

Shenzhen Watt Power Testing Institute Co., Ltd.

Test Report

Report No. :	WTY22080301002S
Applicant :	JENSON ENTERPRISE CO.,LTD
Applicant Address :	Old Guanchang Road, Ailingkan Village, Dalingshan Town, DONGGUAN Guangdong 523000
Manufacturer :	JENSON ENTERPRISE CO.,LTD
Manufacturer Address :	Old Guanchang Road, Ailingkan Village, Dalingshan Town, DONGGUAN Guangdong 523000
Product name:	Furniture Power Distribution Unit
Model :	JN02-03-22TR, JN02-03-22, JN02-03-32, JN02-03-23, JN02-03-24, JN02-03-24TR
DC. output cord length(mm):	/
Trade Mark :	/
Name plate specifications :	Input: 12A, 125Vac, 60Hz, 1500W USB Output: 5VDC, 2A Max.
Test Standard: CEC-140-2019-002, Dated January 2017 -- Appendix Z to Subpart B of Part 430-Uniform Test Method for Measuring the Energy Consumption of External Power Supplies.	
Sample Received:	2022-08-03
Test performed:	2022-08-04
Test laboratory name:	Shenzhen Watt Power Testing Institute Co., Ltd
Test laboratory address:	Area A, Floor 1, Building C, Guosheng Industrial Park, No. 101 Junxin Road, Shimajing community, Guanlan Street, Longhua New District, Shenzhen.
Conclusion:	The submitted samples were found to comply with the above standard.

Test by: Tant Tan/engineer	<i>Tant Tan</i>	Date	2022-08-05	 Shenzhen Watt Power Testing Institute Co., Ltd
Approved by: Hero Wu / Manager	<i>Yew Wu</i>	Date	2022-08-05	

General condition

1. Test Room

The test was carried out in a room that has an air speed close to the UUT of ≤ 0.5 m/s. The ambient temperature was maintained at $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ throughout the test.

2. Test Voltage

The input voltage is within the specified voltage $\pm 1\%$ and the specified frequency $\pm 1\%$. The UUT was tested at rated supply as mentioned in Summary of testing. The input power source is capable of delivering at least 10 times the nameplate input power of the UUT. The THD of the supply voltage when supplying the UUT in the specified mode was not exceeding 2%, up to and including the 13th harmonic.

3. Test Setup

The UUT was operated at 100% of rated current output for at least 30 minutes immediately prior to conducting efficiency measurements.

4. THD

The THD of the input voltage shall be ≤ 2 percent, up to and including the 13th harmonic. The crest factor of the input voltage shall be between 1.34 and 1.49.

5. Load Conditions

The UUT was tested at four active mode load conditions and the no-load condition according to table below by using electronic load.

Percentage of Nameplate Output Current	
Load Condition 1	$100\% \pm 2\%$
Load Condition 2	$75\% \pm 2\%$
Load Condition 3	$50\% \pm 2\%$
Load Condition 4	$25\% \pm 2\%$
Load Condition 5	0%

The 2% allowance is of nameplate output current, not of the calculated current value. For example,

a UUT at Load Condition 3 may be tested in a range from 48% to 52% of rated output current.

List of Test and Measurement Equipment:

Kind of Equipment	Manufacturer	Model	S/N	Calibrated until
POWER METER	YOKOGAWA	WT210	WTY-TR-S-047	2023-06-12
DC ELECTRONIC LOAD	CHROMA	6312	WTY-TR-S-037	2022-09-05
TEMPERATURE & HUMIDITY RECORDER	ENJOY ALL THE ELECTRONIC	LX868	WTY-TR-S-032	2022-09-05
STOPWATCH	TIANTU	PC369	WTY-TR-S-013	2022-09-08
TAPELINE	HENG TAI	LV-JC-01	WTY-TR-S-020	2022-09-15
AC POWER SOURCE	EPPS	AFC-11005	WTY-TR-S-021	2022-09-05
ANEMOMETER	ALL THE ELECTRONIC	AS8336	WTY-TR-S-039	2022-10-25

International Efficiency Marking Protocol for External Power Supplies Version 3.0, September 2013

