SILVERSTONE

SilverStone GM1000 2U Gold

DXGMK02G21340010

Lab ID SL10001935

Certification ID 251935

Test Result Report ID: 21PS1935A

Certificate Issue Date: Nov 19, 2021

230V

Scheme: ETA-EMI PSU





Aristeidis Bitziopoulos, Certification Body General Manager

General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 Chroma 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500
Power Analyzers	Rohde & Schwarz HMC8015 & NPA701
Oscilloscopes	Picoscope 4444, Siglent SDS2104X PLUS
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Temperature Logger	Picoscope TC-08
Tachometer	UNI-T UT372
Multimeters	Keysight 34465A
EMI Analyzer	TekBox TBMR-110M-EU
Isolation Transformer	4kVA
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Testing Methodology	Cybenetics PSU Test Protocol

DUT Information(Non-accredited measurements)

Product Identification Details	
Brand	SilverStone
Model	GM1000 2U Gold
OEM/ODM	TC Sure Star Computer Co.
Serial Number	DXGMK02G21340010
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	13-6
□□□□ (Hz)	47-63

□□□□ (W)	1000
Operating Temperature (Continuous Full Load) (°C)	
□□	2U
□□□□	Fixed cables
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
□□	40mm Double Ball Bearing Fan (04028DA-12S-AUG)
□□□□□	✗
Cybenetics Testing Information	
Lab ID	SL10001935
Date of receipt	Sep 17, 2021
Testing Date	Nov 9, 2021
Report Issued Date	Nov 19, 2021
□□□□□	SST-2M1000FCGD-A
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□

□		12V	5VSB
□□□□	□□	83	3.5
	□	996	17.5
□□□□□ (W)		1000	

Test Results

Temperature & Compliance Info

□□□□ (°C /°F)	28-32 / 82.4-89.6

Performance Summary 230V

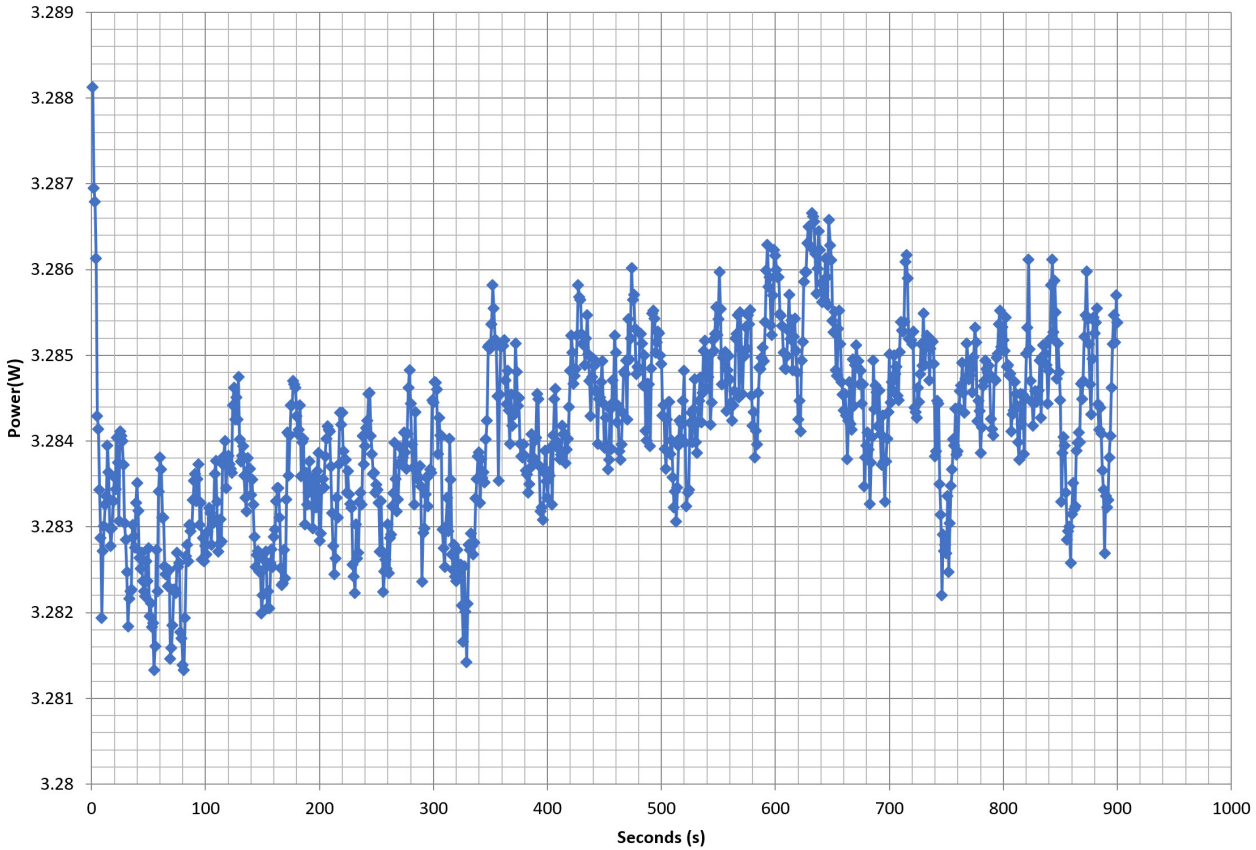
Accredited		
□□□□ (>1450 load combinations)		89.636%
PF□□□ (>1450 Load Combinations)		0.934
Efficiency With 10W (≤500W) or 2% (>500W) Load		-
□□□□□□		3.2854W
Non-Accredited		
12V Ripple (Full Load)		498.60mV
5VSB Ripple (Full Load)		67.10mV
12V Load Regulation		4.14%
5VSB Load Regulation		6.91%
Inrush Current		93.860A
□□□□ & PG□□		2.00ms
AC Loss to PWR_OK Hold Up Time		13.20ms
PWR_OK Inactive to DC Loss Delay		-11.20ms
PSU Timings: T1 (20% / 100%)	186.0ms	186.0ms
PSU Timings: T3 (20% / 100%)	258.0ms	257.0ms

