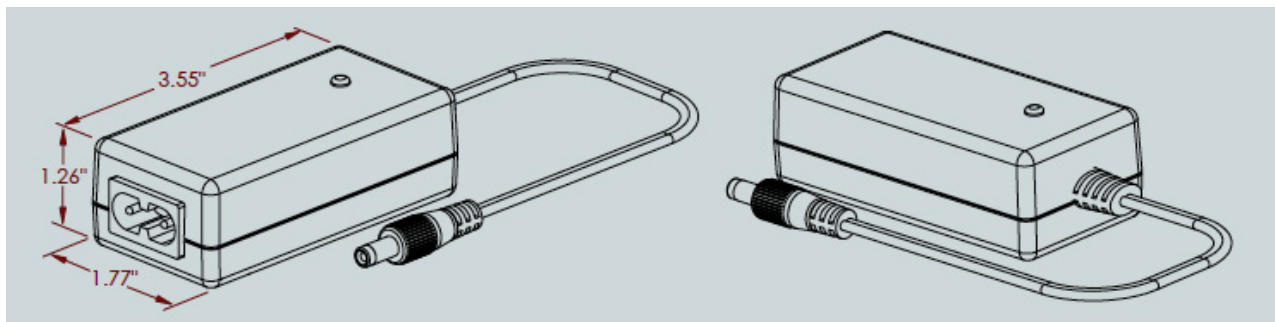


Switch mode Lithium Iron Phosphate chargers are designed to effectively charge Lithium Iron Phosphate batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from .56A to 1.3A.



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 approval (60601-1)
- LED status indicator
- Custom specifications on request



Category	Specifications
Model number	452240-F
Input rating	Nominal 90-264VAC/47-63Hz
Maximum output power	16W
Cell count	1-8 cells
Switch frequency	≈ 40kHz
Leakage current from battery	
Operating/storage temperature	-25°C
Ripple	< 100 mV p-p
Insulation class	Class II
Electrical safety approvals	UL 60601-1, EN 60950-1, EN 60335-2-29, EN 60601-1
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)
Reliability (MIL-HDBK-217F)	MTBF> 250.000h @ 30°C and full load
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	3.55" x 1.77" x 1.26" (90 x 45 x 32mm) / .25 lbs. (115g)

* Other output connections available upon request

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 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.

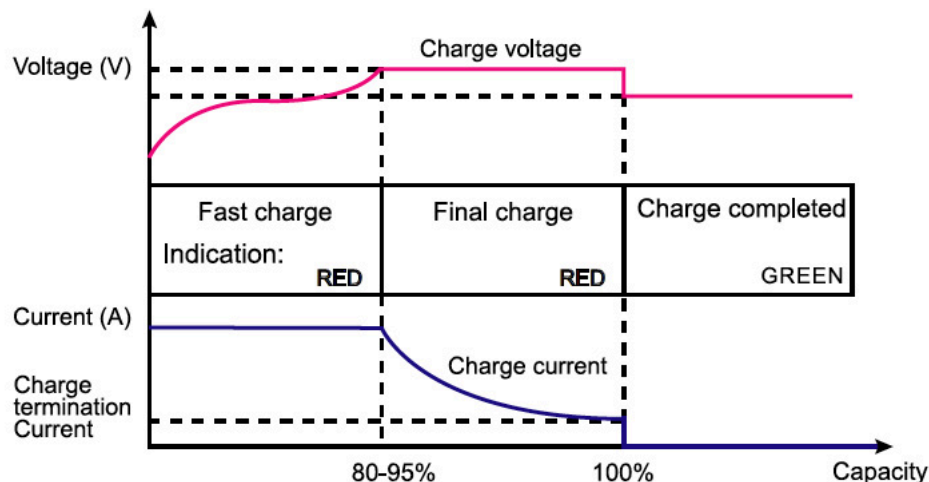
In the third step, the charge process has stopped. Charging has ceased as no current flows to the battery.

Versions			Charge control			
			Step 1 (red)	Step 2 (red)	Step 3 (green)	
Model #	Cell count	Max output power (W)	Charge current	Charge voltage	Charge termination when current is	Float charge
452240-FA	1	5.5	1.3A	3.65V	< 100 mA +/- 25%	3.5V +.05/-.15V
452240-FB	2	10.9	1.3A	7.3V	< 100 mA +/- 25%	7.0V +.1/-.15V
452240-FC	3	15.1	1.2A	10.95V	< 100 mA +/- 25%	10.5V +.1/-.15V
452240-FD	4	15.1	.9A	14.6V	< 100 mA +/- 25%	14.0V +.1/-.15V
452240-FE	5	14.7	.7A	18.25V	< 100 mA +/- 25%	17.5V +.1/-.15V
452240-FF	6	15.1	.56A	21.9V	< 100 mA +/- 25%	28.0V +.1/-.15V
452240-FH	8	16.4	.6A	29.2V	< 100 mA +/- 25%	28.0V +.1/-.15V

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 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.

