SILVERSTONE

SilverStone GM800 2U Gold

DXGM802G21340050

Lab ID SL80001936

Certification ID 251936

Test Result Report ID: 21PS1936A

Certificate Issue Date: Nov 19, 2021

230V

Scheme: ETA-EMI PSU

CYBENETICS REDUNDANT GOLD 230v

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	GM800 2U Gold
OEM/ODM	TC Sure Star Computer Co.
Serial Number	DXGM802G21340050
Product Specifications	
Manufacturer-Provided Information	
□□□□ (Vrms)	100-240
□□□□ (Arms)	13-6
□□□□ (Hz)	47-63

□□□□ (W)	800
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	SL80001936
Date of receipt	Sep 17, 2021
Testing Date	Nov 12, 2021
Report Issued Date	Nov 19, 2021
□□□□□	SST-2M0800FCGD-A
Engineer Name	-
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

□□□□

□		12V	5VSB
□□□□	□□	66.5	3.5
	□	798	17.5
□□□□□ (W)		800	

Test Results

Temperature & Compliance Info

□□□□ (°C /°F)	28-32 / 82.4-89.6

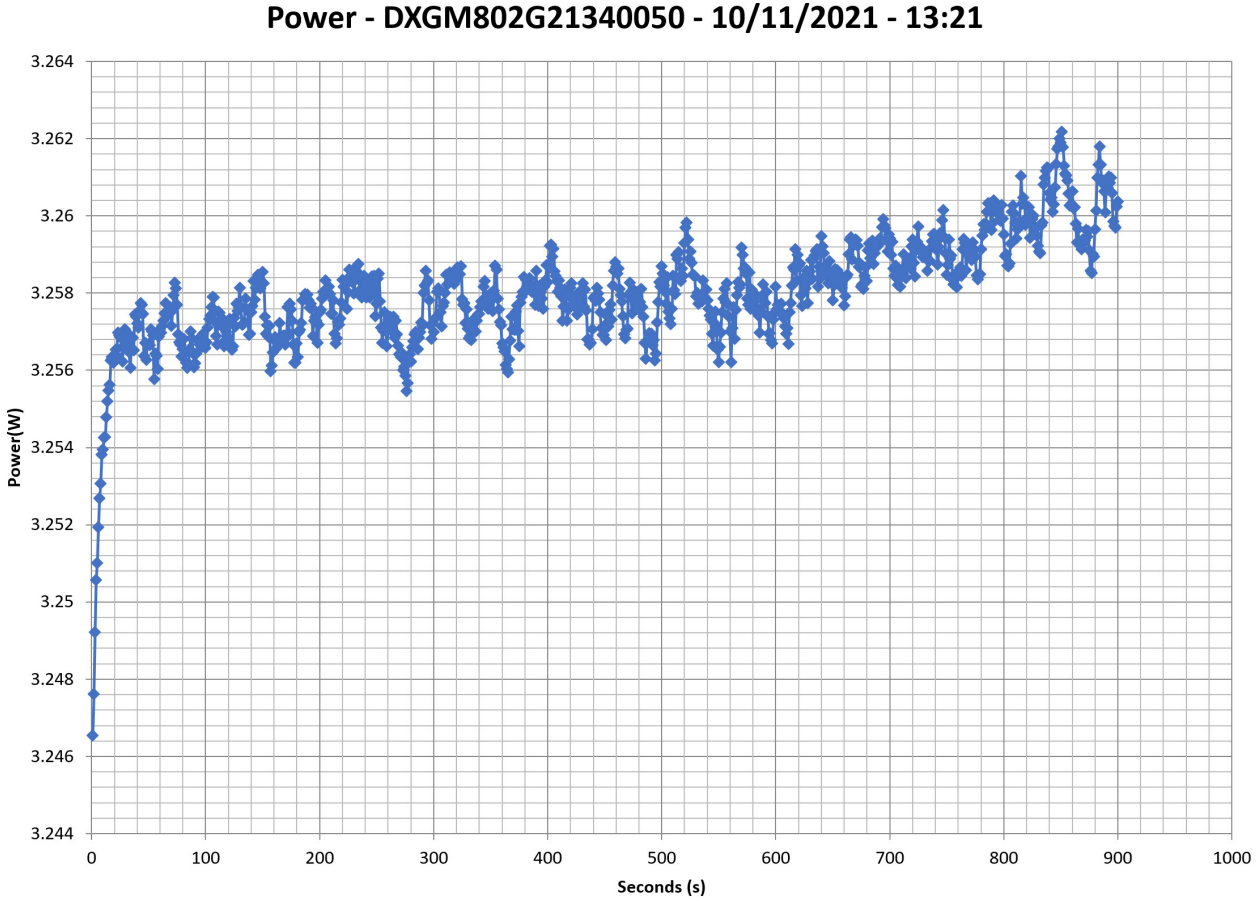
Performance Summary 230V

Accredited		
□□□□ (>1450 load combinations)		89.527%
PF□□□ (>1450 Load Combinations)		0.932
Efficiency With 10W (≤500W) or 2% (>500W) Load		-
□□□□□□		3.2604W
Non-Accredited		
12V Ripple (Full Load)		599.70mV
5VSB Ripple (Full Load)		55.87mV
12V Load Regulation		3.07%
5VSB Load Regulation		6.75%
Inrush Current		92.270A
□□□□ & PG□□		1.50ms
AC Loss to PWR_OK Hold Up Time		10.70ms
PWR_OK Inactive to DC Loss Delay		-9.20ms
PSU Timings: T1 (20% / 100%)	186.0ms	186.0ms
PSU Timings: T3 (20% / 100%)	258.0ms	257.0ms

