

TR8138 – 12.6v 3A LiPo Fast Charger (UK/Euro)

1. SAFETY STANDARD:

The power supply shall be certified by the following international regulatory standards

2. DIELECTRIC WITHSTANDING STRENGTH(HI-POT):

Primary to Secondary DC4242V, 10mA 1 minute for type test, 2 second for production: DC4242V, 10mA.

3. INPUT FEATURE:

3.1 INPUT VOLTAGE RANGE: 90Vac to 264Vac.

3.2 RATED INPUT FREQUENCY: 50Hz/60Hz.

INPUT FREQUENCY RANGE: 47Hz to 63Hz.

3.3 INPUT CURRENT: 1500mA max. at 100-240Vac.

3.4 INRUSH CURRENT: 60A max. at 100-240Vac input for a cold start at 25°C.

3.5 Standby power consumption less than 1.5W at 117Vac input.

3.6 EFFICIENCY: higher than 75% at 100-240Vac input and output full load.

4. OUTPUT FEATURE:

RATED OUTPUT	SPEC. LIMIT		q1
12.6VDC	Min. value	Max. value	
No Load Output Regulation	12.45VDC	12.75VDC	
Current Voltage12V	2500mA	3500mA	
LED Change Color	400mA	600mA	
Ripple and Noise	-	260mVp-p	20MHz Bandwidth 10uF Ele. Cap.0.1uF Cer. Cap

4.1 LED Indication

Status	LED Indication
Power on	LED in solid Green
In charging	LED in solid Red
Fully Charged (Trickling)	LED in solid Green
Over current protection	Red LED in blinking

5. PROTECTION FEATURE:

5.1 OVER-CURRENT PROTECTION:

The power supply shall be protection (hiccupped & power reduced) when any output operating in overload condition under any line condition for an indefinite period of time. The power supply shall be self-recovery when the fault condition is removed.

5.2 SHORT-CIRCUIT PROTECTION:

The power supply shall be protection (hiccupped & power reduced) and no damage shall occur when any output operating in a short circuit condition under any line condition for an indefinite period of time. The power supply shall be self-recovery when the fault condition is removed.

6. ENVIRONMENTAL CONDITIONS:

6.1 OPERATING:

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions.

6.1.1 Operating Temperature: 0°C ~ 40°C

6.1.2 Relative Humidity: 10% ~ 90%

6.1.3 Vibration: 1.0mm, 10-25Hz, 15 minutes per cycle for each axis(x,y,z)

6.1.4 Cooling: The power supply will operate with convection cooling, Blocking of vents must not cause damage to the power supply.

6. 6.2 NON-OPERATING:

The power supply shall be capable of withstanding the following environmental conditions extended periods of time.

6.2.1 Storage Temperature: -20°C ~ 70°C

6.2.2 Relative Humidity: 10% ~ 90%

6.2.3 Vibration and Shock:

The power supply shall be designed to withstand normal transportation vibration per MIL-STD-810D, as it is mounted in the chassis assemble and packed for shipping.

7. EMC STANDARDS:

7.1 EMI STANDARDS:

The power supply shall meet the radiated and conducted emission requirements for EN55013 EN55020 Fcc part 15 class B

7.2 EMS STANDARDS:

The power supply 8202033A00001

7.2.1 EN61000-4-2: 1995/A1:1998 Electrostatic Discharge(ESD)

7.2.2 EN61000-4-3: 1996/A1:1998 Radiated Electromagnetic Fields(RS)

7.2.3 EN61000-4-4: 1995 Electrical Fast Transient/Burst(EFT)

7.2.4 EN61000-4-5: 1995 Surge Immunity.Line to Neutral

7.2.5 EN61000-4-6: 1996 Injected Current

7.2.6 EN61000-4-8: Power Frequency Magnetic Field

8. RELIABILITY AND QUALITY CONTROL:

8.1 BURN-IN:

The power supply shall undergo a minimum of 4 hours Burn-In test under full load at 35~45°C.

8.2 COMPONENT DERATING:

Semiconductor junction temperatures shall not exceed the manufacturer's maximum thermal rating.

9. INSULATION RESISTANCE:

INPUT TO OUTPUT: 10MΩ min.(500VDC)

10. LEAKAGE CURRENT:

The leakage current shall be less than 0.25mA for Class 2 when power supply is operated maximum input voltage and maximum load.

11. MAJOR MEASURE EQUIPMENT: AC SOURCE: AFC-500W	✓
POWER METER: EVERFINE PF9901	✓
ELECTRONIC LOAD: chroma 63030	✓
OSCILLOSCOPE: TEKTRONIX TDS1012	✓
DIGITAL MULTIMETER: GW GDM-8245	✓
DC POWER: GW GDS-3030D	
HI-POT TESTER: GOODWILL GPT-605	✓
HYBRID RECORDER: YOKOGAWA uR100	
CONS. T/H SIMULATOR: TH-A4H 1-150	✓
INSULATION RESISTANCE TESTER: HY7620	✓