

Anex

SilverStone GM600 2U Gold

Lab ID#: SL60001940
Receipt Date: Sep 17, 2021
Test Date: Nov 18, 2021

Report: 21PS1940A
Report Date: Nov 19, 2021

DUT INFORMATION

Brand	SilverStone
Manufacturer (OEM)	TC Sure Star Computer Co.
Series	Gemini
Model Number	SST-GM600-2UGU V2
Serial Number	DXGM62GU21340099
DUT Notes	SST-2M0600FCGD-A

DUT SPECIFICATIONS

Rated Voltage (Vrms)	100-240
Rated Current (Arms)	13-6
Rated Frequency (Hz)	47-63
Rated Power (W)	600
Type	2U
Cooling	40mm Double Ball Bearing Fan (04028DA-12S-AUG)
Semi-Passive Operation	X
Cable Design	Fixed cables

TEST EQUIPMENT

Electronic Loads	Chroma 63601-5 x4 Chroma 63600-2 x2 63640-80-80 x20 63610-80-20 x2
AC Sources	Chroma 6530, Keysight AC6804B
Power Analyzers	N4L PPA1530 x2
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Data Loggers	Picoscope TC-08 x2, Labjack U3-HV x2
Tachometer	UNI-T UT372 x2
Digital Multimeter	Keysight U1273AX, Fluke 289, Keithley 2015 - THD
UPS	CyberPower OLS3000E 3kVA x2
Transformer	3kVA x2

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RESULTS

Temperature Range (°C /°F)	30-32 / 86-89.6
ErP Lot 3/6 Ready	X
(EU) No 617/2013 Compliance	

230V

Average Efficiency	89.318%
Average Efficiency 5VSB	58.225%
Standby Power Consumption (W)	7.2112200
Average PF	0.934
Avg Noise Output	- dB(A)
Efficiency Rating (ETA)	GOLD
Noise Rating (LAMBDA)	None

POWER SPECIFICATIONS

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	NaN	NaN	50	3.5	NaN
	Watts	NaN		600	17.5	NaN
Total Max. Power (W)		600				

HOLD-UP TIME & POWER OK SIGNAL (230V)

Hold-Up Time (ms)	7.2
AC Loss to PWR_OK Hold Up Time (ms)	19
PWR_OK Inactive to DC Loss Delay (ms)	-11.8

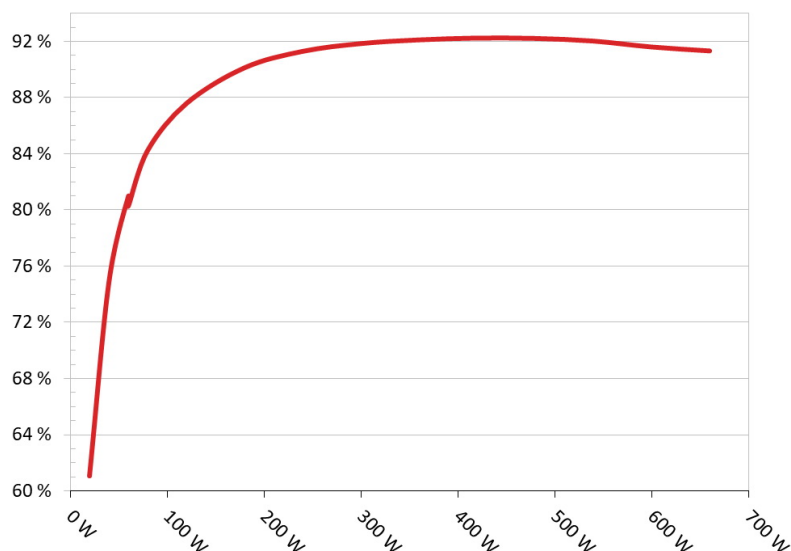
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EFFICIENCY UNDER HIGH AMBIENT TEMPERATURE

Efficiency: SilverStone GM600 Gold
Ambient: 36°C - 47°C (96.8°F - 116.6°F)