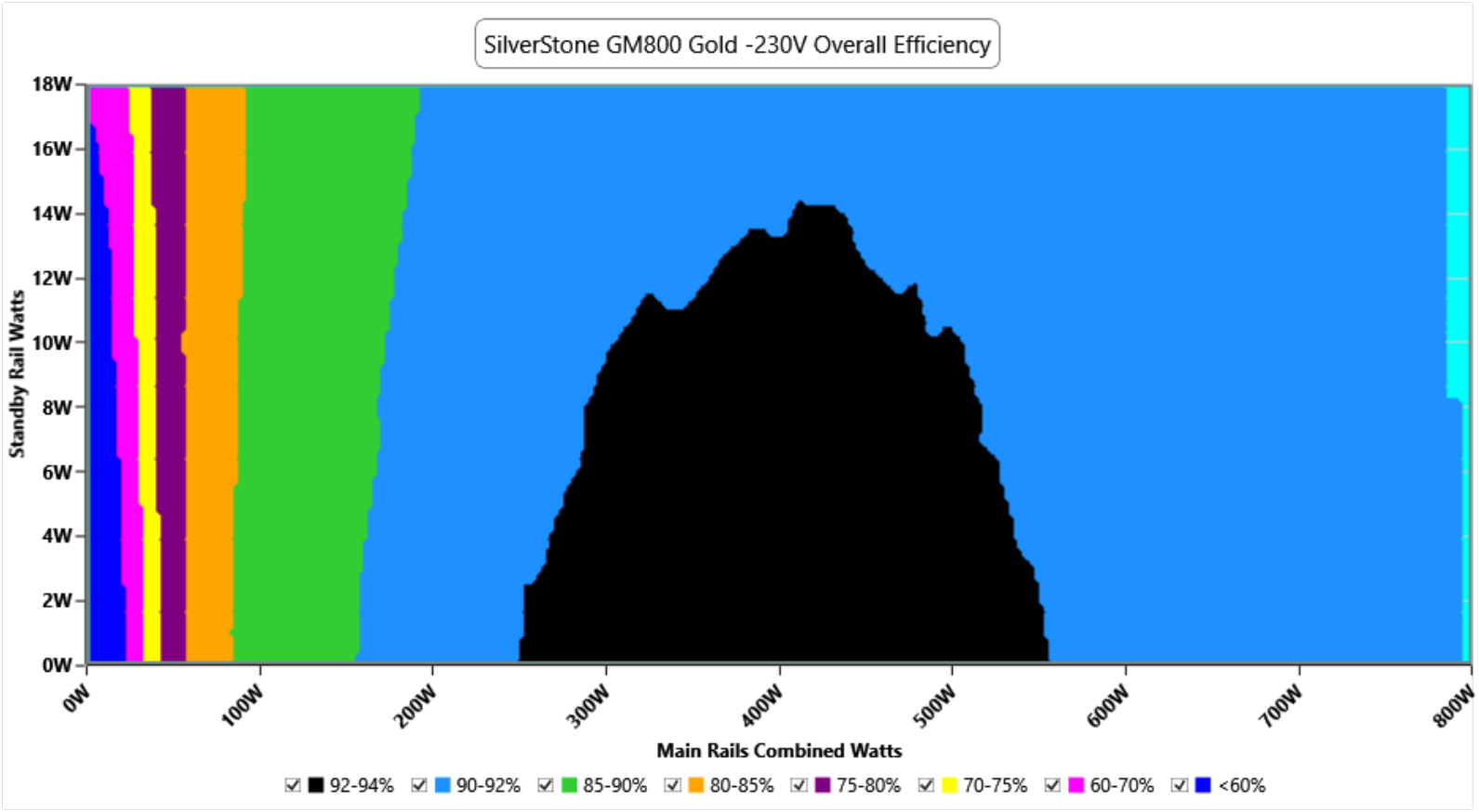
□□□□ & PG□□

Hold-Up Time (ms)	1.5
AC Loss to PWR_OK Hold Up Time (ms)	10.7
PWR_OK Inactive to DC Loss Delay (ms)	-9.2

Graphs 230V


Power - DXGM802G21340050 - 10/11/2021 - 13:21
Power(W)
3.264
3.262
3.26
3.258
3.256
3.254
3.252
3.25
3.248
3.246
3.244
0
100
200
300
400
500
600
700
800
900
1000
Seconds (s)

