

Model 3044 LiFe

2 A max out • 10-30 VDC input

- DC/DC switch mode charger for LiFePo4 batteries
- 3-step charge control with current detection as charge termination
- Charging 8 cells
- 3-colored LED indicator
- Waterproof (IP67) version available
- Custom specifications on request

Notes:

DC/DC charger Desktop unit Exchangeable DC plugs available Mounting bracket available Order plugs separately



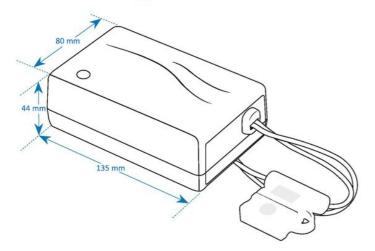
Available versions

8 cell / 2 A

MASCOT ELECTRONICS AS SPECIFICATIONS FOR TYPE 3044 Life
DATE: 13.12.16 _____

SPECIFICATIONS for	LiFePO₄ 8-cell
Mascot type 3044:	10-30Vdc
Input voltage	
Step 1 Charge current (orange LED):	2A ±0.2A
Step 2 Charge voltage:	29.2V ±0.2V
Step 2 Current when LED turns to yellow:	< 0.8A ±25%
Step 3 Current when LED turns to green, Charge termination:	< 0.3A ±25%
Float charge voltage:	28.0V ±0.3V
Max output power:	60W
Leakage current from battery with no input voltage:	< 1mA
Ripple:	100mV p-p
Switch frequency approx.:	40kHz.
Temperature range:	-20 til +40°C (these values are only for the charger, not for the batteries).
Storage temperature:	-20 til +85°C
Efficiency (100% load 13.5V input):	Ca. 80%.
Fuse:	5A fuse on input cable. Polyswitch fuse at the output protects the unit against wrong polarity.
EMC standard:	EN 61204-3
Output terminals:	Secondary cable with exchangeable plugs.
IP-grade:	IP 41.
Dimensions:	135 × 80 × 44 mm.
Weight:	550 g.
Other:	

Technical drawing



Charging method B

STEP 1 - BOOST CHARGE

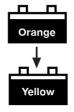
To start a charge cycle, connect the charger to the mains.

The charger is in constant current mode, charging with the maximum current indicated on the charger, the LED-indication on the charger is ORANGE. This step allows rapid charging of your battery until the battery voltage has increased to a certain set level



STEP 2 - TOP-UP CHARGE

When the battery voltage has increased to a certain set level the charger enters constant voltage mode, charging with a decreasing current until the current is below the chargers charge termination level (indicated on the charger). The LED-indication on the charger is ORANGE.



When the battery has reached typically 90 - 95% of its full capacity the charge current has dropped below a set level and the LED-indication on the charger changes to YELLOW to indicate that the battery is almost fully charged and may be ready for use. The constant voltage charge continues and the battery reaches its full capacity at the end of this step

STEP 3 - FLOAT CHARGE

The LED-indication on the charger is GREEN and the battery is fully charged. The charge voltage is at float level and the charger may remain connected to the battery. The charger will return to Step 1 if the battery is used. A load larger than the cut-off current will initiate a new charge cycle.