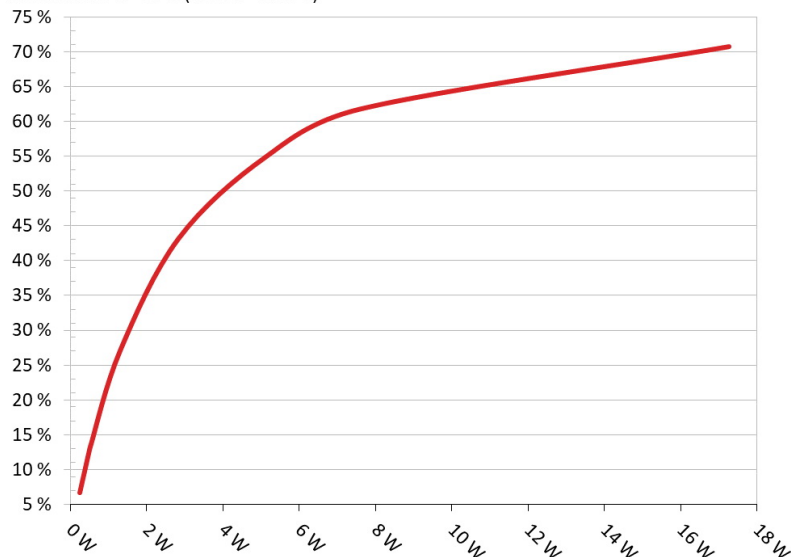


INFO

The PSU's efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

5VSB EFFICIENCY

5VSB Efficiency: SilverStone GM600 Gold
Ambient: 34°C - 36°C (93.2°F - 96.8°F)



INFO

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

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Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	0.045A	0.235W	6.683%	0.086
	5.22V	3.516W		230.27V
2	0.09A	0.468W	12.348%	0.092
	5.201V	3.79W		230.27V
3	0.55A	2.822W	43.167%	0.143
	5.133V	6.538W		230.28V
4	1A	5.097W	54.852%	0.182
	5.098V	9.293W		230.28V
5	1.5A	7.608W	61.806%	0.213
	5.073V	12.31W		230.28V
6	3.499A	17.254W	70.739%	0.276
	4.931V	24.392W		230.28V

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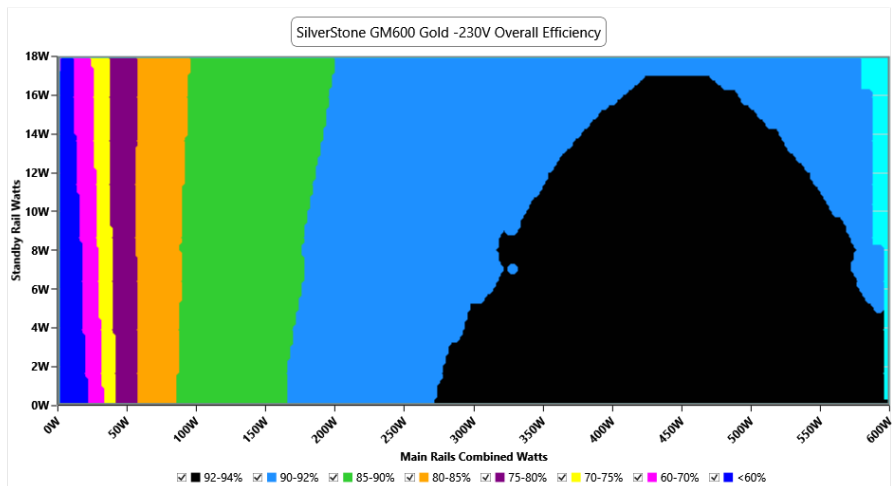
230V

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EFFICIENCY GRAPH 230V



INFO

This graph depicts the PSU's efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

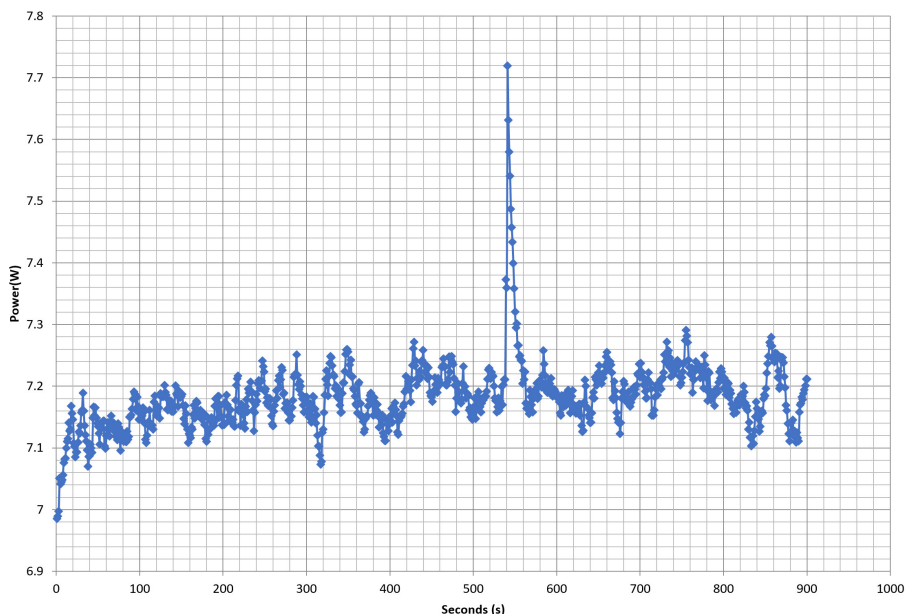
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VAMPIRE POWER -230V