□□□□ & PG□□

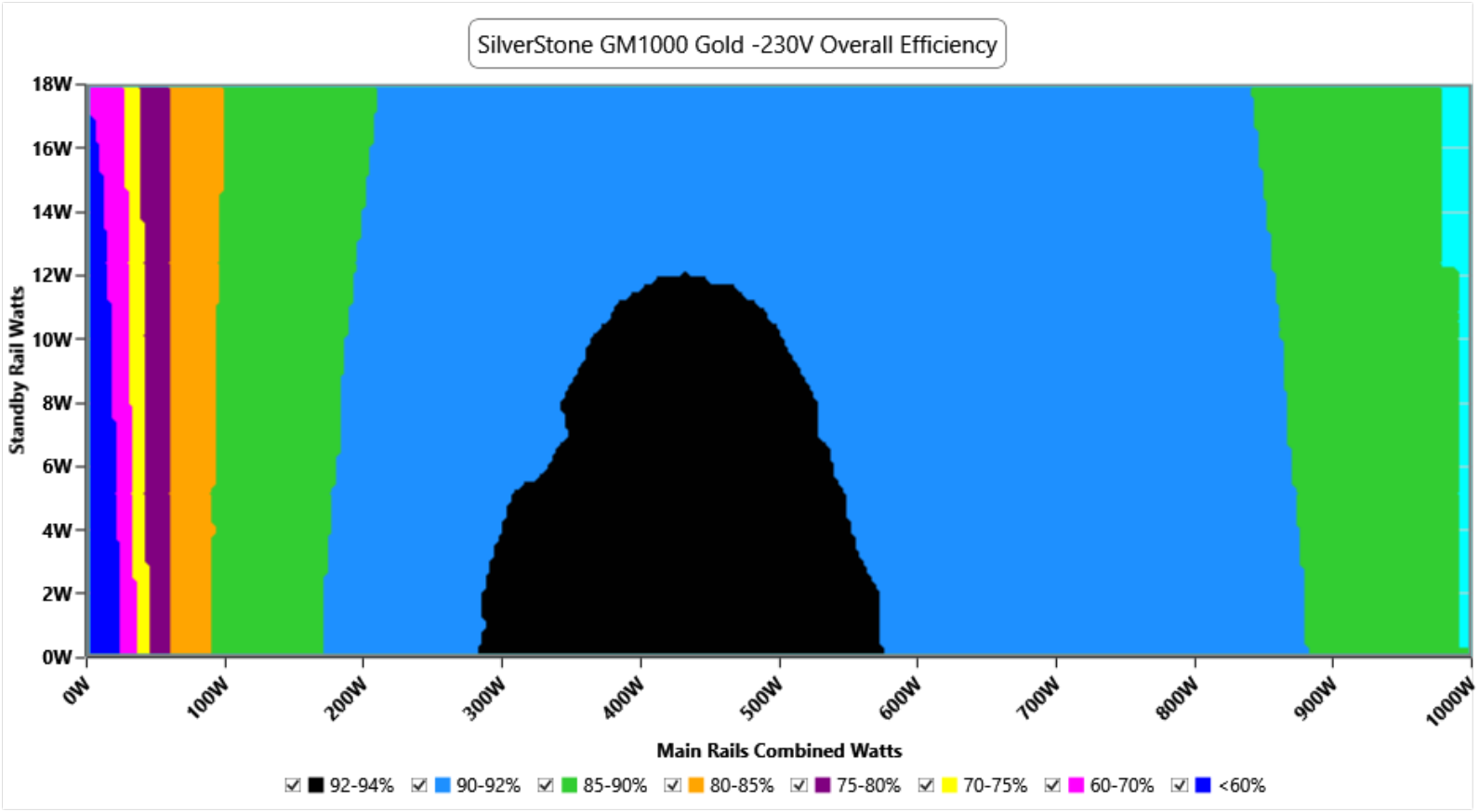
Hold-Up Time (ms)	2
AC Loss to PWR_OK Hold Up Time (ms)	13.2
PWR_OK Inactive to DC Loss Delay (ms)	-11.2

