

Anex

SeaSonic Prime Fanless TX-700 (#2)

Lab ID#: SS70001926

Receipt Date: Oct 8, 2021

Test Date: Oct 27, 2021

Report: 21PS1926A

Report Date: Oct 27, 2021

DUT INFORMATION	
Brand	SeaSonic
Manufacturer (OEM)	Seasonic
Series	Prime TX Fanless
Model Number	SSR-700TL
Serial Number	
DUT Notes	

DUT SPECIFICATIONS	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	9.5-4.5
Rated Frequency (Hz)	50-60
Rated Power (W)	700
Туре	ATX12V
Cooling	-
Semi-Passive Operation	Х
Cable Design	Fully Modular

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	✓
(EU) No 617/2013 Compliance	✓

115V	
Average Efficiency	91.974%
Efficiency With 10W (≤500W) or 2% (>500W)	72.508
Average Efficiency 5VSB	80.748%
Standby Power Consumption (W)	0.0564119
Average PF	0.989
Avg Noise Output	- dB(A)
Efficiency Rating (ETA)	TITANIUM
Noise Rating (LAMBDA)	A++

230V	
Average Efficiency	93.511%
Average Efficiency 5VSB	80.232%
Standby Power Consumption (W)	0.0978163
Average PF	0.943
Avg Noise Output	- dB(A)
Efficiency Rating (ETA)	TITANIUM
Noise Rating (LAMBDA)	A++

POWER SPECIFICATIONS						
Rail		3.3V	5V	12V	5VSB	-12V
Mary Davis	Amps	20	20	58	2.5	0.3
Max. Power	Watts	100		696	12.5	3.6
Total Max. Power (W)		700				

HOLD-UP TIME & POWER OK SIGNAL (230V)		
Hold-Up Time (ms)	31.9	
AC Loss to PWR_OK Hold Up Time (ms)	27	
PWR_OK Inactive to DC Loss Delay (ms)	4.9	

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Modular Cables				
Description	Cable Count	Connector Count (Total)	Gauge	In Cable Capacitors
ATX connector 20+4 pin (620mm)	1	1	18-22AWG	Yes
4+4 pin EPS12V (660mm)	2	2	18AWG	No
6+2 pin PCle (760mm)	4	4	18AWG	No
SATA (410mm+150mm+150mm+150mm)	1	4	18AWG	No
SATA (450mm+120mm+120mm+120mm)	1	4	18AWG	No
SATA (300mm+160mm)	1	2	18AWG	No
4 pin Molex (450mm+125mm+125mm)	1	3	18AWG	No
4 pin Molex (360mm+125mm)	1	2	18AWG	No
4 pin Molex to SATA 3.3 Adapter (150mm+150mm)	1	2	18AWG	No
AC Power Cord (1420mm) - C13 coupler	1	1	16AWG	_

