

Shenzhen Huayiteng Technology Development Co., Ltd. Specification

Manufacturer: Shenzhen Huayiteng Technology Development Co., Ltd.

Supplier name: 15V 360mA
Material name: charger
Technical data model: HYT-1500360E
Document number: 20171201-1

1 Scope

This specification is used to specify the electrical and mechanical properties of the charger, as well as external environmental requirements and other specifications.

2 reference standards EN60950

3 storage conditions

Working temperature	0 - 45 °C
Working humidity	5% - 93%
Detection temperature	25 ± 10 ° C.
Storage temperature	-40 ° C - + 70 ° C
Storage humidity	5% - 93%
Atmospheric pressure	70-106 MPa

4 Electrical properties

4.1 Input properties

4.1.1 Input voltage

Nominal voltage range:	AC 100 V - 240 V
Permissible voltage range:	AC 90 V - 254 V

4.1.2 Input frequency

AC input frequency	50/60 Hz
Permissible AC input frequency range	47 ~ 63 Hz

4.1.3 Input current (at full load):

When the AC input voltage is 100V-240V AC, 50 / 60HZ, the maximum input current should be less than 0.4A

4.1.4 Inrush current

In the event of a cold start, the maximum surge current is less than 50 A if the voltage AC 100 V - 240 V, 50 / 60HZ is entered within 10 ms

4.1.5 Work efficiency:

The input voltage is in the range of AC 100 V - 240 V.

When the CV mode is 14 VDC, the maximum output current range is 320-400 mAdc, work efficiency $\geq 70\%$.

4.1.6 Standby power consumption:

When AC 100 V - 240 V is entered, the standby power with no load is 0.5 W or less. 4.2 Output characteristics

4.2.1 Nominal output voltage: CV 15V

4.2.2 Nominal open circuit voltage: 14.25 - 15.75 VDC

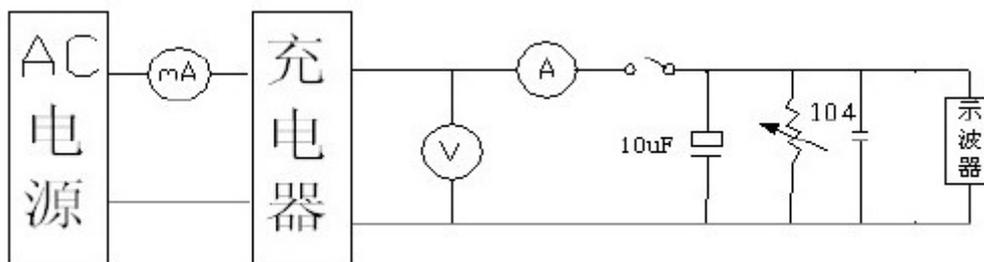
4.2.3 Operating voltage range: 5 - 15V

When using the constant current mode 14 V, test output current range 320mA-400mA

4.2.4 Output ripple:

Ripple ≤ 120 mVp-p at full load (see attached drawing for test circuit)

Test Method: Under normal working conditions of a load, use an oscilloscope with a bandwidth of 20 MHz to connect to the charger output port while the output port is connected in parallel to a 104pF ceramic capacitor and a 10Uf electrolytic capacitor.



4.3 Protective function

4.3.1 Short-circuit protection:

It is guaranteed that this product will not cause fire or damage if the output terminal is short-circuited.

4.3.2 Overcurrent protection

When the load increases and the output current is greater than the rated current value, the output voltage will decrease rapidly as the output current increases.

5 performance test

6.1 Vibration test

The frequency is 10-55 Hz, the amplitude is 0.35 mm, and it is vibrated cyclically for 5 cycles in each direction of the X, Y and Z axes. After the experiment, the appearance and the insulation resistance as well as the insulation strength are checked and display functions are carried out. The electrical performance should be checked again. The appearance should be smooth with no scratches, burrs, or other mechanical damage, and the exposed metal parts should not be rusted, damaged or arcing. The insulation should not be damaged. The resistance is greater than 7 M Ω , the display function and electrical performance are normal.

6.2 Drop test

The product is placed on a level with a height of 1.0 m (\pm 0.1 m) without packaging and can freely fall 6 times on 6 sides onto the 5 cm long wooden floor. After falling, there are no cracks or loosening of the elements and the function is perfect.