Graphs 230V

Power - DXGMK02G21340010 - 05/11/2021 - 12:42



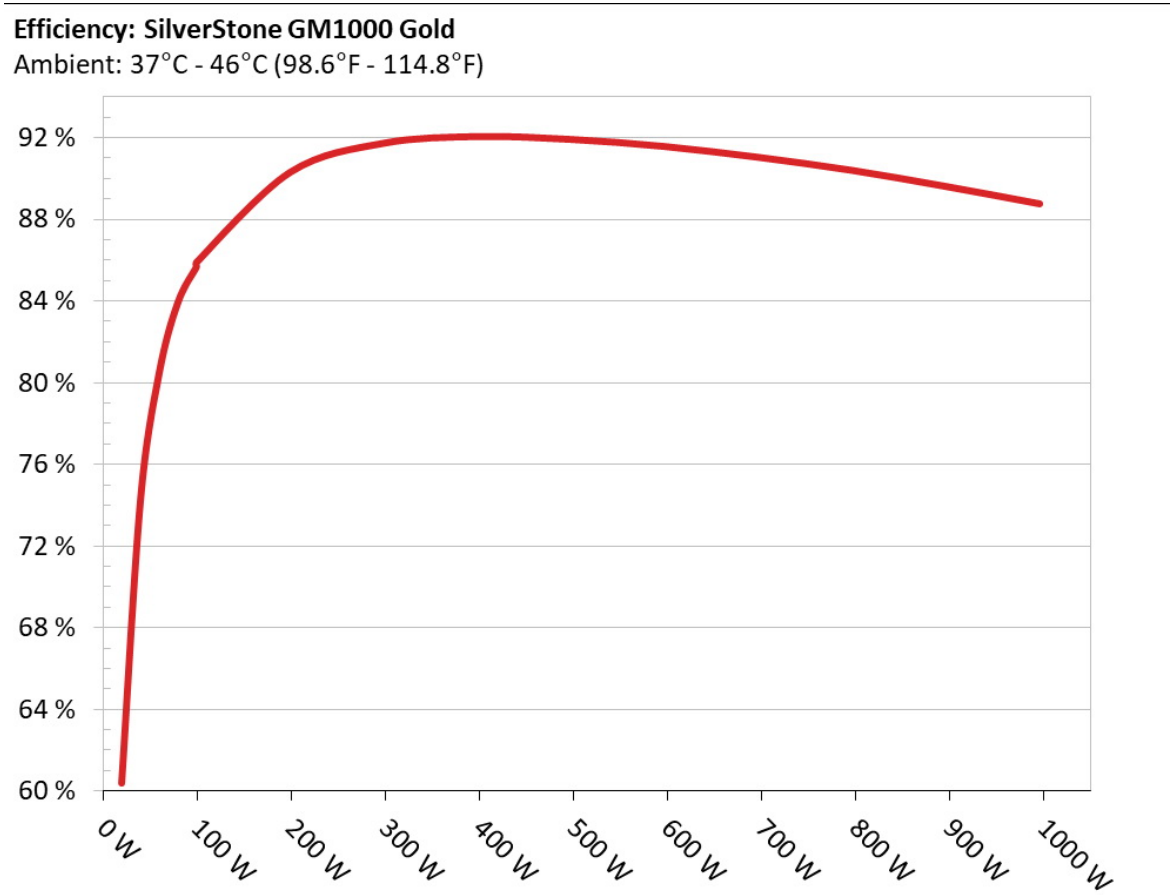
