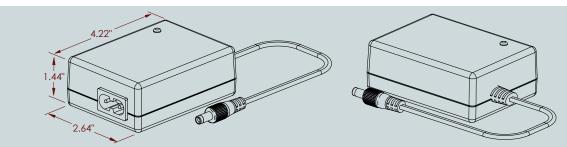
Switch mode lithium ion chargers are designed to effectively charge lithium ion batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from 1.0A to 2.7A.



Features:

- 3 step charge control with current detection as charge termination
- Switch mode charger with universal input voltage
- Protected against reverse polarity and short circuit
- Charges 1-8 cell battery packs
- Complies with medical standard (EN 60601)
- LED status indicator
- Custom specifications on request



Category	Specification		
Model number	452541-L Series		
Input rating	Nominal 90-264VAC/47-63Hz		
Maximum output power	40W		
Cell count	1-8 cells, others available upon request		
Switch frequency	≈ 40kHz		
Leakage current from battery	<250 uA		
Operating/storage temperature	-20°C - +40°C / -25°C - +85°C		
Ripple	< 100 mV p-p		
Insulation class	Class II		
Electrical safety approvals	EN 60950-1, EN 60601-1, EN 60335-2-29, in compliance with UL 60601-1		
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)		
Termination	Current detection as charge terminator < 100 mA +/- 25%		
Input connection	2 pin IEC 320-C7 (input cordset not included)		
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)		



Functionality:

Once the charger is attached to a lithium ion battery and then plugged in, the charging process will begin. The charger will subject the lithium ion battery to three steps of charging.

During the first step, the charger enters into 'fast charge' mode. During this step, the charger is in constant current mode with the current rate remaining at its maximum rating.

In step two, the charger switches into constant voltage mode (current is no longer being provided at its maximum rate). The battery is 80-95% charged when the LED - indicator changes to orange. The charger will continue toprovide a constant voltage until the charge current decreases to the charge termination level.

In the third step, the charge process has stopped. Charging has ceased as no current flows to the battery.

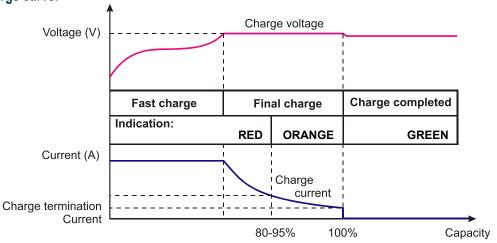
Versions:

Model #	Cell count	Nominal battery Voltage	Charge resumes with V bat < (or mains turned on)	Charge voltage	Charge current	Charge termination when current is
452541-LA	1	3.6V	4.0V +/1V	4.2V	2.7A	< 100 mA +/- 25%
452541-LB	2	7.2V	8.0V +/1V	8.4V	2.7A	< 100 mA +/- 25%
452541-LC	3	10.8V	12.1V +/1V	12.6V	2.3A	< 100 mA +/- 25%
452541-LD	4	14.4V	16.2V +/1V	16.8V	2A	< 100 mA +/- 25%
452541-LE	5	18.0V	20.3V +/1V	21.0V	1.6A	< 100 mA +/- 25%
452541-LF	6	21.6V	24.4V +/1V	25.2V	1.4A	< 100 mA +/- 25%
452541-LG	7	25.2V	28.5V +/1V	29.4V	1.2A	< 100 mA +/- 25%
452541-LH	8	28.8V	32.6V +/1V	33.6V	1.0A	< 100 mA +/- 25%

LED status indicator:

The lithium ion charger has an LED status indicator to inform the user of its status. During step 1, the LED will appear red in color. While in step 2, the LED will appear orange in color. During step 3, the LED will appear green in color.

Charge curve:



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