6.3 Test of the input power plug

Check the power supply to check the effect of the instantaneous voltage and current effects on the charger and switch the power supply repeatedly. Source 1000 times frequency is 1 times / 5 seconds.

After the test, the travel charger is performing normally and there should be no damage

7 Safety Regulations

7.1 Safety regulations: Quote EN60950: Standard

7.1.1 Insulation resistance

Apply 500 V DC to the input and output terminals for 1 minute, and then test the input. The insulation resistance between the output terminal and the output terminal is at least 7 M Ω .

7.1.2 High voltage test:

3.0 kV, 50 Hz, 1 minute: After direct addition, increase from 1.5 kV to 3.0 kV at a steady rate. The requirements: The leakage is less than 5 mA and there is no breakdown.

7.1.3 The shell is flame retardant: class V-1

7.1.4 AC leakage

Add 100 VAC / 60 Hz to the input terminal and test between the output terminal and ground. The requirements: The leakage current is less than 0.25 mA.

7.1.5 MTBF:> 5000 hours

7.1.6 Product aging

7.1.6.1: Temperature

Environment temperature 30 - 50 ° C

Humidity 5% - 93%

7.1.6.2 Input voltage: 220 VAC / 50 Hz

7.1.6.3 Aging load: 80% - 100% load

7.1.6.4 Aging hours: 2 hours

8 Electromagnetic Compatibility

Fulfill the requirements of GB9254-2008 (idt CISPR22: 1997) of class B according to GB17625.1-2003 (corresponds to IEC 61000-3-2: 2001)

9 ESD test

9.1 Contact discharge:

Together with the metal part in the supply state, it must be able to withstand a contact discharge of +/- 4 kV.

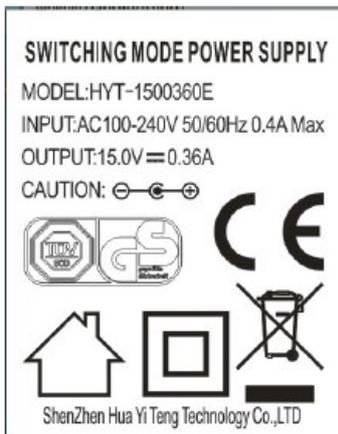
10 Mechanical properties

10.1 Requirements for appearance and product-label

10.1.1 Appearance requirements:

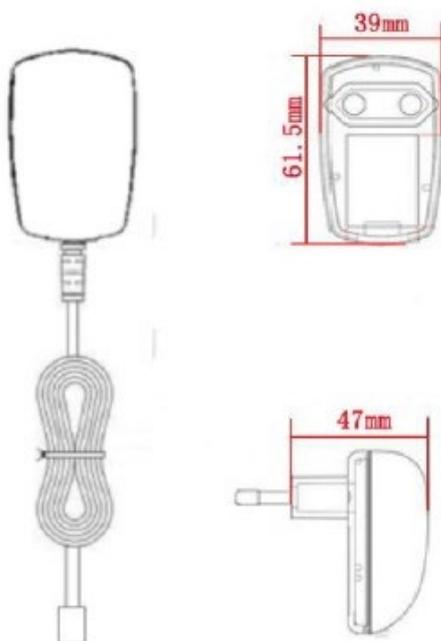
The shell of this product is black, the surface is flat, there are no scratches, burrs, mechanical damage, and the exposed metal parts should not be rusted. The plug and connection are reliable and there is no loosening or chipping.

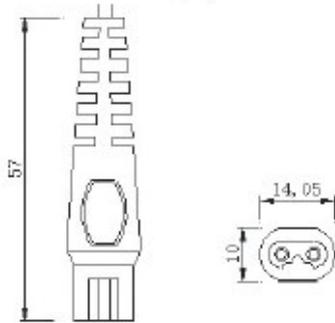
10.1.2 Requirements for the product-label:



10.2 Output requirements: 2464 24 # B prefix L = 1.5M

11. Product picture





REMARK/备注: Color of endosire/胶袋颜色
Black in color/黑色.

Note: The output connector is the B prefix output port (Note: the DC output is the B prefix output port).

12. Packing method