Mark	Performance Requirements				
	Nameplate Output Power (Pno)	No-Load Mode Power	Nameplate Output Power (Pno)	Average Efficiency in Active Mode	Power Factor
I	Used if none of the other criteria are met.				
II	0 to ≤ 10 watts	≤ 0.75	0 to < 1 watt	≥ 0.39 * Pno	Not applicable
	> 10 to 250 watts	≤ 1.0	1 to < 49 watts	≥ 0.107 x Ln(Pno) + 0.39	
			> 49 watts	≥ 0.82	
III	0 to < 10 watts	≤ 0.5	0 to 1 watt	≥ 0.49 * Pno	Not applicable
	10 to 250 watts	≤ 0.75	> 1 to < 49 watts	≥ 0.09 * Ln(Pno) + 0.49	
			>49 to 250 watts	≥ 0.84	
IV	0 to 250 watts	≤ 0.5	0 to 1 watt	≥ 0.5 * Pno	Not applicable
			1 to 51 watts	≥ 0.09 * Ln(Pno) + 0.5	
			>51 to 250 watts	≥ 0.85	
V	0 to < 50 watts	≤ 0.5 for ac-ac; ≤ 0.3 for ac-dc	0 to ≤ 1 watt	Standard: ≥ 0.480 * Pno + 0.140 Low Voltage: ≥0.497 * Pno + 0.067	EPSs with ≥ 100 watts input power must have a true power factor ≥ 0.9 at 100% of rated load when tested at 115 volts/60Hz.
	≥ 50 to ≤ 250 watts	≤ 0.5	> 1 to 49 watts	Standard: ≥ [0.0626* Ln(Pno)] + 0.622 Low Voltage: ≥[0.0750 * Ln(Pno)]+ 0.561	
			> 49 to 250 watts	Standard: ≥ 0.870 Low Voltage: ≥ 0.860	
VI	Single-Voltage				Not Applicable
	0 to ≤ 49 W	AC-DC: ≤ 0.100 AC-AC: ≤ 0.210	0 to ≤ 1 W	Basic Voltage: ≥ 0.5 * Pno + 0.16 Low Voltage: ≥ 0.517 * Pno + 0.087	
			1 to ≤ 49 W	Basic Voltage: ≥ 0.071* Ln(Pno) – 0.0014*Pno + 0.67 Low Voltage: ≥ 0.0834 * Ln(Pno) – 0.0014 * Pno + 0.609	
	☐ >49 to ≤ 250 W	≤ 0.210	>49 to ≤ 250 W	Basic Voltage: ≥ 0.880 Low Voltage: ≥ 0.870	
	> 250 W	≤ 0.500	>250 W	≥ 0.875	
	Multiple-Voltage				
	Any	≤ 0.300	0 to ≤ 1 W	≥ 0.497 * Pno + 0.067	
			1 to ≤ 49 W	≥ 0.075 * Ln(Pno) + 0.561	
			49 W	≥ 0.860	
VII	Reserved for future use				

Sample 1#

	No Load	Load condition			
Percentage of nameplate current	0%	25%	50%	75%	100%
Output current (mA)	--	500	1000	1500	2000
Output voltage (V)	4.902	4.879	4.842	4.865	4.889
Output power (W)	--	2.440	4.842	7.298	9.778
AC input voltage (V)	115	115	115	115	115
AC supply frequency (Hz)	60	60	60	60	60
AC input power (W)	0.06	2.99	6.02	9.19	12.52
Total Harmonic distortion (THD)V%	0.735	0.701	0.983	1.203	1.363
True power factor (W/VA)	0.121	0.412	0.441	0.469	0.506
Power consumed by EUT (W)	0.06	0.550	1.178	1.892	2.742
Efficiency (%)	--	81.61	80.43	79.41	78.10
Average active efficiency (%)	--	79.89			

*) Arithmetic average of efficiency at load conditions 1-4.

TEST RESULTS AND REQUIREMENT:

Test Results:

	Model No.	Test at 115V, 60Hz	Energy Efficiency: VI
No load power (W)	JN02-03-22TR	0.06	≤0.10
Average Efficiency (%)	JN02-03-22TR	79.89	≥78.70
Verdict	--	PASS	--

Limit for efficiency mark level VI:

Minimum Efficiency Average active mode efficiency limit greater than or equal to $\geq 0.0834^*$
 $\ln(P_{no}) - 0.0014 \cdot P_{no} + 0.609 = 78.70\%$

The no-load condition consumption shall not exceed 0.10W

Copy of marking plate(Representative):

The artwork below may be only a draft.

JENSON ENTERPRISE CO.,LTD
Product: Furniture Power Distribution Unit
Model No: JN02-03-22TR
Rating: 12A 125Vac 60Hz 1500W
USB Output: 5V==2A MAX
CONFORMS TO UL STD 962A
CERTIFIED TO CSA STD.C22.2 NO.308
CAUTION: To Reduce the Risk of Electric Shock
-Use only indoor in dry locations. Date: 2022.08
-Suitable for Household(Residential) use only
ATTENTION: Pour réduire le risque de choc électrique
-Utiliser uniquement à l'intérieur dans des endroits secs.

**General product information:**

1. The submitted samples were found to comply with the above standard.
2. This test results relate only to the submit samples.
3. the models are non-user selectable single out power supply
4. All models are same except for model name and enclosure shape.
5. Model JN02-03-22TR was selected for testing

Note: This report shall not be reproduced except for authorized by testing laboratory.