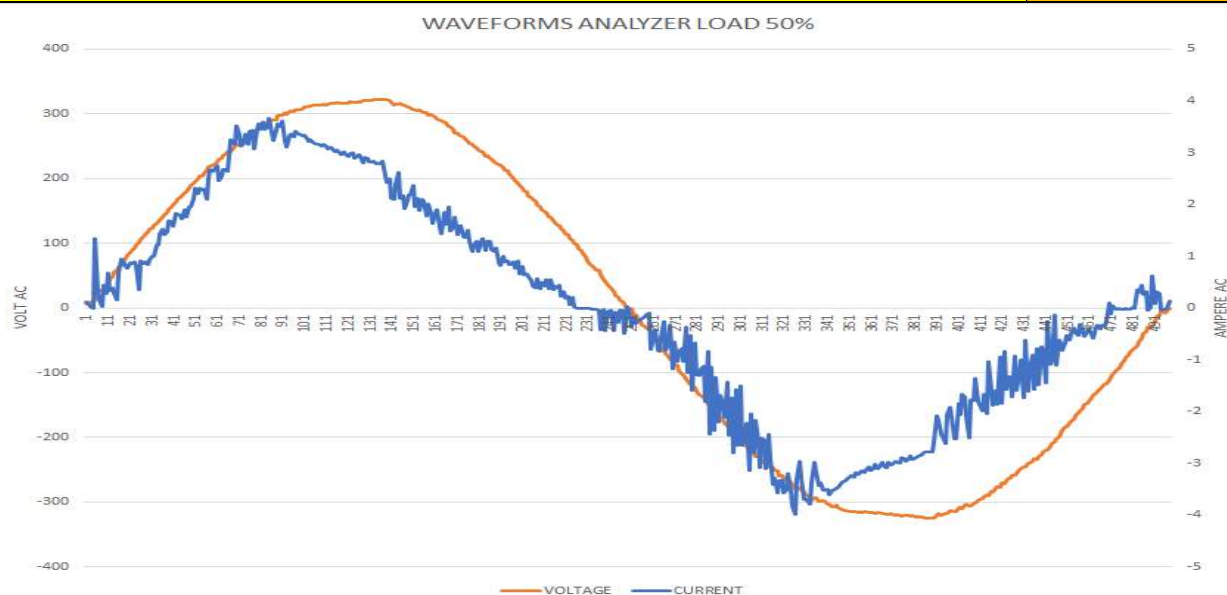
Rating: 8/10



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Current and Voltage Waveforms Value [+12V-32A]-[+5V-5A]-[+3.3V-5A]-[+5Vsb-1A]

Rating:



Efficiency Report 220V AC / 50Hz

Watt In	I-rms	PF	Load %	+12V/A	+5V/A	+3.3V/A	+5Vsb/A	Watt Out	Efficiency
-	-	-	10%	-	-	-	-	-	-
191.00	0.887	0.90	20%	12.0/12.9	5.1/1.98	3.3/1.97	5.1/0.54	174.90	91.57%
459.05	2.051	0.95	50%	12.0/31.6	5.0/5.03	3.3/4.96	5.1/1.06	426.74	92.96%
943.84	4.230	0.96	100%	11.9/63.5	5.0/10.0	3.3/9.94	5.0/2.11	851.20	90.19%

Watt In	I-rms	PF	Load %	Standby Efficiency +5Vsb/A				Watt Out	Efficiency
3.69	0.215	-	20%	5.11/0.54				2.76	74.80%
8.81	0.239	0.15	50%	5.09/1.34				6.81	77.29%
16.52	0.289	0.28	100%	5.05/2.53				12.76	77.23%

Standby Power IEC62301-2011 (MAX 0.5W)

PASS

0.195W

Conclusions

Positive notes:

-
-
-

Negative notes:

-
-
-