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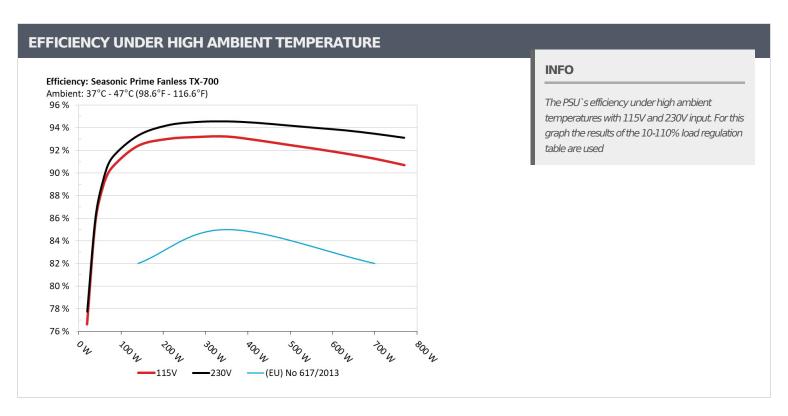
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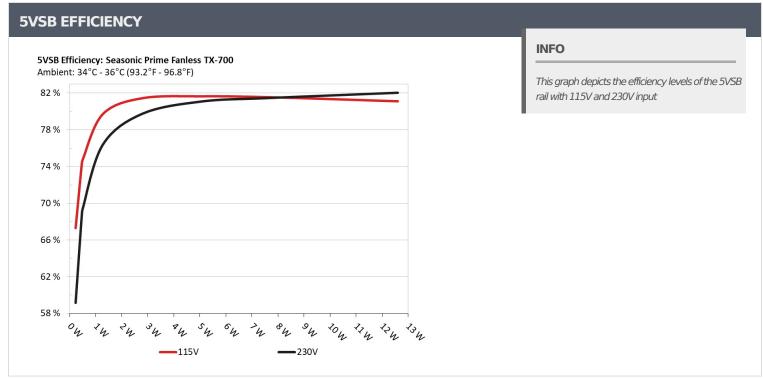
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Test # 5VSB DC/AC (Watts) Efficiency 0.045A 0.23W 67.286%	PF/AC Volts
	0.033
67.286%	
5.103V 0.342W	115.17V
0.09A 0.459W	0.059
2 5.101V 0.62W 74.048%	115.17V
0.55A 2.8W	0.257
3 5.09V 3.437W 81.46%	115.17V
1A 5.079W	0.355
4 5.078V 6.22W 81.66%	115.17V
1.5A 7.599W	0.412
5 5.065V 9.316W 81.566%	115.17V
2.501A 12.602W	0.468
6 5.04V 15.535W 81.118%	115.16V

5VSB EFFICIENCY -230V (ERP LOT 3/6 & CEC)					
Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts	
1	0.045A	0.23W	FO 1 440/	0.011	
1	5.103V	0.389W	59.144%	230.36V	
2	0.09A	0.459W		0.02	
2	5.101V 0.671W 68.369%	230.36V			
2	0.55A 2.8W	2.8W	70.7500/	0.098	
3	5.089V	3.511W	79.758%	230.36V	
4	1A	5.079W	01.0070/	0.163	
4	5.078V	6.264W	81.087%	230.36V	
_	1.5A	7.599W	07.4570/	0.221	
5	5.065V	9.329W	81.457%	230.36V	
	2.501A	12.6W	02.0250/	0.299	
6	5.039V	15.359W	82.035%	230.36V	

