

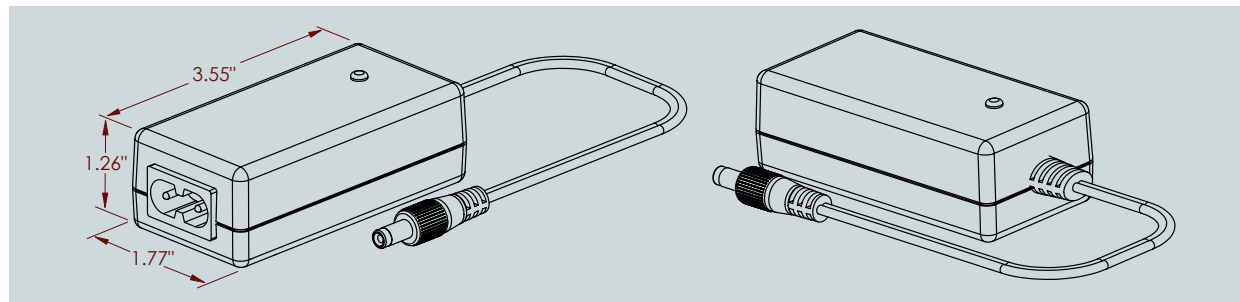
Switch mode lithium ion chargers are designed to effectively charge lithium ion batteries while protecting the batteries from over-charging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from 500mA to 1.3A.



LITHIUM ION CHARGER, 1.3A

Features:

- Medically certified (EN 60601, versions UL60601)
- 3 step charge control
- Current detection as charge termination input voltage
- Charges 1 to 7 cell packs
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- Protected against reverse polarity and short circuit
- Medical approved (EN 60601)
- LED status indicator
- Custom specifications on request



Category	Specification
Model number	452240L Series
Input rating	Nominal 90-264VAC/47-63Hz
Cell count	1-7 cells
Switch frequency	≈ 40kHz
Leakage current from battery	≈ 0
Operating temperature	-25°C - +40°C
Ripple	< 100 mV p-p
Insulation class	Class II
Insulation voltage	4000VAC (primary) / 5640VDC (secondary)
Electrical safety approvals	UL 60601-1 (1,2 & 3 cell versions certified), EN 60950, EN 60601-1, EN 60335-2-29
EMC standards	EN60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)
Reliability (MIL-GDBK-217F)	MTBF > 250.000 hours at 30°C and full load
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	3.55" x 1.77" x 1.26" (90 x 45 x 32mm) / .25 lbs. (115g)

*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 charge current decreases to the charge termination level.

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

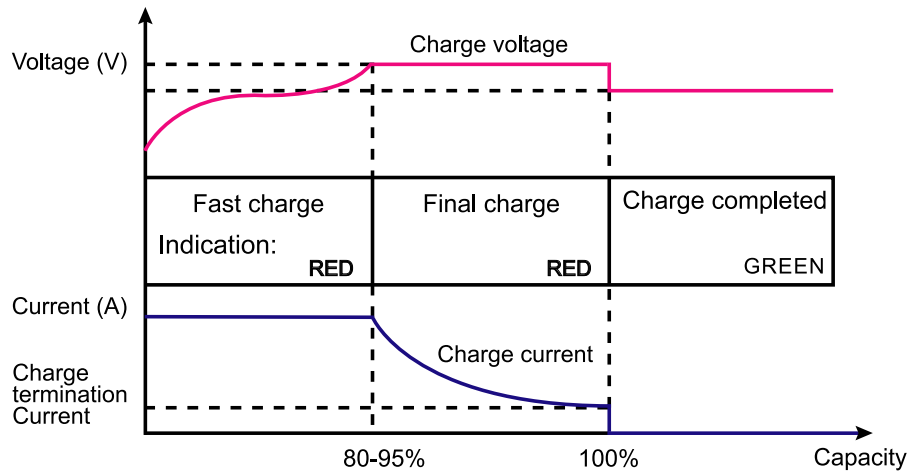
Versions:

Version				Charge control			
Model number	Cell count	Max output power (W)	Efficiency 100% at 230V	Charge current	Charge voltage	Charge termination I<	Charge resumes with Vbat< or mains turned on
452240-LA	1	5.5	58%	1.3A +5/-7%	4.2V +.05V	100mA +/- 25%	4.05 +.05/- .15V
452240-LB	2	10.9	72%	1.3A +5/-7%	8.4V +/- .1V	100mA +/- 25%	8.1V +.1/- .15V
452240-LC	3	15.1	77%	1.2A +5/-7%	12.6V +/- .1V	100mA +/- 25%	12.3V + .1/- .15V
452240-LD	4	15.1	80%	0.9A +5/-7%	16.8V +/- .1V	100mA +/- 25%	16.4V +.1/- .15V
452240-LE	5	14.7	82%	0.7A +5/-7%	21.0V +/- .1V	100mA +/- 25%	20.5V +.1/- .15V
452240-LF	6	15.1	82%	0.6A +5/-7%	25.2V +/- .1V	100mA +/- 25%	24.6V +.1/- .15V
452240-LG	7	16.4	82%	0.56A +5/-7%	29.4V +/- .1V	100mA +/- 25%	28.7V +.1/- .15V

LED status indicator:

The lithium ion charger has an LED status indicator to inform the user of its status. During step 1 and step 2, the LED will appear red 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.

