



Name: Li-Ion cells charger

Model: AKYGA AK-29-25

SPEC: 29.4V / 2.5A

Switching Power Supply Specifications

Table of contents

1.	SCOPE.....	2
2.	INPUT CHARACTERISTICS.....	2
3.	OUTPUT CHARACTERISTICS.....	2-3
4.	PROTECTION REQUIREMENT.....	4
5.	ENVIRONMENTAL REQUIREMET.....	4-5
6.	MECHANICAL REQUIREMENT.....	5-6

1 SCOPE

The purpose of the document is to specify the functional requirements of AK-29-25 lithium battery charger.

2 INPUT CHARACTERISTICS

2.1 Input Voltage

(Nominal Voltage):100-240Vac

Variation Range :90-264Vac

2.2 Input Frequency

Nominal Frequency :50/60Hz

Variation Frequency :47-63Hz

2.3 Input Current

2.5Arms max At any input voltage and rated, DC output rated load.

2.4 Inrush Current

Amps Max. Cold start at 240Vac input, with rated load and 70°C ambient.

2.5 Ac Leakage Current

25mA Max At 240Vac input.

3 OUTPUT CHARACTERISTICS

3.1 Power Output

Voltage	Min.Load	Max.Load	Output Power
+29.4Vdc	2.5A	800mA	73.5W

3.2 Combined Load/Line Regulation

Voltage	Min. Voltage	Max. Voltage	Line Regulation	Line Regulation
+29.4Vdc	29.8V	29.8V	±3%	±5%

3.3 Ripple And Noise

The ripple and noise are as follows when measure with Max. Bandwidth of 20MHz and Parallel 47uF/0.1uF,crossed connected at testing point.

$$\leq 200\text{mV}$$

3.4 Turn On Delay Time

2 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

76%Min. At 100Vac input and output Max. Load.

79%Min. At 240Vac input and output Max. Load.

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.

4.3 Over Voltage Protection

The power supply will not be auto recovered when faults remove.

5 ENVIRONMENTAL REQUIREMET

5.1 Operating Temperature

0°C~ 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 Vibration

1 Operating: IEC 721-3-3 3M3

5~9Hz,A=1.5mm 9~200Hz,Acceleration 5m/s²)

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

5-9Hz, A=3.5mm

9~200Hz, Acceleration=5m/S²

200~500HZ, Acceleration=15m/S²

.

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

5.5 Dropping Packed

1 corner,3 edges, and 6 surfaces

45cm Height:45cm

6 MECHANICAL REQUIREMENT

6.1 (Enclosure):

:L150*W70*H45mm

The power supply size : L150*W70*H45mm

6.2 (Input Connector):

Europe

6.3

DC wire length: 1m,

DC connector: 5.5*2.5*10MM