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115V

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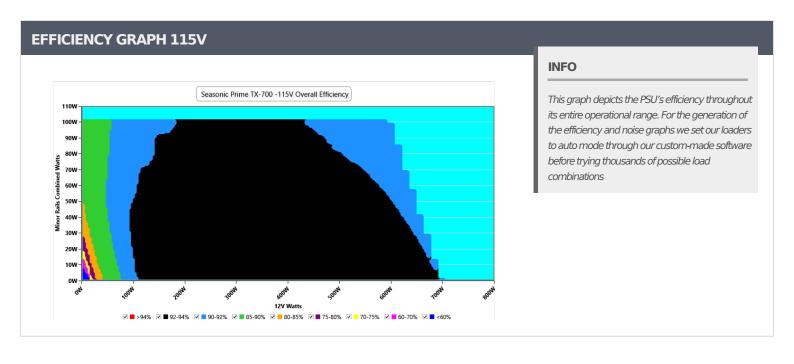
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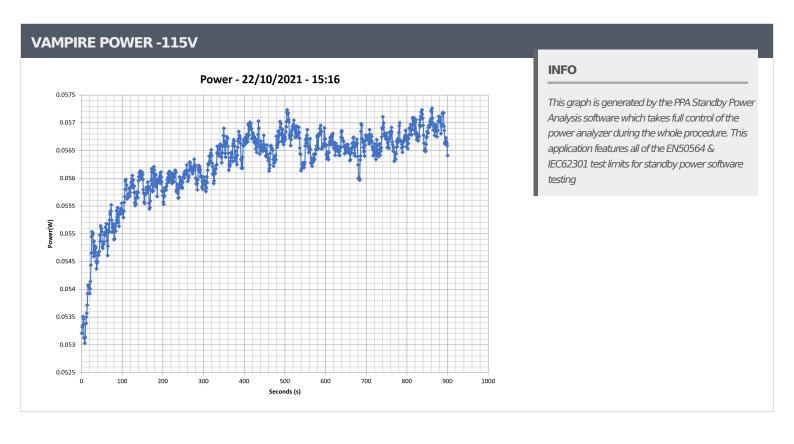
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Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
10%	3.976A	1.968A	1.966A	1.005A	69.999	- 90.19/	46.22°C	0.955
10%	12.174V	5.083V	3.357V	4.977V	78.562	89.1%	40.84°C	115.15V
200/	8.951A	2.956A	2.955A	1.21A	139.946	92.382%	46.84°C	0.982
20%	12.183V	5.075V	3.35V	4.962V	151.486	92.30270	41.16°C	115.16V
2007	14.279A	3.454A	3.455A	1.415A	209.987	92.996%	47.64°C	0.989
30%	12.181V	5.068V	3.343V	4.947V	225.803	92.990%	41.32°C	115.16V
400/	19.610A	3.952A	3.956A	1.622A	280.04	02.1710/	49.14°C	0.993
40%	12.179V	5.061V	3.336V	4.932V	300.567	93.171%	42.26°C	115.16V
E00/	24.595A	4.948A	4.957A	1.831A	349.999	93.211%	49.58°C	0.997
50%	12.177V	5.054V	3.329V	4.916V	375.492		42.3°C	115.16V
600/	29.589A	5.947A	5.966A	2.001A	419.805	92.898%	50.52°C	0.995
60%	12.173V	5.046V	3.319V	4.9V	451.897		42.74°C	115.16V
700/	34.593A	593A 6.951A 6.978A 2.254A	490.129	02 5050/	51.72°C	0.996		
70%	12.170V	5.037V	3.311V	4.881V	529.841	92.505%	43.18°C	115.17V
	39.595A	7.958A	7.995A	2.363A	559.74	02.1240/	52.82°C	0.996
80%	12.169V	5.028V	3.302V	4.867V	607.591	92.124%	43.78°C	115.17V
200/	45.000A	8.47A	8.501A	2.473A	629.976	01 7110/	54.61°C	0.997
90%	12.166V	5.019V	3.293V	4.853V	686.914	91.711%	44.75°C	115.18V
1000/	50.405A	8.985A	9.041A	2.584A	700.314	01.2440/	56.31°C	0.997
100%	12.163V	5.009V	3.285V	4.838V	767.516	91.244%	45.72°C	115.18V
1100/	55.420A	10.005A	10.173A	2.592A	769.721	00.0020/	58.46°C	0.998
110%	12.160V	4.998V	3.273V	4.824V	848.805	90.683%	46.72°C	115.19V
CI 1	0.115A	11.882A	11.917A	0A	101.309	00.2100/	49.38°C	0.974
CL1	12.174V	5.067V	3.331V	4.987V	114.838	88.219%	42.77°C	115.19V
CI 2	0.115A	19.688A	0A	0A	101.399	07.24404	50.98°C	0.974
CL2	12.176V	5.079V	3.339V	5.019V	116.225	87.244%	43.77°C	115.19V
21.2	0.115A	0A	19.768A	0A	67.392	02.210/	52.8°C	0.958
CL3	12.165V	5.057V	3.339V	4.977V	81.876	82.31%	44.72°C	115.19V
Cl. 4	57.565A	0A	0A	0A	700.165	00.00731	55.39°C	0.997
CL4	12.163V	5.02V	3.306V	4.929V	760.546	92.061%	45.64°C	115.18V

