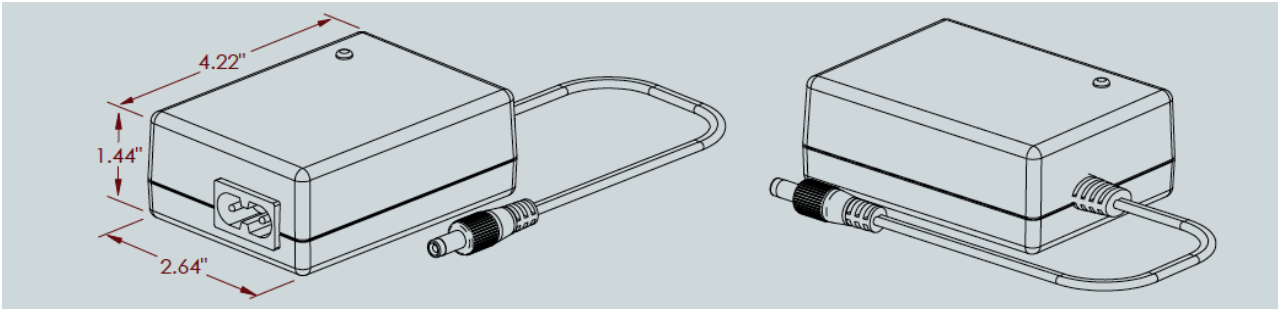
LiFePO4 CHARGER, 2.7A

Switch mode Lithium Iron Phosphate chargers are designed to effectively charge Lithium Iron Phosphate 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 1.2A 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
- Medical approved (60601-1)
- 3 Color LED status indicator
- Custom specifications on request



Category	Specifications
Model number	452541-F
Input rating	Nominal 90-264VAC/47-63Hz
Maximum output power	35W
Cell count	1-5, 8 cells
Switch frequency	≈ 40kHz
Leakage current from battery	<250 uA
Operating/storage temperature	-20ºC - +40ºC / -25ºC - +85ºC
Ripple	< 100 mV p-p
Insulation class	Class II
Electrical safety approvals	IEC / EN / UL 60601-1, EN 60950-1, EN 60335-2-29
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)

* Other output connections available upon request

CELL-CON
battery and charger solutions

Functionality:
Once the charger is attached to a Lithium Iron Phosphate battery and then plugged, the charging process will begin. The charger will subject the Lithium Iron Phosphate 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.

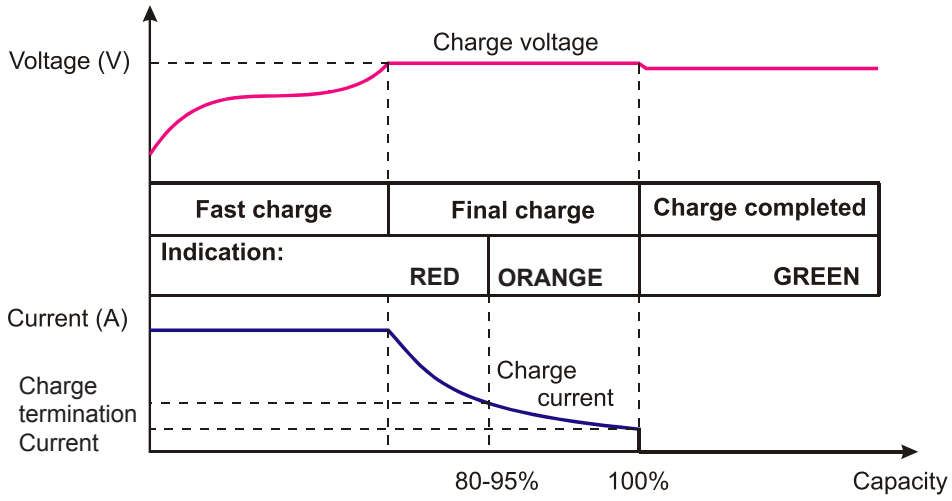
In step two, the charger switches into constant voltage mode (current is no longer being provided at its maximum rate). The battery is 80-95% charged when the LED - indicator changes to orange. The charger will continue to provide a constant voltage until the charge current decreases to the charge termination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

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

Versions			Charge control				
			Step 1 (red)	Step 2a (red)	Step 2b (orange)	Step 3 (green)	
Model #	Cell count	Max output power (W)	Charge current	Charge voltage	To orange when current is:	Charge termination when current is	Float charge
452541-FA	1	10	2.7A +/- 0.1A	3.65V+/-0.05V	<1.15A +/- 0.1A	< 100 mA +/- 25%	3.5V +/- 0.1V
452541-FB	2	20	2.7A +/- 0.1A	7.3V +/- 0.1V	<1.15A +/- 0.1A	< 100 mA +/- 25%	7.0V +/- 0.1V
452541-FC	3	25	2.3A +/- 0.1A	10.95V+/-0.1V	<1.00A +/- 0.1A	< 100 mA +/- 25%	10.5V +/- 0.1V
452541-FD	4	29	2.0A +/- 0.1A	14.6V +/- 0.1V	<0.85A +/- 0.1A	< 100 mA +/- 25%	14.0V +/- 0.1V
452541-FE	5	29	1.6A +/- 0.1A	18.25V+/-0.1V	<0.70A +/- 0.1A	< 100 mA +/- 25%	17.5V +/- 0.1V
452541-FH	8	35	1.0A +/- 0.1A	29.2V +/- 0.1V	<0.40A +/- 0.1A	< 100 mA +/- 25%	28.0V +/- 0.1V

LED status indicator:
The Lithium Iron Phosphate 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.

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