

## Product specification

Customer : \_\_\_\_\_

Model : ADPUMXMS-2.1A-LOOSE

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Checked by : \_\_\_\_\_

Approved by : \_\_\_\_\_

Approved by customer : \_\_\_\_\_

# ULTRA MAX

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## Characteristics

### 1.1 Input Characteristics:

1) Input Rated Voltage. Frequency :		<b>100-240V 50/60Hz</b>
2) Input Voltage Range:	Continuously	<b>90VAC to 264VAC</b>
3) Input Frequency Range:	Continuously	<b>50Hz to 60Hz</b>
Vibration Rate input frequency	Continuously	<b>47Hz to 63Hz</b>
4) Input Current:	<b>100Vac in/2.1A load</b>	<b>0.3A Max.</b>
	<b>240Vac in/2.1A load</b>	<b>0.2A Max</b>
5) Inrush Current: (Cold start)		<b>30A Max .@100VAC cool start</b> <b>60A Max .@230VAC cool start</b>
6) No Load Power Consumption:	<b>100-240Vac in</b>	<b>&lt; 0.3W</b>
7) Leakage current:	<b>240Vac/50Hz</b>	<b>≤250uA</b>
8) Power Factor:	<b>100-240Vac in Full Load</b>	<b>NC</b>

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## 1.2 Output Characteristics:

1) Output Characteristics: Measured at the end of DC cable

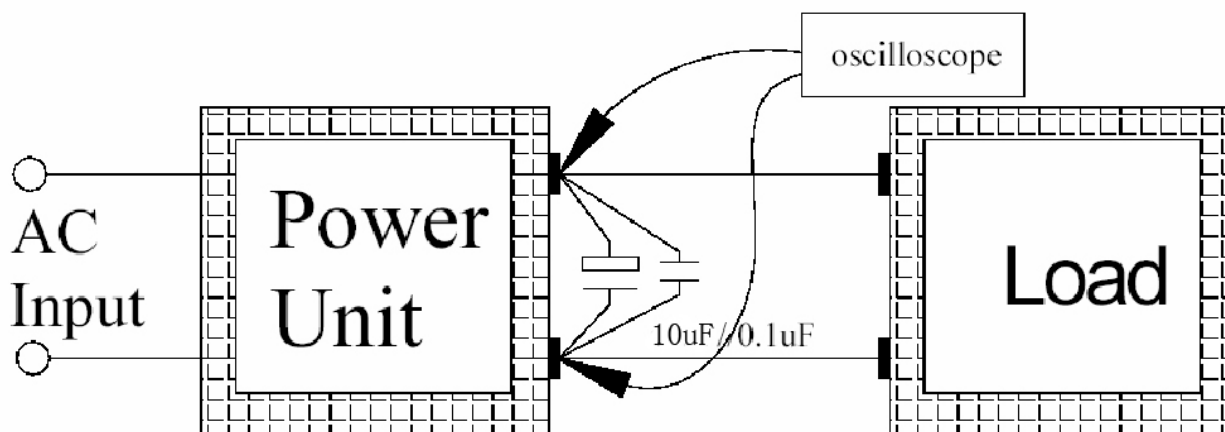
2) Output Rated Voltage:

NO	OUTPUT VOLTAGE	OUTPUT RATED VOLTAGE
NO LOAD	5V	4.75-5.25V
LOAD	5V	4.75-5.25V

3) Output Current: At constant voltage mode 0A to 2.1A

4) Maximum output power: 10.5W

4) Output Voltage Ripple and Noise: 100-240Vac in/2.1A load <200mVp-p  
(0.1uF ceramic Cap.and 50V  
10uF Aluminum Cap. paralleled  
between the end of output cable)



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## 1.3 Protection Characteristics

- 1) Short Circuit Protection: The adapter can withstand continuous short at DC output and no damage, it will enter into normal condition if the fault condition is removed. No broken, no smoke in
- 2) Overshoot / Undershoot: 5.25V+10%
- 3) Over-current protection: 2.2A~2.8A over current protection / With auto-recovery function

## 1.4 General characteristics

- 1)Efficiency: (Warm up) Average at 115Vac/60Hz to 230Vac/50Hz, with full load >65%
- 2) Any protect condition shall cause no damage and no component fail, Automatic recovery when removal

## 1.5 Environmental Characteristics

- 1) EMI standard : CISPR-22 CLASS B, Fcc class B , EN55022,PART 15
- 2) EMS standard :
- 2.1 Electrostatic Discharge ESD :  
It is refer to EN 61000-4-2, EN55024:1998  
Air Electrostatic Discharge : ±8KV  
Contact Electrostatic Discharge : ±4KV
- 2.2 Surge :  
It is refer to EN 61000-4-5, EN55024:1998  
Common mode Surge Immunity : ±2KV  
differential mode Surge Immunity : ±1KV
- 3) Safety standard:

UL			PSE	
CE	YES		GS/TUV	
FCC			CB	
BS	YES		CCC	

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- 4) **Insulation Resistance:** Between AC input and secondary applied 500Vdc>100M Ω for 1 minute
- 5) **Dielectric Strength(Hi-Pot):** Between AC input and secondary **AC3000V**, test No dama time 1minute,and cut off current shall be less than **10mA, DC 4242V**, test time 1 sec. In production line
- 6) **Temperature:**
- |           |              |
|-----------|--------------|
| Operating | 0 to 40°C    |
| Storage   | -20 to +60°C |
- 6) **Humidity:**
- |           |        |
|-----------|--------|
| Operating | 8%~95% |
| Storage   | 5%~95% |

## 1.6 Mechanical Characteristics:

- 1) **Dimension (Length x Width x Height) :** **61.5\*38.8\*26.7mm**
- 2) **Adapter weight:** **56g (typical)**
- Case material** **UL 94V-0** **PLASTIC ABS+PC**
- 3) **Input AC plug Type:**

DISK TOP IEC320 TYPE C8	---	
DISK TOP IEC320 TYPE 3 PIN	---	
WALL MOUNT US/UL	---	
WALL MOUNT EUROPE/CE	---	
WALL MOUNT UK	YES	
WALL MOUNT JAPAN	---	
WALL MOUNT BRAZIL	---	
WALL MOUNT KOREA	---	
WALL MOUNT AUSTRALIA	---	

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## 4) Transformer instruction

## 5) Output DC Cable

### 5.1 Length

NC

### 5.2 Wire style

NC

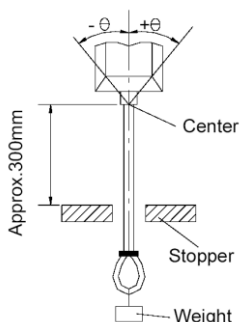
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### 5.3 Plug

NC

### 5.4 Polarity

### 5.5 Flexibility test



Weight:0g

Angle ( $\theta$ ):60°

Short diameter direction: 2000 cycle

Cycles in every minute: 40

Hang the specified weight and swing it to one direction and return to the original position, then swing to the opposite direction and return to the original position. This constitutes one cycle. The d.c. power supply shall be subjected to the specified cycles a specified speed.

Without damage to the cord.

### 5.6 Strain Relief Test:

Applied a weight of 9KG to output cord SR, for one minute, there shall be no broken or other damage result.

## 6) Drop Test:

Lift this unit a height of 1M onto 20mm thick hardwood, surface one time at 6 directions. the shell should be no opened, and can meet the safety of the withtdand voltage test.

If drop the Key surface, total 3 times, the shell can't open and need pass the basic function test.

## 7) Random Vibration Storage:

1) Frequency: 10 to 55Hz and return 10Hz

2) Overall Grms: 2.31 m/s<sup>2</sup> (0.236G)

After vibration test, the adapter

will be turned on normally

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3) Vibration duration: 20minutes

4) Vibration waveform: Random

5) Force Direction X,Y,Z

Operation

1) Frequency: 10 to 55Hz and return 10Hz

2) Overall Grms: 1.16 m/s<sup>2</sup> (0.118G)

3) Vibration duration: 20minutes

4) Vibration waveform: Random

5) Force Direction X,Y,Z

8) Color:

Case

Black

DC Cable

Black

## 1.7 Reliability

1) Heat-resistance: The SMPS shall be stored at a temperature of 55+/-2 °C for 16 hours. Then (Storage) it shall be subjected to standard astropheres conditions for 2 hours, after which measurement shall be made. No distortion and No function error

2) Heat resistance: The SMPS shall be placed at a temperature of 25+/-2 °C and operating at (Operation) full load for 4 hours. Measurement shall be made. The output voltage No abnormality

3) Cold-resistance: The SMPS shall be stored at a temperature of -20+/-2 °C for 16 hours. (Storage) Then it shall be subjected to standard astropheres conditions for 2 hour, after which measurement shall be made. No distortion and No function error

4) Cold-resistance: The SMPS shall be placed at a temperature of 0+/-2 °C and operating at (Operation) rate75% full load for 4 hours. Measurement shall be made. The output voltage No abnormality

5) Body surface temp: at a entironment temperature of 23+/-2 °C , 100VAC/2.1A load (thermoelectric couple method) For 2 hours, measure central section of sueface ≤65°C

6) M.T.B.F: 30K Hours At 25°C With 80% Loading No abnormality

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