



## Specification Approval Sheet

Name: **Tenergy 12V 300mA Charger w/ Standard Tamiya Connector**

Model: **01009**

SPECS: **for 6.0V-9.6V NiMH & NiCd Batteries**

Approved By	Checkup	Make

Customer Confirmation	Signature	Date
	Company Name:	
	Stamp:	

436 Kato Terrace, Fremont, CA 94539 U.S.A.

Tel: 510.687.0388 Fax: 510.687.0328

[www.Tenergy.com](http://www.Tenergy.com)





**1. SCOPE:**

This specification defines the input, output, performance characteristics, environment, noise and safety requirements

**2. INPUT CHARACTERISTICS:**

2.1 The range of input voltage is from 100Vac to 240Vac single phase.

	Minimum	Normal	Maximum
Input Voltage	100Vac	100Vac~240Vac	240Vac
Input Frequency	47Hz	60Hz/50Hz	63Hz

2.2 Input Current: The maximum input current shall be less than 0.5A at 100~240Vac input)

2.3 Maximum Energy Consumption in NO-Load

The input power shall be less than 1W at 100~240Vac input.

**3. OUTPUT CHARACTERISTICS:**

3.1 Rated Current CV mode:

Rating Output Voltage	No load Voltage Range	Load Output Voltage Range
12V	11.6V~11.8V	3.6V~7.2V
Output Invariable Current	Output Invariable Current Range	Turn lamp current
300m	300mA~400mA	60~120mA

3.2 Line/ Load Regulation

Output Rate	Load Condition		Line Regulation	Load Regulation	Remark
	Min. Load	Max. Load			
+12V	0.0A	300mA	±3%	±5%	

3.3 Ripple And Noise:

Output ripple voltage is 300mv p-p measured methods: Performed by 20MHz bandwidth in oscilloscope. Applied 0.1uF ceramic capacitor and 10uF electrolytic capacitor across output connector terminals Measured at the end of DC cable.

3.4 Turn On Delay Time:

3 second Max. At 115Vac input and output Max. Load.

3.5 Rise Time:

40mS Max. At 115Vac input and output Max. Load.



3.6 Hold Up Time:

5mS Min. At 115Vac input and output Max. Load.

3.7 Efficiency:

65%Min.At 100Vac input and output Max. Load.

69%Min.At 240Vac input and output Max. Load.

3.8 ultimate output: 3.6W

3.9 Overshoot:

15%Max.When power supply at turn on or turn off.

**4. PROTECTION REQUIREMENT:**

4.1 Short Circuit Protection:

The power supply will be auto recovered when short circuit faults remove.

4.2 Over current Protection:

The power supply will be auto recovered when over current faults remove.

**5. ENVIRONMENTAL REQUIREMET:**

5.1 Operating Temperature:

0°C to 40°C Full load Normal operation

5.2 Storage Temperature:-20°C to 85°C, With package.

5.3 Relative Humidity:

5%(0°C)~90%(40°C)RH,72Hrs,Full load Normal operating.

5.4 Altitude:

Operating: ≤5000 meters

Storage: ≤5000meters

5.5 Vibration:

1) Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm (9~200Hz,Acceleration  $5\text{m/s}^2$ )

2) Transportation: IEC 721-3-2 2M2

5-9Hz, A=3.5mm

9~200Hz, Acceleration= $5\text{m/S}^2$

200~500HZ, Acceleration= $15\text{m/S}^2$

3) Axes,10 cycles per axis

No permanent damage may occur during testing.

The product has to restores its original situation after power off/on.

5.6 Dropping (Packed):

1 corner, 3 edges, and 6 surfaces

Height: 76cm

**6. SAFETY AND EMC REQUIREMENT:**

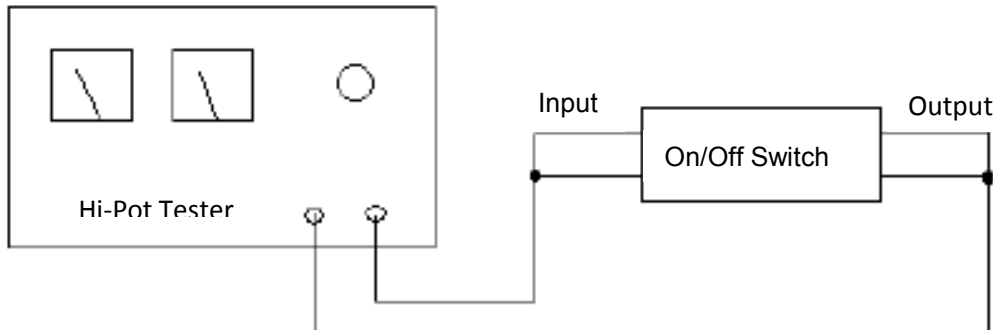
6.1 safety: CE UL compliant

6.2 DIELECTRIC STRENGTH:

Primary to secondary:

Table 3: Hi-pot test

Item	Specification		Remark
Primary to Secondary	1500Vac	<5mA / 60s	No arcing
Primary to P.G	N/A	N/A	No broken



6.3 Insulation Resistance

Primary to Secondary: 50 Meg. Ohms min. 500VDC

6.4 Leakage Current

<1mA max @ 240Vac/50HZ

**7. MECHANICAL REQUIREMENT:**

7.1 Enclosure:

Material requirements: ABS+PC

The power supply size: L78\*W48\*H30mm

( Product Image As the right)

7.2 Input Connector: N/A

7.3 Output lines:





## Tenergy Corporation

436 Kato Terrace  
Fremont, CA 94539  
Tel: 510.687.0388 Fax: 510.687.0328  
[www.Tenergy.com](http://www.Tenergy.com) email: sales@tenergy.com

DC: AWM 24AWG\*2C,VV-1,80°C,FT1,300V

### 8. Label:

black text on white label

Unit: mm ; Tolerance:  $\pm 0.1$ mm

(Label Size: 20 x 20mm)

### 9. Package

1. PE bag + white box + Carton
2. Qty per Carton: 150PCS
3. Carton Size: 460\*390\*250mm

