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1. SCOPE

The document detail the electrical, mechanical and environmental specifications of a SMPS, the power supply provide 10W continuous output power.

The power supply shall meet the **RoHS** requirement.

1.1. Description

- SMPS Adaptor(Wall mount)
 SMPS Adaptor(Desk-top)
 Open Frame
 SMPS Unit (With Case)
 Others

2. Input Characteristics

2.1. Input Voltage & Frequency

The range of input voltage is from 90Vac to 264Vac single phase.

	Minimum	Nominal	Maximum
Input Voltage	90Vac	100-240Vac	264Vac
Input Frequency	47Hz	50/60Hz	63Hz

2.2. Input AC Current

0.35Amax. @ 100-240Vac input & Full load

2.3. Inrush Current (cold start)

60 Amax. @ 100-240Vac input

2.4. Average Efficiency

79.00% min. @ Input 115Vac60Hz/230Vac50Hz

2.5. Energy Consumption

Input 115Vac60Hz/230Vac50Hz The No-Load power \leq 0.075W

3. Output Characteristics

3.1. Static Output Characteristics (Vo & R+N)

Output Rate	Rated Load		Output Range	R+N	Remark
	Min. Load	Max. Load			
+5V	0.0A	2A	4.75-5.25V	\leq 200mVp-p	100-240Vac
+5V	0.0A	0.0A	4.75-5.35V	\leq 200mVp-p	100-240Vac

Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor. (test under the condition of rated input and rated output)

3.2. Line/ Load Regulation

Output Rate	Load Condition		Line Regulation	Load Regulation	Remark
	Min. Load	Max. Load			
+5V	0.1A	2A	± 5%	± 5%	

3.3. Turn - on Delay Time

3 S max. @ 100-240Vac input & Full load

3.4. Hold-up Time

10 ms minimum at 115Vac/60Hz input at maximum load, and 20 ms minimum at 230Vac/50Hz input at maximum load.

3.5. Rise Time

100 mS max. @ Rated load

3.6. Fall Time

5 mS min. @ Rated load @ 100-240Vac input

3.7. Output Overshoot

10 % max. When the power on or off, when it is the Rated input voltage and Rated load

3.8. Output Load Transient Response

Output voltage within ±10% for load step from 20% to 80%, R/S: 0.5A/uS, frequency: 100Hz duration and 8mS at 80%.

4. Protection Requirements

4.1. Over Current Protection

Over Current Point Limited: $I \leq 4A(100-240Vac)$

The output shall hiccup when the over currents applied to the output rail, and shall be self-recovery when the fault condition is removed

4.2. Short Circuit Protection

The input power shall decrease when the output rail short, the power supply shall no damage, and shall be self-recovery when the fault condition is removed

5. Environment Requirements

5.1. Operating Temperature and Relative Humidity

Operating Temperature: 0°C ~ 40°C

Relative Humidity: 10% ~ 90%

Altitude: Sea level to 2,000 m.

5.2. Storage Temperature and Relative Humidity

Storage Temperature: -30°C to +70°C

10%RH to 95%RH non-condensing @ Sea level shall be low 2000 m

5.3. Drop in

Height: 1m; the product should be fell off on the hardwood with the thickness of 20mm, and the hardwood should be put on the base of the cement or on the ground without flexibility. Apply one times on all surface.

6. Reliability Requirements

6.1. Burn-in

The power supply shall be burn-in for 2 Hours under normal input and 100% rated load at 35-40°C

6.2. MTBF Qualification

The MTBF shall be at least 30,000hours at 25°C, 80% for Full load and 115/230V input condition

7. EMI/EMS Standards

7.1. EMI Standards

EN 55032:2006
FCC part 15 B
GB9254 CLASS B

7.2. EMS Standards

7.2.1. N 61000-4-2, electrostatic discharge (ESD) requirement

Discharge characteristic	Test level	Test criteria
Air discharge	+/-8KV	B
Contact discharge	+/-4KV	B

7.2.2. EN 61000-4-5, surge capability requirement

Surge voltage	Test criteria
Common mode +/-1KV	B
Differential mode +/-1KV	

8. Safety Standards

8.1. Dielectric Strength (Hi-pot)

Primary to Secondary: **3000Vac / 5.0 mA** Max / 60 second (3second for production)

