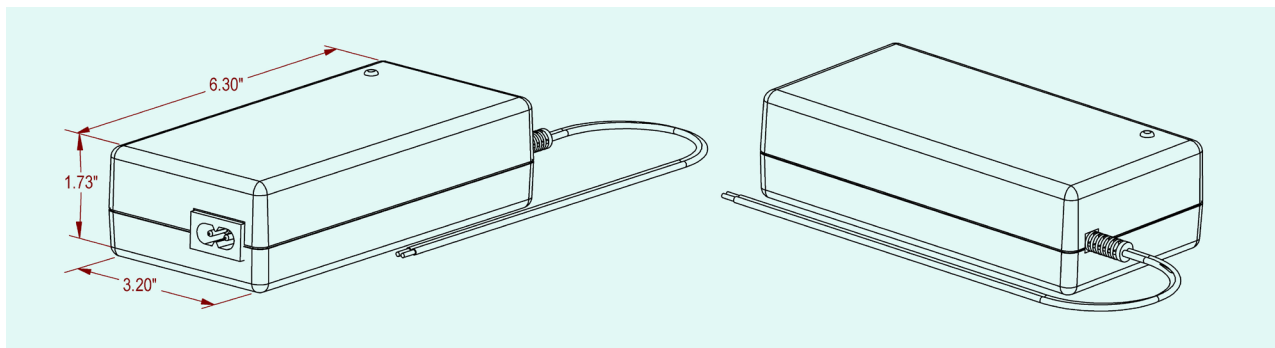


Switch mode LiFePO4 chargers are designed to effectively charge LiFePO4 batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal auto-detected input of 115/230 VAC. The output current ranges from 1.7A to 8.5A.



Features:

- 3 step charge control with current detection as charge termination
- Switch mode charger with auto-detected input voltage
- Protected against reverse polarity and short circuit
- Charges 1-16 cell battery packs
- UL 60601-1 approved
- LED status indicator
- Custom specifications on request



Category	Specifications
Model number	453240-F
Input rating	Nominal 95-130VAC and 198-264VAC
Maximum output power	102W
Cell count	1-16 cells
Switch frequency	≈ 65kHz
Leakage current from battery	<1.3ma
Operating/storage temperature	-25°C - +40°C / -25°C - +85°C
Ripple	< 100 mV p-p
Insulation class	Class II
Electrical safety approvals	EN 60335-2-29, 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 < 300 mA +/- 30%
Input connection	2 pin IEC 320-C7 (input cordset not included)
Output connection	Wire leads *
Dimensions/weight	6.30" x 3.20" x 1.73" (160 x 81 x 44mm) / 1.3 lbs. (590g)

* Other output connections available upon request

Functionality:

Once the charger is attached to a Lithium Iron Phosphate battery and then plugged in, 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 (LED changes to orange), 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 2a (red)	Step 2b (orange)	Step 3 (green)
Model #	Cell count	Max output power (W)	Charge current	Charge voltage	To yellow when current is:	Charge start Vbat
453240-FA	1	31W	8.5A +0.1/-0.75A	3.65V ±0.05V	3.8A + 0/ -0.2A	3.5V ±0.05V
453240-FB	2	62W	8.5A +0.1/-0.75A	7.3V ±0.1V	3.5A + 0/ -0.2A	7.0V ±0.1V
453240-FC	3	93W	8.5A +0.1/-0.75A	10.95V ±0.1V	3.1A + 0/ -0.2A	10.5V ±0.1V
453240-FD	4	102W	7.0A +0.05/-0.65A	14.6V ±0.1V	2.7A + 0/ -0.2A	14.0V ±0.1V
453240-FE	5	100W	5.5A +0.1/-0.45A	18.25V ±0.2V	1.9A + 0/ -0.2A	17.5V ±0.1V
453240-FF	6	101W	4.6A +0.1/-0.4A	21.9V ±0.2V	1.7A + 0/ -0.2A	21.0V ±0.2V
453240-FG	7	100W	3.9A +0.1/-0.3A	25.55V ±0.2V	1.6A + 0/ -0.2A	24.5V ±0.2V
453240-FH	8	102W	3.5A +0/-0.4A	29.2V ±0.2V	1.4A + 0/ -0.2A	28.0V ±0.2V
453240-FI	9	102W	3.1A +0/-0.4A	32.85V ±0.2V	1.3A ±0.2A	31.5V ±0.2V
453240-FJ	10	102W	2.8A +0/-0.3A	36.5V ±0.3V	1.2A ±0.2A	35.0V ±0.2V
453240-FK	11	96W	2.4A +0.1/-0.3A	40.15V ±0.3V	1.2A ±0.2A	38.5V ±0.4V
453240-FL	12	101W	2.3A +0.05/-0.3A	43.8V ±0.3V	0.9A ±0.2A	42.0V ±0.4V
453240-FM	13	102W	2.15A +0/-0.3A	47.45V ±0.3V	0.8A ±0.2A	45.5V ±0.4V
453240-FN	14	102W	2.0A +0/-0.2A	51.1V ±0.3V	0.7A ±0.2A	49.0V ±0.4V
453240-FO	15	99W	1.8A +0.05/-0.2A	54.75V ±0.3V	0.6A ±0.2A	52.5V ±0.4V
453240-FP	16	99W	1.7A +0.05/-0.2A	58.4V ±0.3V	0.6A ±0.2A	56.0V ±0.4V

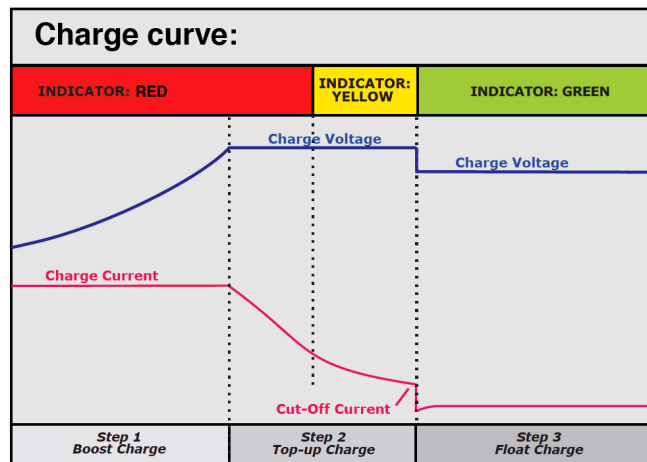
charge termination when current is: 300mA +/- 30%

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.



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