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20-80	OW LOAD T	ESTS 115	,					
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
	1.220A	0.491A	0.49A	0.2A	19.997	76.6020/	39.62°C	0.794
20W	12.177V	5.088V	3.366V	5.007V	26.105	76.602%	36.5°C	115.14V
	2.684A	0.688A	0.687A	0.3A	39.996	05 7710/	41.31℃	0.908
40W	12.176V	5.086V	3.364V	5.002V	46.631	85.771%	37.52℃	115.14V
COM	4.150A	0.885A	0.883A	0.4A	59.995	00.0120/	43.26°C	0.946
60W	12.174V	5.085V	3.362V	4.997V	67.401	89.013%	38.95°C	115.15V
00147	5.608A	1.082A	1.08A	0.501A	79.947	00.5150/	45.13°C	0.963
80W	12.180V	5.084V	3.359V	4.991V	88.325	90.515%	40.1°C	115.15V

RIPPLE MEASUREMENTS 115V									
Test	12V	5V	3.3V	5VSB	Pass/Fail				
10% Load	7.00mV	8.13mV	5.99mV	7.14mV	Pass				
20% Load	19.04mV	8.49mV	5.48mV	6.63mV	Pass				
30% Load	20.62mV	9.87mV	5.84mV	7.44mV	Pass				
40% Load	18.22mV	9.77mV	5.73mV	7.39mV	Pass				
50% Load	12.19mV	10.38mV	6.09mV	8.36mV	Pass				
60% Load	10.50mV	11.55mV	6.40mV	8.87mV	Pass				
70% Load	10.98mV	12.12mV	6.40mV	8.26mV	Pass				
80% Load	12.72mV	12.58mV	11.21mV	9.94mV	Pass				
90% Load	13.74mV	13.25mV	11.15mV	9.28mV	Pass				
100% Load	23.90mV	15.10mV	12.43mV	12.25mV	Pass				
110% Load	25.55mV	16.38mV	13.08mV	13.60mV	Pass				
Crossload1	21.21mV	10.58mV	12.88mV	7.20mV	Pass				
Crossload2	18.48mV	10.79mV	6.60mV	6.83mV	Pass				
Crossload3	17.06mV	12.58mV	20.93mV	10.45mV	Pass				
Crossload4	23.60mV	14.50mV	7.18mV	13.70mV	Pass				

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SeaSonic Prime Fanless TX-700 (#2)