230V



□□

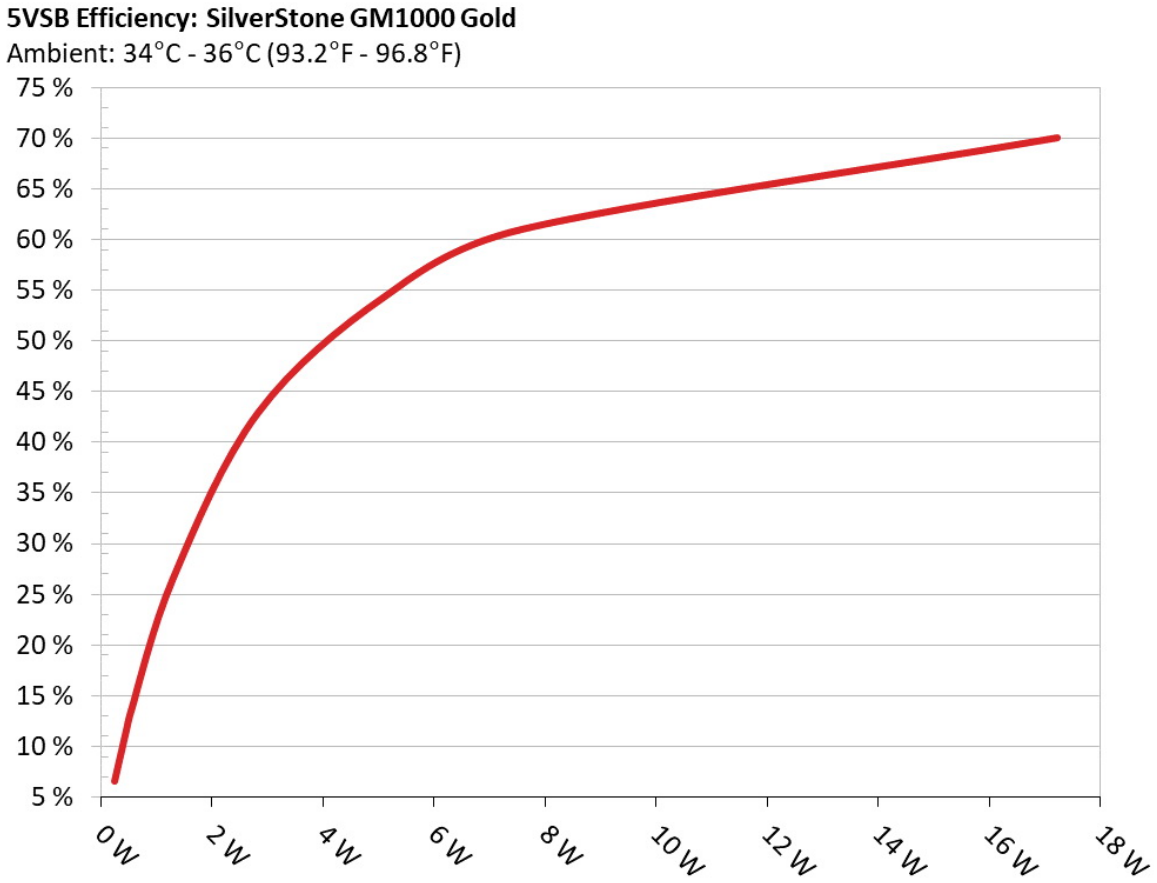
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

