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FU-CLI2000-29.4V • Li-ion battery charger



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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 1.5A at 100-240Vac input.

2.3 Maximum Energy Consumption in NO-Load

The input power shall be less than 1.0W at 100-240Vac input.

3. Output characteristics

3.1 Rated Current CV mode

Rating output voltage	No load voltage range	Load output voltage range
29.4	29.2V~29.6V	40%~65%V
Output Invariable Current	Output Invariable Current Range	Turn lamp current

3.2 Line/ Load Regulation

Output	Load Condition		Line Regulation	Load Regulation	Remark
	Min. Load	Max. Load			
+29.4V	0.0A	2.0A	±3%	±5%	

3.3 Ripple And Noise

Output ripple voltage is XXXmv 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

83%Min. At 100Vac input and output Max. Load.

85%Min. At 240Vac input and output Max. Load.

3.8 Ultimate output: 58.8W

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 requirement

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

Non-operating: ≤5000meters

5.5 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

3. Axes, 10 cycles per axis

No permanent damage may occur during testing.

The product has to restore 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 FCC (CE FCC compliant)

6.2 Dielectric strength

Primary to secondary:

Hi-pot test

Item	Specification		Remark
Primary to Secondary	300VAC	<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

<0.25mA max @ 240Vac/50HZ

7. Mechanical requirement

7.1 Enclosure

Material requirements:ABS+PC

The power supply size:L120*W56*H30mm

7.2 Input connector

AC 1.0M

7.3 Output lines

DC: 2464 20AWG*2C VW-1 80°C FT1 300V 1.5M

DC: 5.5*2.1*10mm, SR: 9*7.

8. Label