Power - DXGM62GU21340099 - 15/11/2021 - 09:03



INFO

This graph is generated by the PPA Standby Power Analysis software which takes full control of the power analyzer during the whole procedure. This application features all of the EN50564 & IEC62301 test limits for standby power software testing

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10-110% LOAD TESTS 230V

Test	Main Rail	Standby Rail	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
10%	4.544A	0.986A	59.992	80.266%	38.58°C	0.817
	12.101V	5.071V	74.742		42.13°C	230.27V
20%	9.430A	1.182A	119.976	87.568%	39.3°C	0.897
	12.087V	5.073V	137.009		43.21°C	230.27V
30%	14.325A	1.385A	179.937	90.105%	40.24°C	0.933
	12.072V	5.054V	199.697		44.42°C	230.27V
40%	19.236A	1.589A	239.975	91.276%	40.69°C	0.947
	12.059V	5.034V	262.91		45.25°C	230.27V
50%	24.153A	1.794A	299.94	91.828%	41.29°C	0.958
	12.045V	5.015V	326.631		46.31°C	230.29V
60%	29.053A	2A	359.433	92.089%	42.04°C	0.967
	12.028V	4.996V	390.312		47.64°C	230.29V
70%	34.007A	2.208A	419.583	92.219%	43.05°C	0.972
	12.015V	4.978V	454.986		49.27°C	230.3V
80%	38.999A	2.314A	479.332	92.194%	43.65°C	0.975
	11.996V	4.968V	519.919		50.47°C	230.29V
90%	44.073A	2.419A	539.871	92.007%	44.65°C	0.978
	11.977V	4.958V	586.774		52.33°C	230.29V
100%	48.712A	3.592A	599.78	91.587%	45.95°C	0.98
	11.953V	4.871V	654.875		54.54°C	230.29V
110%	53.860A	3.597A	659.83	91.307%	46.76°C	0.983
	11.926V	4.864V	722.652		56.2°C	230.29V

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20-80W LOAD TESTS 230V

Test	Main Rail	Standby Rail	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
10W	1.568A	0.194A	19.988	61.054%	35.67°C	0.608
	12.110V	5.167V	32.739		36.87°C	230.27V
20W	3.180A	0.291A	39.993	74.849%	36.26°C	0.747
	12.104V	5.149V	53.432		37.69°C	230.27V
30W	4.793A	0.39A	59.992	80.936%	36.6°C	0.816
	12.100V	5.131V	74.122		38.52°C	230.27V
40W	6.400A	0.488A	79.916	84.212%	37.23°C	0.854
	12.095V	5.122V	94.898		39.52°C	230.27V

RIPPLE MEASUREMENTS 230V

Test	Main Rail	Standby Rail	Pass/Fail
10% Load	32.9 mV	18.5 mV	Pass
20% Load	30.4 mV	29.1 mV	Pass
30% Load	32.6 mV	31.0 mV	Pass
40% Load	39.6 mV	31.0 mV	Pass
50% Load	46.5 mV	33.0 mV	Pass
60% Load	51.9 mV	36.7 mV	Pass
70% Load	71.4 mV	39.0 mV	Pass
80% Load	82.2 mV	42.0 mV	Pass
90% Load	96.3 mV	45.2 mV	Pass
100% Load	145.0 mV	45.7 mV	Fail
110% Load	198.6 mV	47.1 mV	Fail

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Top side

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AC INPUT (交流輸入) (交流輸入)		
100-240V / 13-6A / 47-63Hz		
DC OUTPUT (直流輸出) (直流輸出)		
+12V	+5VSB	
50A	3.5A	
MAX. POWER (最大總功率) (最大总功率)		
600W	17.5W	
600W		

製造 台灣製造 G11243060



FCC Test to Comply
With FCC Standards
FOR HOME OR OFFICE USE



Power specifications label

CERTIFICATIONS 230V



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