230V

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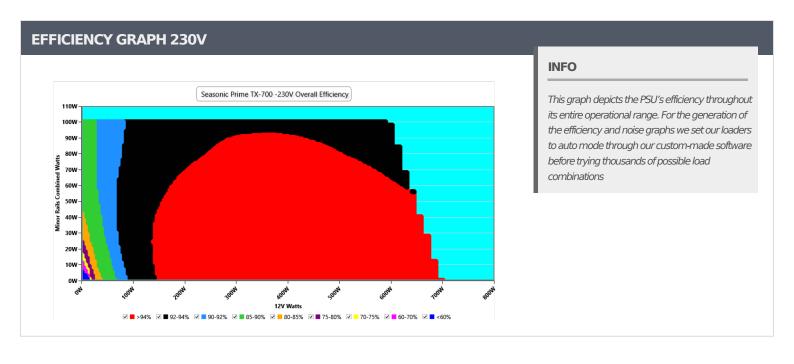
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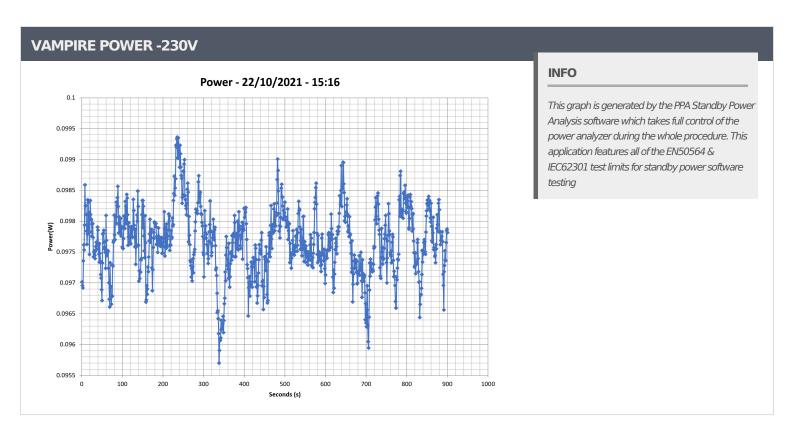
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TO-T	LO% LOAD	12313 230	, ,					
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
100/	3.976A	1.968A	1.966A	1.005A	70.002	00.7050/	45.62°C	0.748
10%	12.171V	5.082V	3.357V	4.975V	78.018	89.725%	40.74°C	230.4V
200/	8.954A	2.957A	2.957A	1.21A	139.952	02.2220/	46.28°C	0.887
20%	12.179V	5.073V	3.348V	4.96V	149.965	93.323%	40.93°C	230.39V
200/	14.283A	3.455A	3.458A	1.416A	209.989	04.2240/	47.43°C	0.936
30%	12.177V	5.066V	3.34V	4.945V	222.839	94.234%	41.38°C	230.4V
400/	19.615A	3.955A	3.96A	1.623A	280.033	04.5310/	48.34°C	0.958
40%	12.176V	5.058V	3.333V	4.929V	296.234	94.531%	41.83°C	230.4V
F00/	24.600A	4.952A	4.963A	1.832A	349.986	04.500/	49.75°C	0.97
50%	12.174V	5.05V	3.325V	4.913V	370.041	94.58%	42.56°C	230.41V
600/	29.585A	5.952A	5.971A	2A	419.705	04.4500/	50.86°C	0.976
60%	12.171V	5.041V	3.316V	4.897V	444.323	94.459%	43.14°C	230.41V
700/	34.588A	6.956A	6.985A	2.255A	490.031	042250/	52.23°C	0.981
70%	12.170V	5.033V	3.307V	4.879V	520.01	94.235%	43.83°C	230.42V
000/	39.594A	7.964A	8.003A	2.364A	559.656	04.0110/	52.93°C	0.984
80%	12.167V	5.024V	3.298V	4.864V	595.308	94.011%	44.21°C	230.42V
000/	44.996A	8.474A	8.509A	2.474A	629.875	02.7000/	54.2°C	0.987
90%	12.165V	5.016V	3.29V	4.851V	671.59	93.789%	44.6°C	230.42V
1000/	50.408A	8.989A	9.05A	2.585A	700.244	02.4060/	56.41°C	0.988
100%	12.162V	5.006V	3.281V	4.835V	749.036	93.486%	45.71°C	230.43V
1100/	55.421A	10.01A	10.18A	2.592A	769.653	02.1200/	58.31°C	0.99
110%	12.158V	4.995V	3.271V	4.823V	826.435	93.129%	46.56°C	230.43V
CL 1	0.115A	11.883A	11.917A	0A	101.3	00.0440/	49.54°C	0.84
CL1	12.173V	5.066V	3.331V	4.986V	113.765	89.044%	42.9°C	230.41V
CI 2	0.115A	19.689A	0A	0A	101.395	00.0700/	50.34°C	0.842
CL2	12.175V	5.079V	3.338V	5.017V	115.119	88.079%	43.09°C	230.4V
CI 2	0.115A	0A	19.767A	0A	67.387	02.0220/	52.45°C	0.758
CL3	12.164V	5.057V	3.339V	4.977V	81.167	83.023%	44.22°C	230.4V
Cl 4	57.561A	0A	0A	0A	700.084	04.2667	55.33°C	0.988
CL4	12.163V	5.019V	3.305V	4.928V	741.93	94.36%	45.91°C	230.42V

