
SPECIFICATION APPROVAL SHEET

CUSTOMER _____ **element14 Asia**

CUST P/N

MODEL NO _____ **HT03-A30WUS**

DESCRIPTION _____ **3V-12V 2A without USB port**

ITEM NO

FILE NO _____ **EN160630A08**

CUSTOMER DISPOSITION

| Prepared by | Checked by | Approved by | |
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- APPROVED
- CONDITIONAL APPROVED
- REJECTED

| Prepared by | Checked by | Q. C | Approved by |
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REVISION CHANGE DESCRIPTION

| ECN | | | | |
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1. General Description

This specification defines the input, output, performance characteristics, environment, noise and safety requirements for the **24Watt** adaptor. The adaptor is full range AC (100~240V) input and **(3-12)V** DC output.

24W, AC (100-240V), DC(3-12)V

2. Environment Protection Laws

- ROHS REACH CPSIA
 EN71 PHTHALATE HALOGEN

3. According with Safety and EMC Criterion

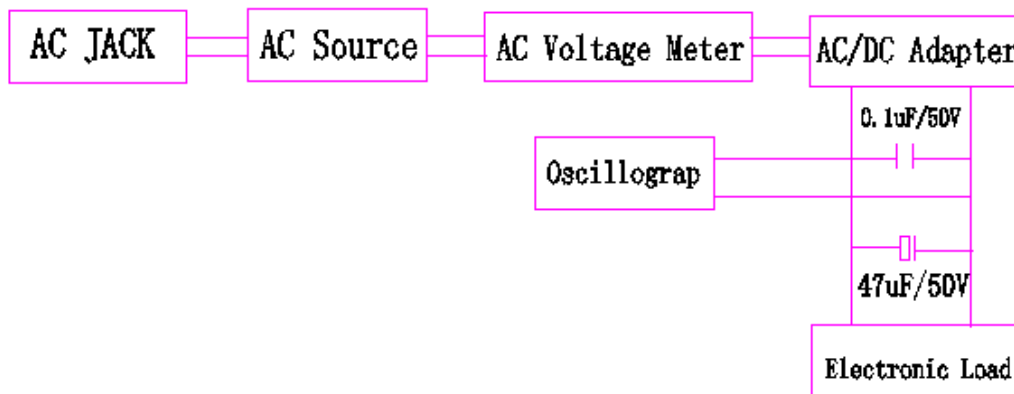
- EN60950-1 EN61558-1 EN60065-1 EN55022
 UL60950-1 UL1310 UL60065-1 EN55024
 GB4943-2001 GB9254-2008 GB17625. 1-2012 FCC Part15

4. Safety and EMC Approval

- CB TUV/GS CE PSE UL FCC
 SAA C-tick KC CCC TLC E-mark

5. Test Circuit

If the test is not made on a specified circuit, be sure to use the following circuit.



6. Input Characteristics

6.1 Rated Input Voltage

Rated input voltage: **100Vac** to **240Vac**.
(100V~240V)

6.2 Rated Frequency

50Hz or **60Hz** single phase.
(50Hz/60Hz)

6.3 AC Input Current)

The maximum input current shall be less than **0.65A** at 100~240Vac input
(100V~240V, 0.65A)

6.4 Peak Inrush Current

With cold starting, input AC 240V the inrush current should **60A Max**
(60A)

6.5 Standby

The input power shall be less than **0.075W** at **110 or 230V**ac input.
(110V / 230V, 0.075W)

6.6 Efficiency

Measured at 115Vac or 230Vac input voltage,
5V 2A Average efficiency can reach energy star 79% standard
6V 2A Average efficiency can reach energy star 83.26 % standard
7.5V 2 A Average efficiency can reach energy star 84.5% standard
9V 2A Average efficiency can reach energy star 85.45% standard
12V 2A Average efficiency can reach energy star 86.80% standard

7. Output Characteristics

7.1 Rated Output Voltage

No load voltage : **(3-12)V ±7%**

Full load voltage : **(3-12V)± 7%(I=2A)**

7.2 Rated Power

This adaptor is able to support max **24Watts** continuously at all specified conditions.
(24Watts)

7.3 Ripple and Noise

Ripple voltage is **200mV** p-p (Full load **2A**)

7.4 Protection

7.4.1 Over Current Protection

The power supply will protect when output power reaches 110-200% of all rated

7.4.2 Short Circuit Protection

The adapter shall not damage and with auto recovery function

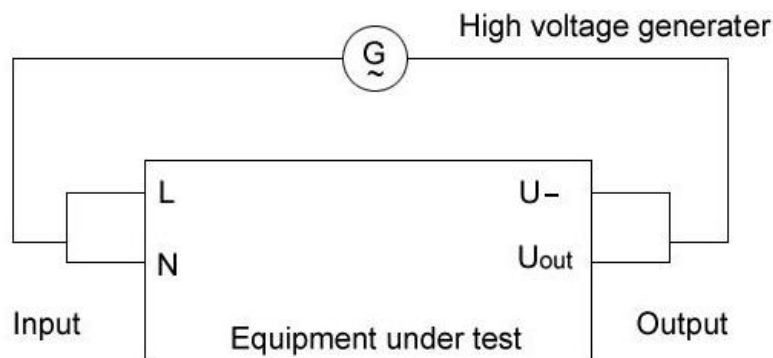
8. Reliability Items

8.1 Electrostatic Discharge

At 150pF: 330Ω, for each point, 10 shots of direct discharge or air discharge.(1 MΩ/SHOT), have no malfunction. Direct discharge: **±4kV**, Air discharge: **±8kV**

8.2 Hi-Pot Test

Primary to Secondary: **3000Vac** /5mAMax /60 second)
(**3000Vac** / 5mAMax / 60)



8.3 Burn-In Test

4 hours at **40°C** maximum, Normal input voltage, rated load.