Indicative Performance



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□□□□



□□

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

□□□□ □□ 5Vsb □□ (ErP Lot3/6 & CEC) 230V

□□ #	5VSB	DC/AC (□)	□□	PF/AC □□
1	0.045A	0.234W	6.547%	0.086
	5.202V	3.574W		230.28V

2	0.09A	0.466W	12.108%	0.091
	5.181V	3.849W		230.28V
3	0.55A	2.813W	42.881%	0.142
	5.116V	6.56W		230.28V
4	1A	5.081W	54.308%	0.181
	5.082V	9.356W		230.28V
5	1.5A	7.584W	61.023%	0.212
	5.057V	12.429W		230.28V
6	3.499A	17.213W	70.038%	0.276
	4.92V	24.577W		230.29V

Supplementary Tests (For Reference)

10-110%□□□□ 230V

□□	Main □	□□ □	DC/AC (□)	□□	□□ (□□ /□□)	PF/AC □□
10%	7.784A	0.988A	99.543	85.699%	40.85°C	0.84
	12.146V	5.058V	116.154		39.17°C	230.33V
20%	15.942A	1.191A	199.192	90.331%	41.27°C	0.903
	12.119V	5.035V	220.512		43.75°C	230.33V
30%	24.125A	1.391A	298.761	91.755%	41.86°C	0.93
	12.093V	5.033V	325.608		44.92°C	230.34V
40%	32.326A	1.597A	398.264	92.082%	42.16°C	0.949
	12.073V	5.009V	432.512		45.19°C	230.33V
50%	40.614A	1.805A	497.699	91.942%	42.76°C	0.958
	12.033V	4.987V	541.317		47.82°C	230.33V
60%	49.026A	2A	597.075	91.597%	43.16°C	0.966
	11.976V	4.964V	651.849		48.57°C	230.34V
70%	57.569A	2.226A	696.607	91.067%	43.77°C	0.973
	11.909V	4.94V	764.936		49.38°C	230.34V
80%	66.313A	2.334A	796.396	90.429%	44.39°C	0.978
	11.836V	4.926V	880.692		51.62°C	230.34V

90%	75.188A	2.442A	896.166	89.639%	44.98°C	0.982
	11.760V	4.912V	999.755		53.44°C	230.34V
100%	83.777A	3.631A	996.199	88.787%	45.93°C	0.985
	11.682V	4.819V	1122.007		53.54°C	230.34V