8.2. Leakage Current

0.25mA max. at **100-240Vac / 60Hz**

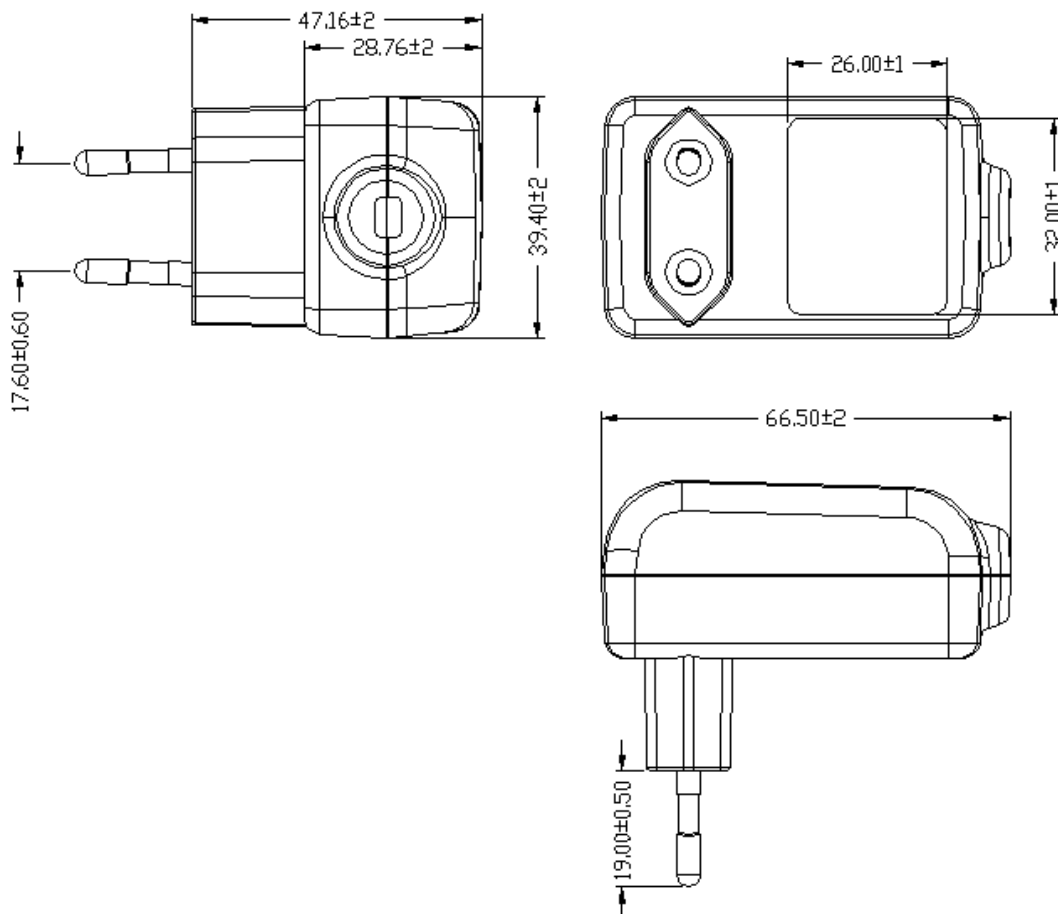
8.3. Insulation Resistance

10 MΩ min. at primary to secondary add 500Vdc test voltage

8.4. Regulatory Standards

Type	Country	Standard	Statue	Mark
3C	China	GB4943		
UL	USA	UL60950		
CUL	Canada	CSA C22.2 No. 60950		
UL	USA	UL 60065		
CUL	Canada	CSA C22.2 No. 60065		
GS	Europe	EN 60950		
CE	Europe	EN 60950	Approved	
PSB	Singapore	IEC60065		
PSE	Japan	J60065		
EK	Korea	K60065		
BSMI	Taiwan	IEC60065		
SAA	Australia	AS/NZS 60065		
INMETRO	Brazil	EN60065		
IRAM	Argentina	IEC60065		
CCC	CHINA	GB8898		