9. Mechanical Requirement

9.1 Weight

150±10g

9.2 Input Plug Type

Wall-mounted type. **US-pin**. 2 Conductors, < Live. Neutral >

9.3 Drop Test

Drop the adaptor from a height of **100cm** onto a hardwood floor, hitting the adaptor for **6** times, no mechanical damages or other failures, no electrical deterioration and other failures comparing to before test condition.

10. Environmental Performances

10.1 Operating temperature range

The product should operate at **0~40°C**, test of operating for **4 hours** at **0°C ±2°C** and **40°C ±2°C**.

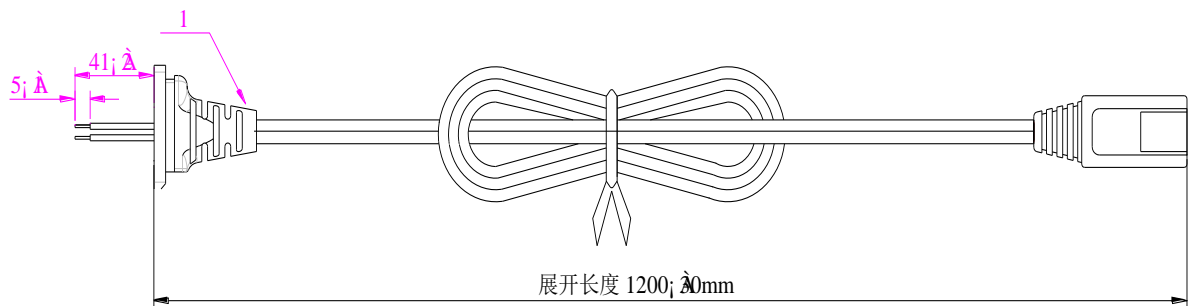
10.2 Stored temperature range

The product should be stored at $-25\sim 70^{\circ}\text{C}$,test of non-operated for 16 hours at $-25^{\circ}\text{C}\pm 2^{\circ}\text{C}$ and $70^{\circ}\text{C}\pm 2^{\circ}\text{C}$.

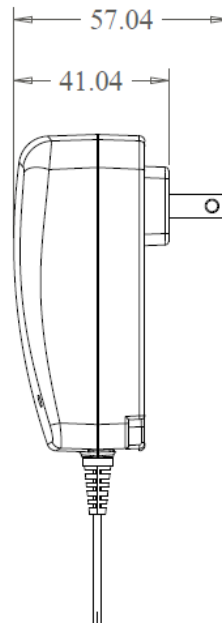
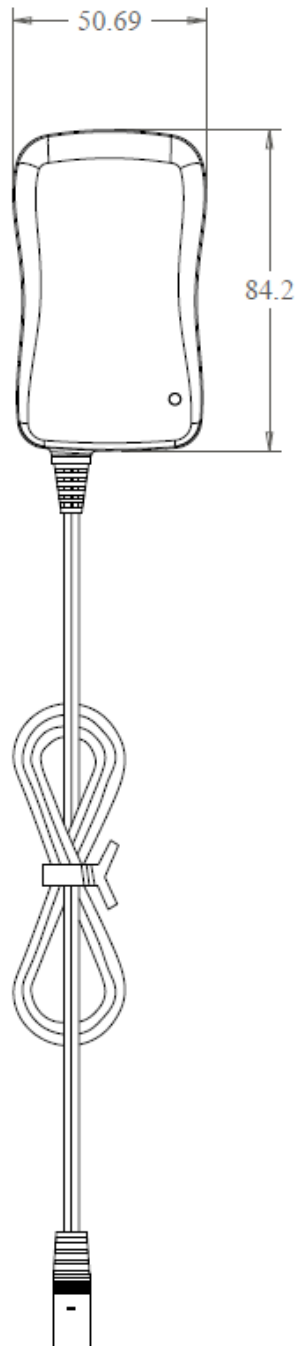
10.3 Operating at the invariable temperature and invariable humidity

The product should operate at $40^{\circ}\text{C}\pm 2^{\circ}\text{C}$, 90~95%RH, test of operating for 48 hours(full load)

11. DC Output Cable and Plug Drawing



12. Product Outline Drawing



DC tips : 2.5*0.7mm、3.0*1.1mm、3.5*13.5mm
5.5*2.5mm

3.5*15mm、5.0*2.1mm、

13. Ratin Label Drawing