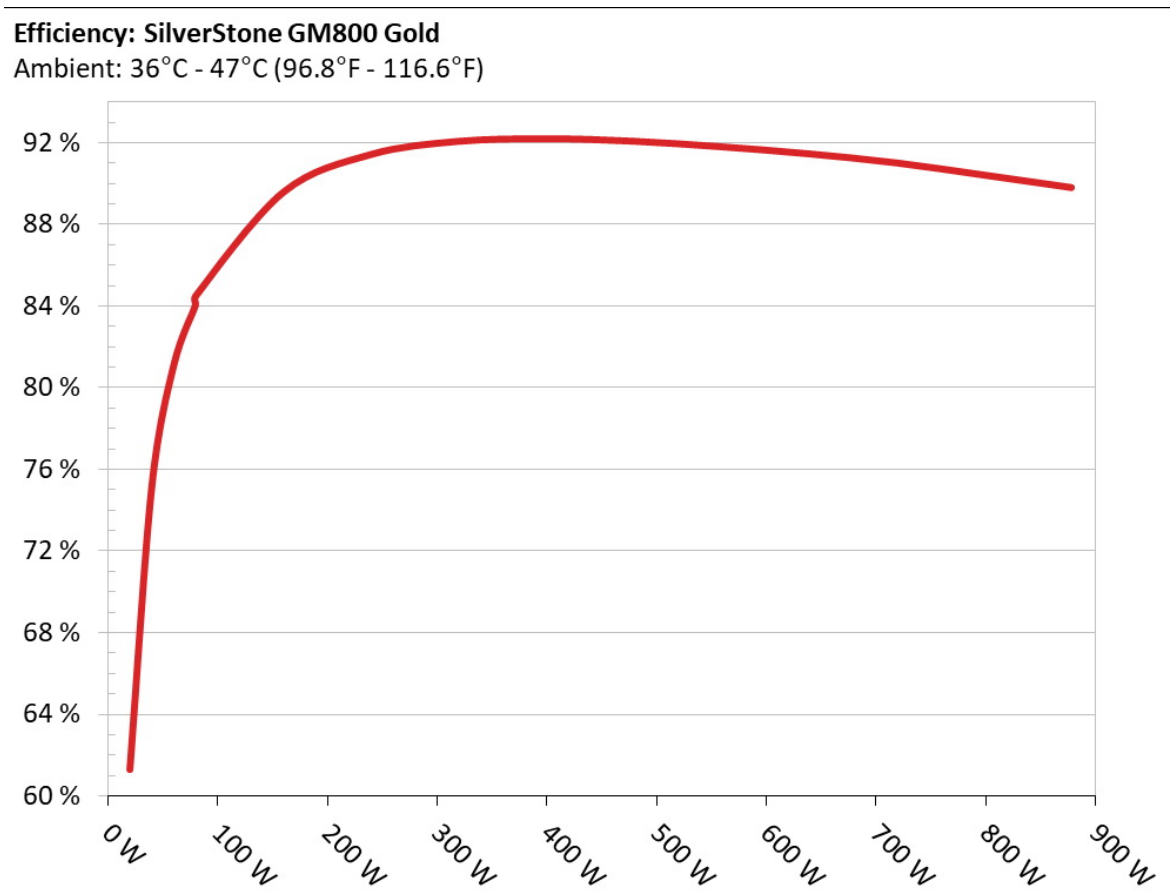
230V



□□

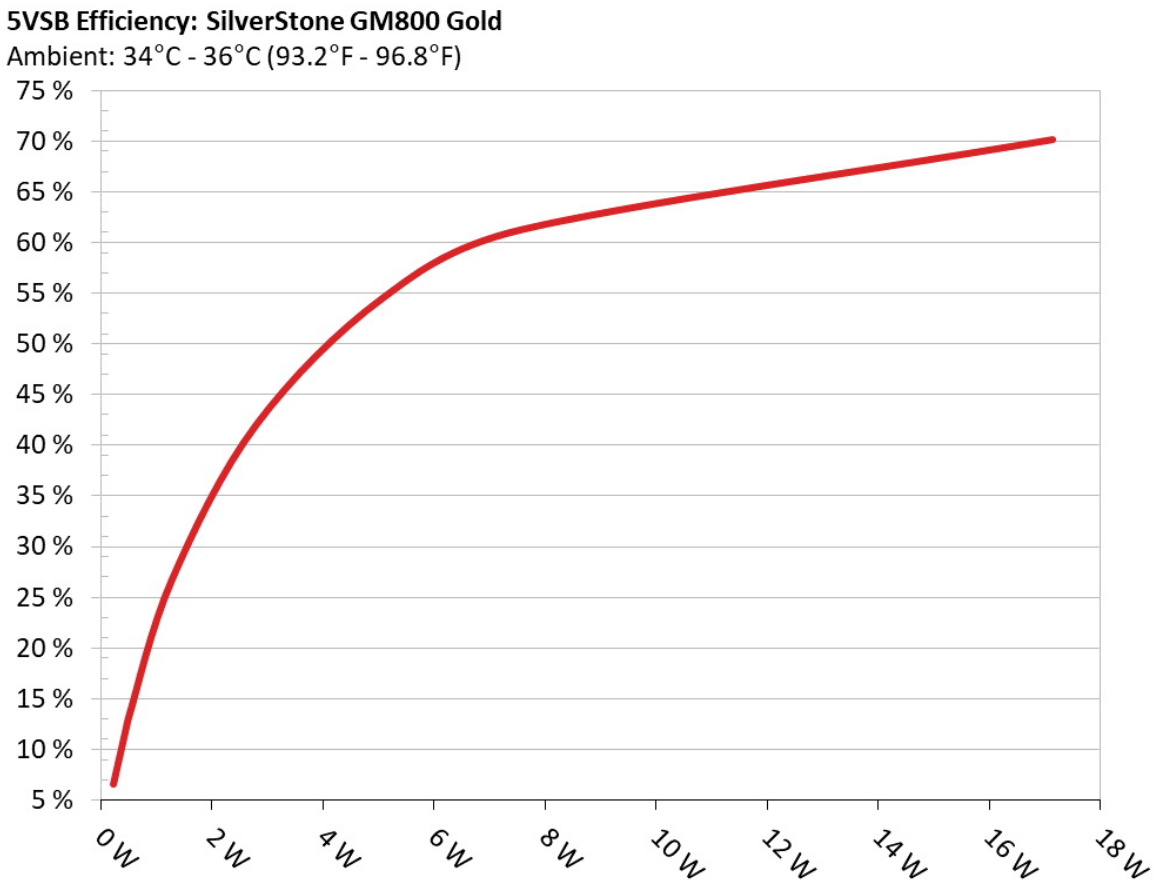
This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

