

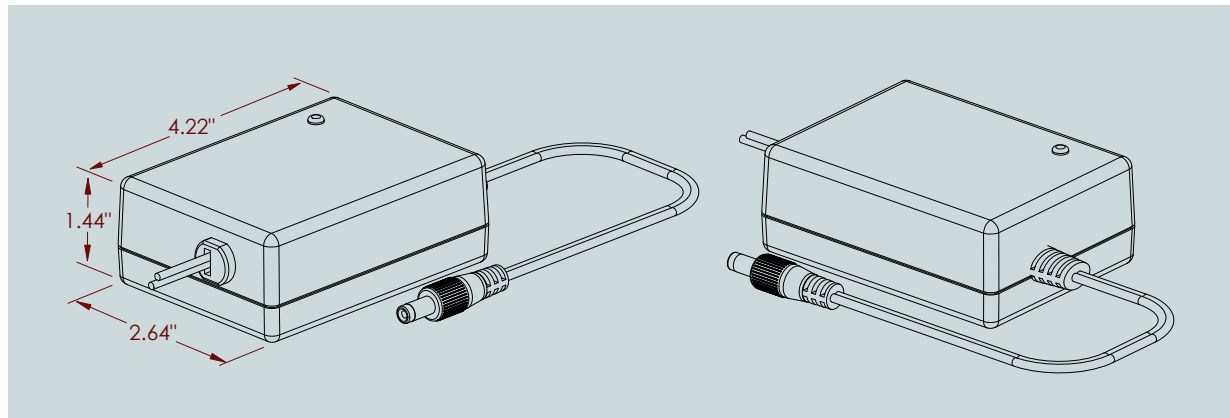
Switch mode lead acid chargers are designed to effectively charge lead acid batteries while protecting the batteries from over-charging. All charger ratings are based on a nominal input of 10-30VDC. The output current ranges from 1.2A to 2.7A.



L958.57-8 CHARGER, &™+A

**Features:**

- 3 step charge control with current detection as charge termination
- DC/DC Switch mode charger for lead acid batteries
- Protected against reverse polarity and short circuit
- 6, 12, & 24 volt versions
- Waterproof (IP67) version available
- LED status indicator
- Custom specifications on request



Category	Specification
Model number	452544-S Series
Input rating	Nominal 10-30VDC
Maximum output power	35W
Versions	6, 12, 24V
Switch frequency	≈ 40kHz
Leakage current from battery	<1 mA
Operating/storage temperature	-20°C - +40°C / -25°C - +85°C
Ripple	< 100 mV p-p
EMC standards	EN 61204-3
Input connection	Stripped & tinned leads - 5A fuse on cord
Output connection	2.5mm x 5.5mm x 9mm barrel plug, center positive*
Dimensions/weight	4.22" x 2.64" x 1.44" (107 x 67 x 36.5mm) / .55 lbs. (250g)

\*other output connection options available upon request



## Functionality:

### 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. In the first step, the charger will enter into 'boost' mode. During this step, the charger is in constant current

### STEP 2 – TOP-UP CHARGE

The charger is in 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 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.

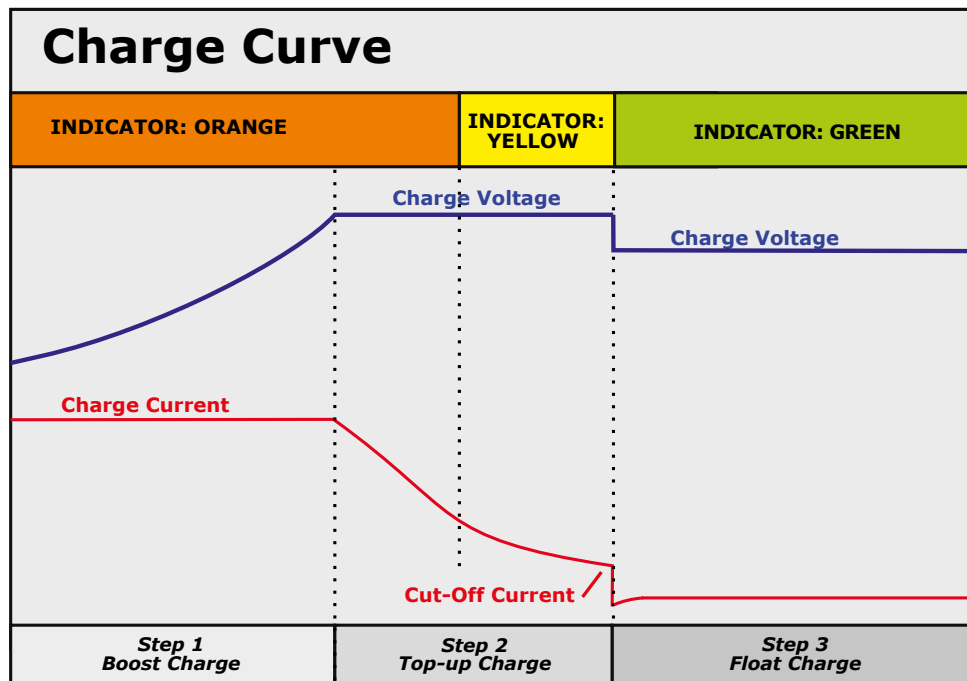
### STEP 3 – FLOAT CHARGE

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.

## Charge control values:

Model #	452544-SA	452544-SB	452544-SC
Charger voltage rating	6V	12V	24V
Constant current charge (Orange)	2.7A < 7.35V	2A > 14.7V	1.2A < 29.4V
Constant voltage charge (Orange)	7.35V > 1.15A	14.7V > 0.85A	29.4V > 0.5A
Constant voltage charge (Yellow)	7.35V < 1.15A	14.7V < 0.85A	29.4V < 0.5A
Float charge (Green)	6.85V < 250mA	13.7V < 250mA	27.4V < 250mA
Recommended battery capacity	12Ah - 12.5Ah	10Ah - 12.5Ah	6Ah - 12.5Ah



\*When specifying product, please consult with Cell-Con to verify that the specifications identified on this data sheet are current