The results above are not used in the certification process

20-80□□□□□ 230V

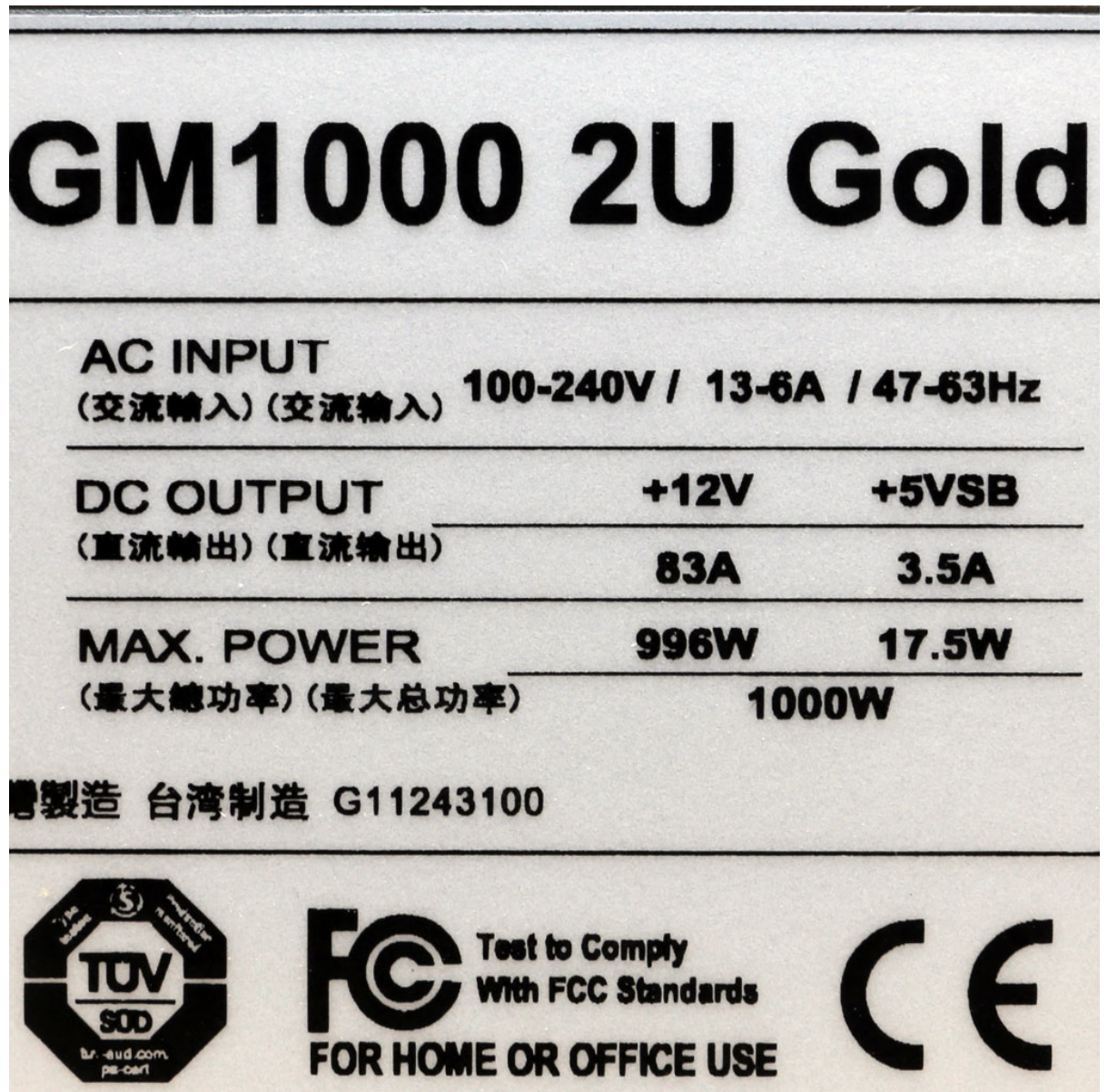
□□	Main □	□□ □	DC/AC (□)	□□	□□ (□□ /□□)	PF/AC □□
10W	1.561A	0.194A	19.995	60.403%	37.23°C	0.548
	12.166V	5.152V	33.102		38.77°C	230.32V
20W	3.166A	0.292A	39.997	74.273%	38.44°C	0.692
	12.159V	5.135V	53.851		40.41°C	230.32V
30W	4.771A	0.391A	59.994	80.512%	38.95°C	0.772
	12.155V	5.117V	74.515		41.61°C	230.32V
40W	6.372A	0.489A	79.926	83.969%	39.38°C	0.813
	12.151V	5.11V	95.185		42.42°C	230.33V

The results above are not used in the certification process

□□□□ 230V

Test	Main Rail	Standby Rail	Pass/Fail
10% Load	25.9 mV	16.1 mV	Pass
20% Load	36.8 mV	16.7 mV	Pass
30% Load	53.6 mV	36.4 mV	Pass
40% Load	82.6 mV	38.1 mV	Pass
50% Load	159.6 mV	40.0 mV	Fail
60% Load	200.0 mV	42.9 mV	Fail
70% Load	200.0 mV	48.8 mV	Fail
80% Load	200.0 mV	51.9 mV	Fail
90% Load	200.0 mV	53.1 mV	Fail
100% Load	498.6 mV	67.1 mV	Fail





The results above are not used in the certification process

SilverStone GM1000 2U Gold

Top side

Power specifications label

本测试报告中包含的所有数据和图表均可在以下条件下由任何人使用：使用过程需提及测试结果由Cybenetics提供。
在任何情况下都应提供原始测试结果文档的网站链接

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