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20-8	0W LOAD 1	TESTS 230	v					
Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Temps (In/Out)	PF/AC Volts
2014/	1.220A	0.491A	0.49A	0.2A	20.003	- 77.7010/	40.14°C	0.447
20W	12.171V	5.087V	3.365V	5.006V	25.734	77.731%	36.86°C	230.4V
40)44	2.686A	0.688A	0.687A	0.3A	40.002	06.1069/	40.1°C	0.612
40W	12.171V	5.085V	3.363V	5.001V	46.408	86.196%	37.34°C	230.4V
60)44	4.152A	0.885A	0.884A	0.401A	60.001	00 500/	41.19°C	0.71
60W	12.170V	5.084V	3.361V	4.995V	66.973	89.59%	37.89°C	230.4V
00147	5.612A	1.082A	1.081A	0.501A	79.966	01.41.60/	43.07°C	0.776
80W	12.177V	5.083V	3.358V	4.99V	87.475	91.416%	39.33℃	230.41V

RIPPLE MEASUREMENTS 230V					
Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	19.94mV	7.88mV	5.84mV	7.24mV	Pass
20% Load	20.67mV	8.49mV	5.84mV	6.83mV	Pass
30% Load	21.28mV	9.26mV	5.89mV	6.88mV	Pass
40% Load	17.86mV	9.87mV	6.20mV	7.09mV	Pass
50% Load	11.84mV	10.53mV	6.45mV	8.01mV	Pass
60% Load	9.89mV	11.71mV	7.06mV	7.85mV	Pass
70% Load	11.39mV	12.17mV	7.21mV	8.87mV	Pass
80% Load	12.21mV	12.68mV	11.36mV	9.07mV	Pass
90% Load	14.29mV	13.65mV	11.57mV	9.53mV	Pass
100% Load	24.39mV	15.48mV	12.66mV	11.89mV	Pass
110% Load	26.03mV	16.03mV	13.21mV	12.75mV	Pass
Crossload1	23.07mV	10.93mV	12.76mV	7.23mV	Pass
Crossload2	20.26mV	11.04mV	6.65mV	7.19mV	Pass
Crossload3	21.08mV	12.63mV	21.80mV	10.15mV	Pass
Crossload4	24.69mV	13.89mV	7.21mV	13.00mV	Pass

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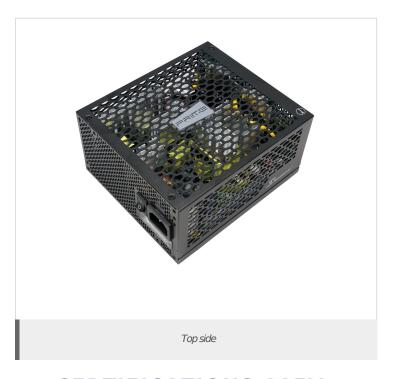
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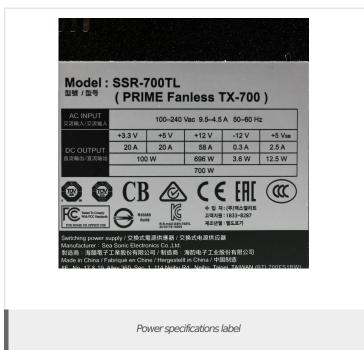
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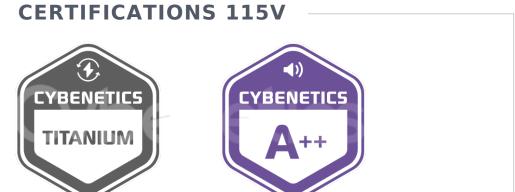


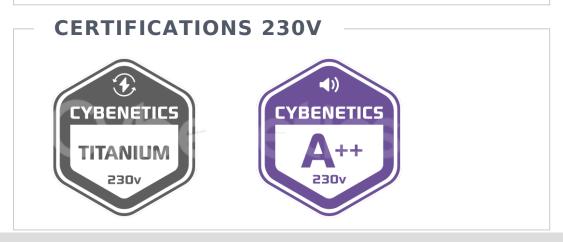
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