

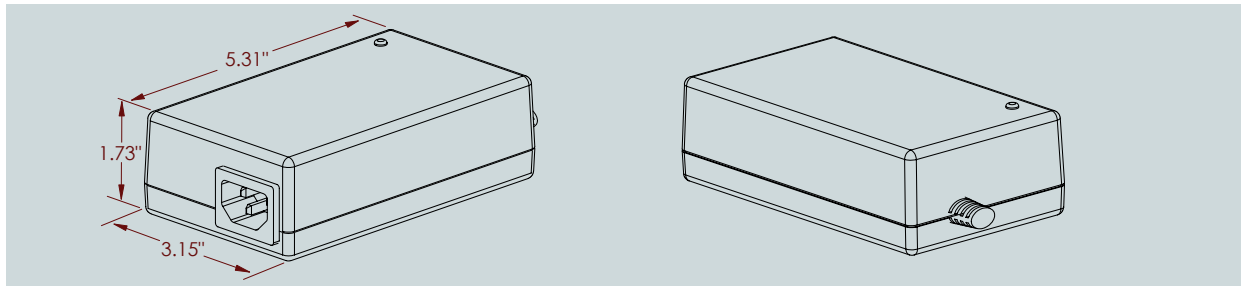
Switch mode lithium ion chargers are designed to effectively charge lithium ion batteries while protecting the batteries from over-charging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from 1.7A to 4.0A.



LITHIUM ION CHARGER, 4A

Features:

- Medical certified (EN 60601, versions UL60601)
- 3 step charge control with timer
- Switch mode charger with universal input voltage
- Protected against reverse polarity and short circuit
- Charges 3-8 cell battery packs
- Medical approved (EN 60601)
- LED status indicator
- Custom specifications on request



Category	Specification
Model number	452040L Series
Input rating	Nominal 90-264VAC/47-63Hz
Maximum output power	60W
Cell count	3-8 cells
Switch frequency	≈ 40kHz
Leakage current from battery	<200 uA
Operating/storage temperature	-10°C - +40°C
Ripple	< 100 mV p-p
Insulation class	Class I
Electrical safety approvals	UL 60601-1 (3 & 7 cell versions certified), EN 60950, EN 60601-1, EN 60335-2-29
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)
Timer	4 hours +/- 30% (also available with other values)
Input connection	3 pin IEC 320 (input cordset not included)
Output connection	Battery clips*
Dimensions/weight	5.31" x 3.15" x 1.73" (135 x 80 x 44mm) / .77 lbs. (350g)

*other output connection options available upon request



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 battery will be nominally 80-95% charged, and the charger switches into constant voltage mode (current is no longer being provided at its maximum rate). The charger will continue to provide a constant voltage until the timer has run out.

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

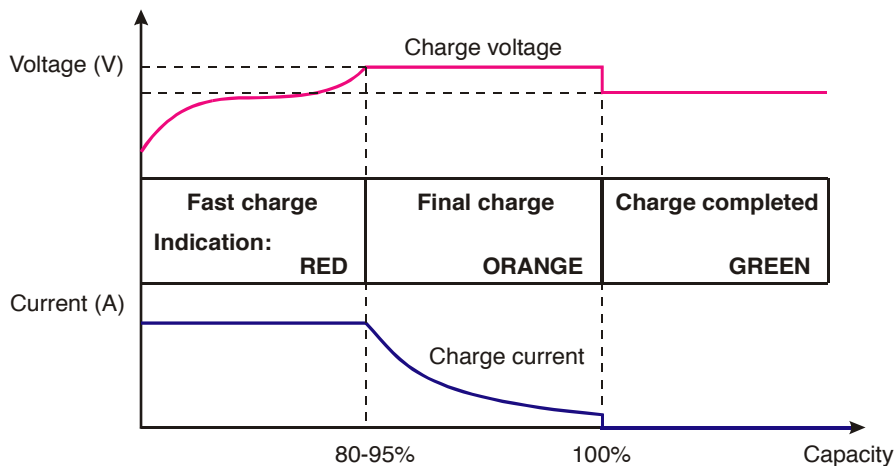
Versions:

Model #	Cell count	Nominal battery Voltage	Charge resumes with V bat < (or mains turned on)	Charge voltage	Charge current
452040-LC	3	10.8V	12V + .1 / -.15V	12.6V	4A
452040-LD	4	14.4V	16V +/- .15V	16.8V	3.5A
452040-LE	5	18.0V	20V +/- .2V	21.0V	2A
452040-LF	6	21.6V	24.3V +/- .3V	25.2V	2A
452040-LG	7	25.2V	28.4V +/- .3V	29.4V	2A
452040-LH	8	28.8V	32.3V +/- .3V	33.6V	1.7A

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.