9. Mach. Outline Drawing



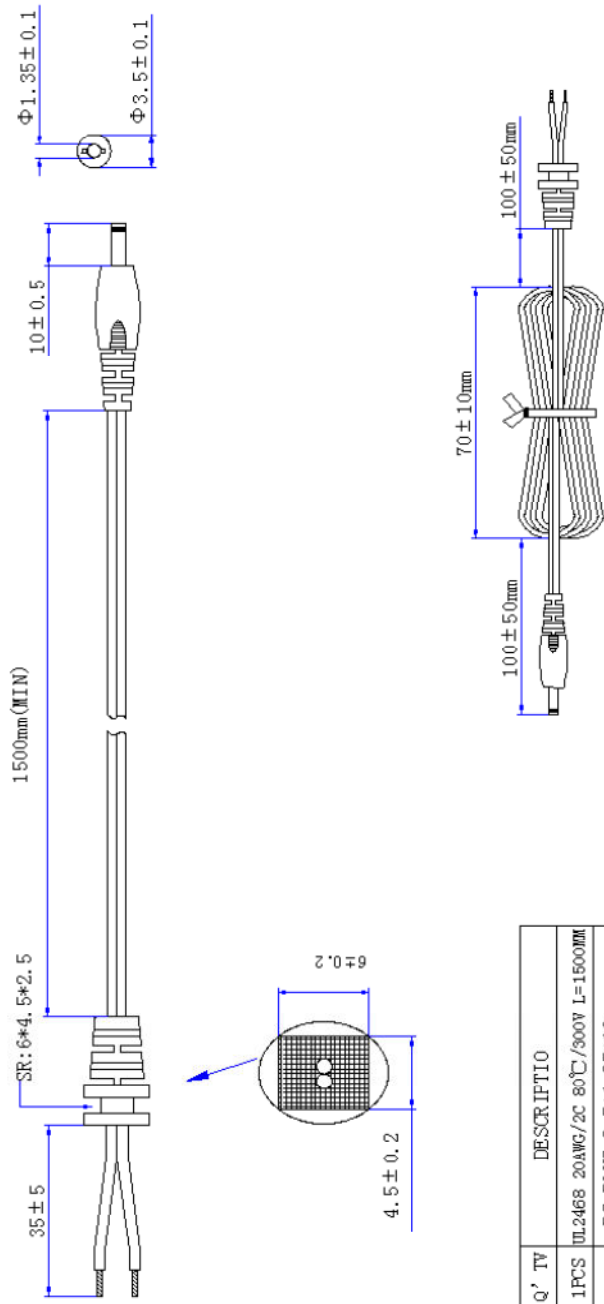
Enclosure **Type** : PC Temperature: 120°C 94V0

