

## Model 3044 LA

4 A max out • 10-30 VDC input

- DC/DC switch mode charger for lead acid batteries
- 3-step charge control with current detection as charge termination
- Charging 12-24V batteries
- 3-colored LED indicator
- Mounting bracket available
- Waterproof (IP67) version available
- Custom specifications on request:

Charging parameters, connectors, cords, logo print, housing/open frame/IP rating and certificates. For more information: [custom design info sheet](#)

### Notes:

DC/DC input

Desktop unit

Fixed cord, exchangeable DC plugs

Order plugs separately



### Available versions

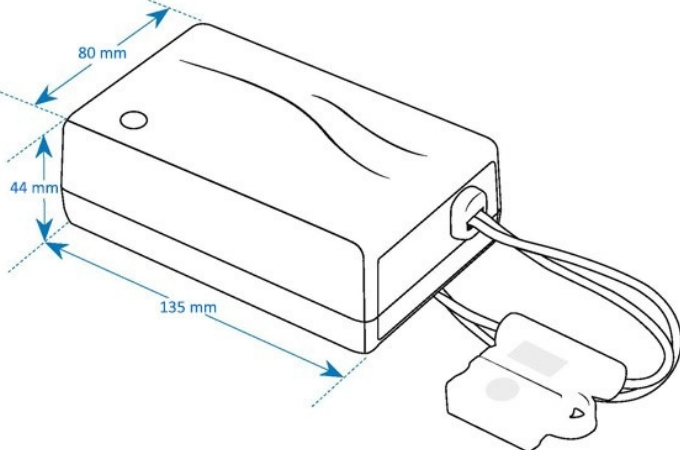
12V / 4A

24V / 2A

DATE: 13.12.16

Mascot type 3044:	12V LA	24V LA
Input voltage	10-30Vdc	10-30Vdc
Step 1 Charge current (orange LED):	4A ±0.3A	2A ±0.2A
Step 2 Charge voltage:	14.7V ± 0.1V	29.4V ± 0.2V
Step 2 Current when LED turns to yellow:	< 2A ± 25%	< 0.8A ± 25%
Step 3 Current when LED turns to green, Charge termination:	< 1A ± 25%	< 0.3A ± 25%
Float Charge:	13.7V ± 0.2V	27.4V ± 0.3V
Max output power:	60W	60W
Leakage current from battery with no input voltage:	< 1mA	< 1mA
Ripple:	100mV p-p	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

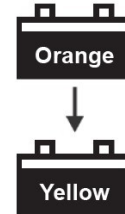
To start a charge cycle, connect the charger to the mains.

The charger is in constant current mode, charging with the maximum current indicated on the charger, the LED-indication on the charger is ORANGE.



### STEP 2 – TOP-UP CHARGE

The charger is in constant voltage mode, charging with a decreasing current until the current is below the charger's charge termination level (indicated on the charger). The LED-indication will turn to YELLOW during Top-up charge. The battery is typically 90-95% fully charged when the LED indicator changes to yellow. The charger stays in this mode until the charge current decreases to charge termination level. The battery is charged to 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 charger is in standby mode. The charge voltage is at standby level and the charger may remain connected to the battery.

The charger will return to boost charging if the battery is used.

A load larger than the cut-off current will initiate a new charge cycle.