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	0.233W	6.602%	0.085
	5.193V	3.529W		230.26V

2	0.09A	0.465W	12.228%	0.091
	5.172V	3.803W		230.26V
3	0.55A	2.804W	42.043%	0.144
	5.101V	6.67W		230.25V
4	1A	5.069W	54.473%	0.181
	5.07V	9.306W		230.25V
5	1.5A	7.564W	61.242%	0.212
	5.044V	12.352W		230.25V
6	3.499A	17.13W	70.128%	0.276
	4.896V	24.427W		230.25V

Supplementary Tests (For Reference)

10-110%□□□□ 230V

□□	Main □	□□ □	DC/AC (□)	□□	□□ (□□ /□□)	PF/AC □□
10%	6.157A	0.992A	79.777	84.063%	38.46°C	0.847
	12.145V	5.04V	94.902		42.28°C	230.28V
20%	12.667A	1.196A	159.572	89.583%	39.28°C	0.908
	12.124V	5.018V	178.127		43.73°C	230.27V
30%	19.199A	1.394A	239.376	91.443%	40.45°C	0.933
	12.104V	5.02V	261.777		45.24°C	230.27V
40%	25.745A	1.601A	319.182	92.089%	41.76°C	0.947
	12.087V	4.997V	346.601		46.85°C	230.27V
50%	32.279A	1.809A	398.388	92.217%	42.27°C	0.958
	12.063V	4.975V	432.013		47.67°C	230.27V
60%	38.988A	2A	478.535	92.097%	42.87°C	0.964
	12.020V	4.955V	519.6		48.68°C	230.27V
70%	45.704A	2.229A	558.061	91.826%	43.45°C	0.969
	11.970V	4.932V	607.738		49.73°C	230.26V
80%	52.572A	2.337A	637.826	91.482%	44.28°C	0.974
	11.914V	4.918V	697.218		51.18°C	230.26V

90%	59.519A	2.445A	717.594	91.04%	44.85°C	0.977
	11.855V	4.906V	788.217		52.49°C	230.26V
100%	66.125A	3.634A	797.574	90.442%	45.49°C	0.979
	11.797V	4.814V	881.864		53.56°C	230.25V
110%	73.312A	3.639A	877.636	89.823%	46.78°C	0.982
	11.733V	4.807V	977.075		55.58°C	230.25V