Remark: PC material conform to the requirements of the ball pressure test

No display tolerance: ± 0.12

Unit: mm

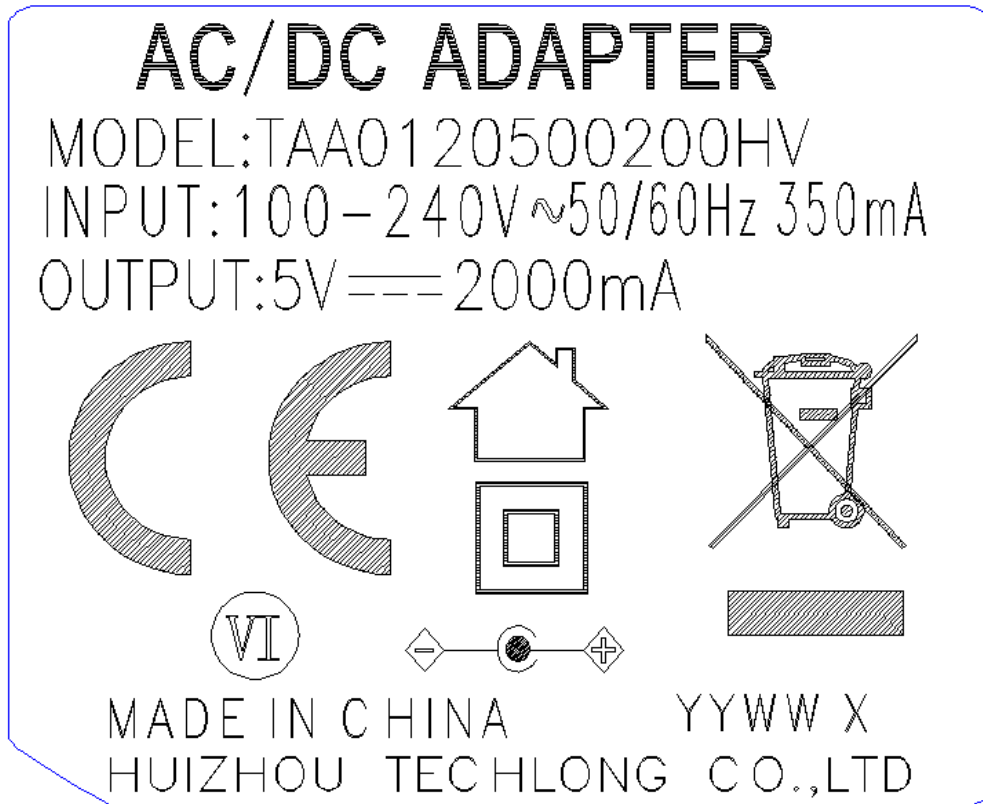
10. DC Cord Drawing



NO.	ITEM	Q' TV	DESCR IPTIO
01	CABLE	1PCS	UL2468 20AWG/2C 80°C/300V L=1500MM
02	PLUG	1PCS	DC PLUG:3.5*1.35*10

customer signature

11. Marking Drawing



YYWW X

PRODUCTION LINE	A - Z
WEEK	01 - 53
YEAR	01 - 99

Material: Laser engraving

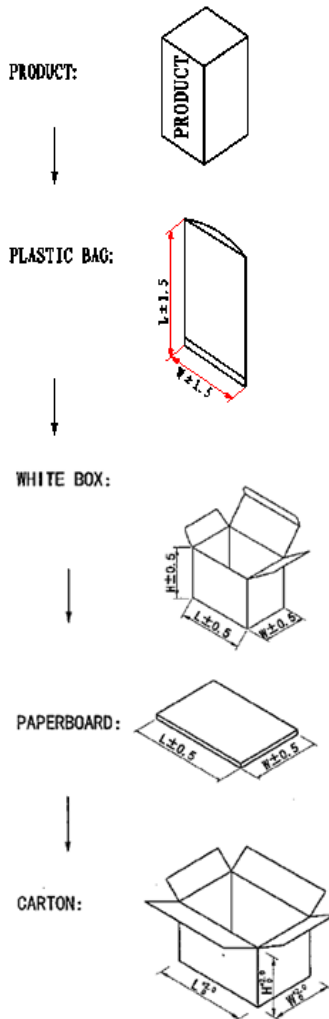
Color : originally

Tolerance: ±0.1mm

Hazardous Substances: RoHS

customer signature

12. Package Drawing



	L	W	H
WHITE BOX	7.5	5.3	8.5
PLASTIC BAG	20	13.8	
PAPERBOARD	38	32	
CARTON	40	33	37

PACKING METHOD:

PAPERBOARD PLACEMENT METHOD	PUT A PAPERBOARD OVER AND UNDER THE PRODUCTS OF EACH LAYER, TOTAL 5PCS.
PACKING METHOD	30PCS/LAYER X 4 LAYERS
QTY	120PCS
N.W./PC	g
G.W./CARTON	Kg

REMARK:

1.STORAGE CONDITION

TEMPERATURE: -10°C ~ +60°C

RELATIVE HUMIDITY: 30% ~ 80%

2.STORAGE PERIOD: 6 MONTHES

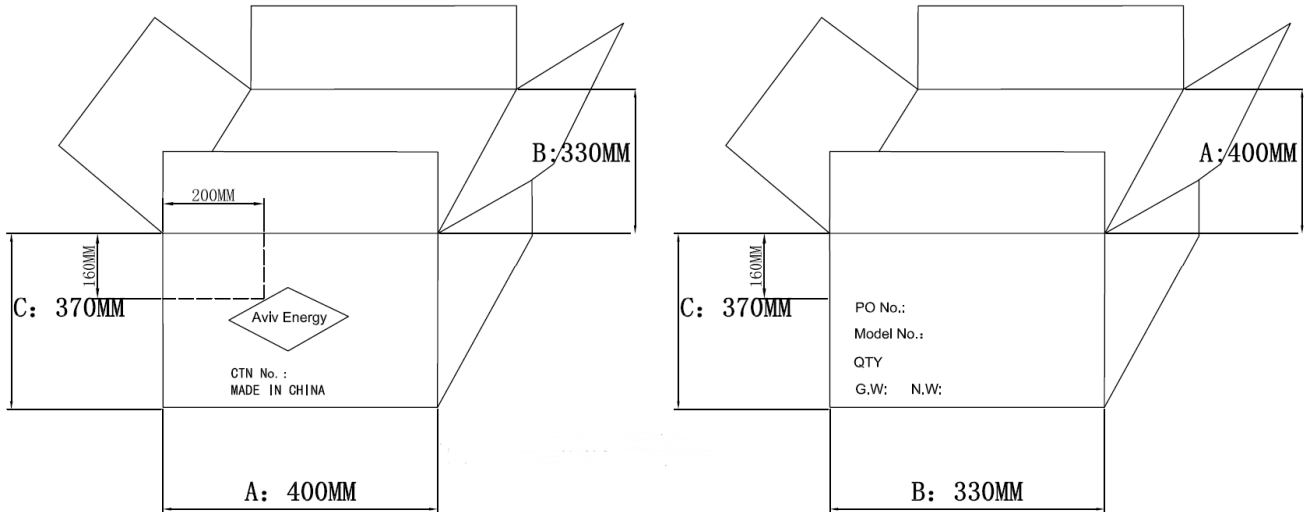
3.ANLISTATIG: NO REQUIREMENT

4.PLEASE ADVISE IF ANY COMMENTS ABOUT THE PACKING INFORMATION.

OTHERWISE, THIS INFORMATION IS DEFAULTED AS CUSTOMER APPROVAL, AND WILL BE APPLIED TO PRODUCTION.

customer signature

13. Carton drawings



14. Carton label



15. White box stickers



16. Safety Instructions

95 ± 2mm