The results above are not used in the certification process

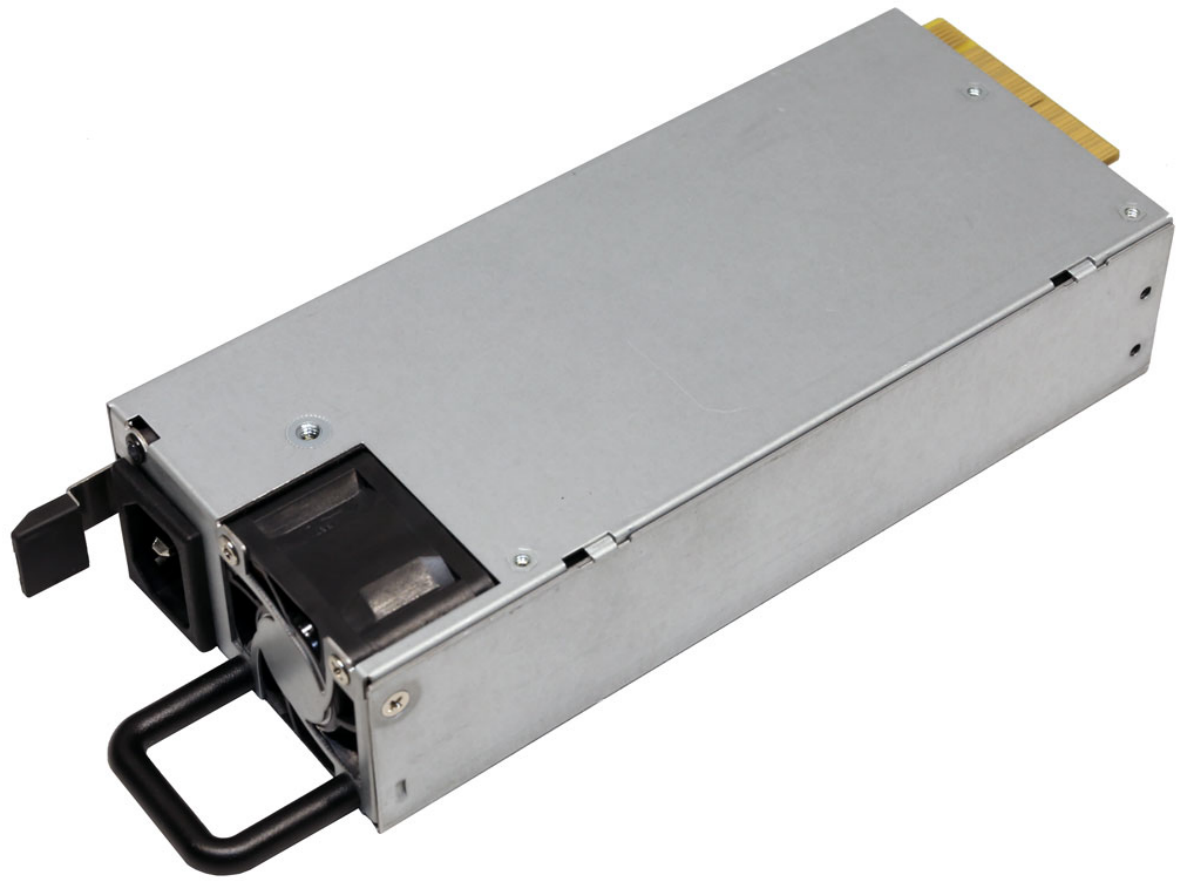
20-80□□□□□ 230V

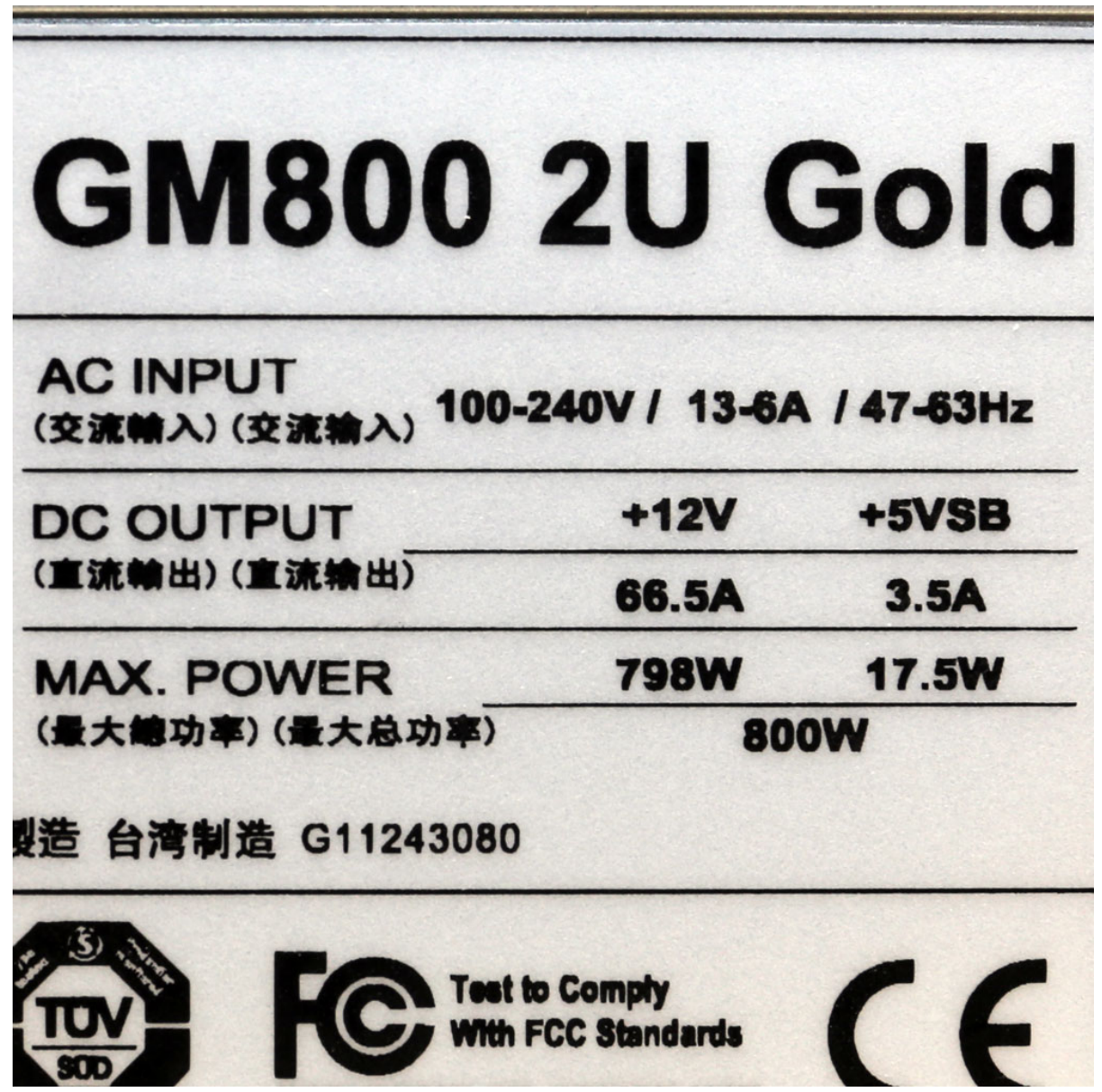
□□	Main □	□□ □	DC/AC (□)	□□	□□ (□□ /□□)	PF/AC □□
10W	1.562A	0.195A	19.994	61.271%	35.89°C	0.577
	12.159V	5.139V	32.632		37.23°C	230.31V
20W	3.167A	0.293A	39.995	75.154%	36.24°C	0.727
	12.156V	5.116V	53.217		38.16°C	230.3V
30W	4.773A	0.392A	59.992	81.112%	37.1°C	0.802
	12.150V	5.103V	73.962		39.36°C	230.29V
40W	6.374A	0.491A	79.917	84.498%	37.59°C	0.846
	12.145V	5.087V	94.579		40.25°C	230.28V

The results above are not used in the certification process

□□□□ 230V

Test	Main Rail	Standby Rail	Pass/Fail
10% Load	24.3 mV	15.0 mV	Pass
20% Load	35.0 mV	17.1 mV	Pass
30% Load	49.3 mV	30.2 mV	Pass
40% Load	66.1 mV	31.9 mV	Pass
50% Load	127.4 mV	36.0 mV	Fail
60% Load	183.5 mV	43.5 mV	Fail
70% Load	200.0 mV	43.1 mV	Fail
80% Load	200.0 mV	45.8 mV	Fail





90% Load	200.0 mV	47.9 mV	Fail
100% Load	599.7 mV	55.9 mV	Fail
110% Load	693.2 mV	57.1 mV	Fail

The results above are not used in the certification process

SilverStone GM800 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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CYBENETICS LTD Syrou 6, Latsia, 2231, Nicosia Cyprus

www.cybenetics.com - info@cybenetics.com