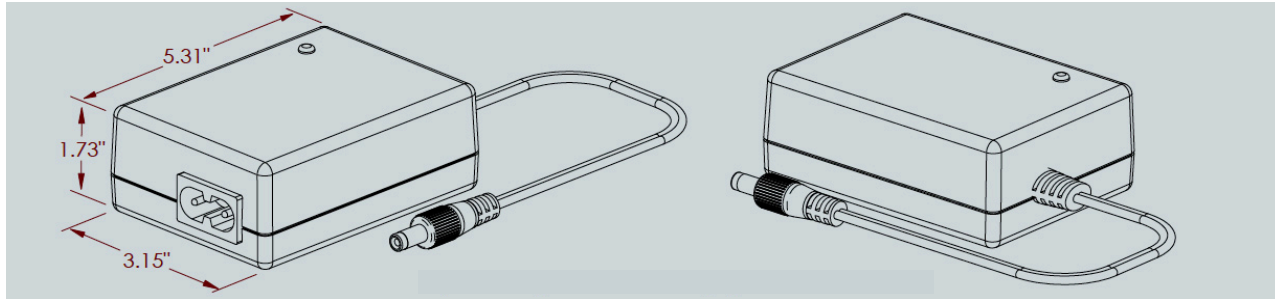Switch mode Lithium Iron Phosphate chargers are designed to effectively charge LiFePO4 batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal input of 90-264 VAC
The output current ranges from 1.2A to 4A.

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 1-16 cell battery packs
- Complies with medical standard (EN 60601)
- LED status indicator
- Custom specifications on request

5.31"
1.73"
3.15"

Category	Specifications
Model number	452440-F
Input rating	Nominal 90-264VAC
Maximum output power	80W
Cell count	16 cells
Switch frequency	≈ 40kHz
Leakage current from battery	<0.7mA @ 6.4V (2 cell version)
Operating/storage temperature	-25ºC - +40ºC / -25ºC - +85ºC
Ripple	< 100 mV p-p
Insulation class	Class ll
Electrical safety approvals	EN 60335-2-29, EN 60950-1, in compliance with 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	2.5mm x 5.5mm x 9.5mm barrel plug, center positive*
Dimensions/weight	5.31" x 3.15" x 1.73" (135 x 80 x 44mm) / .86 lbs. (390g)

* 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 in, the charging process will begin. The charger will subject the LiFePO4 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 voltage is at float level and the charger may remain connected 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
452440-FA	1	15W	4.0A +/- 0.2A	3.65V +/- 0.05V	1.8A +/- 0.2A	3.5V +/- 0.05V
452440-FB	2	29W	4.0A +/- 0.2A	7.3V +/- 0.1V	1.8A +/- 0.1A	7.0V +/- 0.1V
452440-FC	3	44W	4.0A +/- 0.2A	10.95V +/- 0.1V	1.8A +/- 0.1A	10.5V +/- 0.1V
452440-FD	4	58W	4.0A +/- 0.2A	14.6V +/- 0.1V	1.6A +/- 0.1A	14.0V +/- 0.1V
452440-FE	5	71W	3.9A +/- 0.2A	18.25V +/- 0.2V	1.6A +/- 0.1A	17.5V +/- 0.1V
452440-FF	6	72W	3.3A +/- 0.2A	21.9V +/- 0.2V	1.6A +/- 0.1A	21.0V +/- 0.2V
452440-FG	7	72W	2.8A +/- 0.2A	25.55V +/- 0.2V	0.8A +/- 0.1A	24.5V +/- 0.2V
452440-FH	8	73W	2.5A +/- 0.2A	29.2V +/- 0.2V	0.8A +/- 0.1A	28.0V +/- 0.2V
452440-FI	9	72W	2.2A +/- 0.2A	32.85V +/- 0.2V	0.8A +/- 0.1A	31.5V +/- 0.2V
452440-FJ	10	71W	1.95 A +/- 0.1A	36.5V +/- 0.2V	0.8A +/- 0.1A	35.0V +/- 0.2V
452440-FK	11	72W	1.8A +/- 0.1A	40.15V +/- 0.2V	0.8A +/- 0.1A	38.5V +/- 0.2V
452440-FL	12	72W	1.65A +/- 0.1A	43.8V +/- 0.3V	0.6A +/- 0.1A	42.0V +/- 0.2V
452440-FM	13	71W	1.5A +/- 0.1A	47.45V +/- 0.3V	0.6A +/- 0.1A	45.5V +/- 0.2V
452440-FN	14	72W	1.4A +/- 0.1A	51.1V +/- 0.3V	0.6A +/- 0.1A	49.0V +/- 0.2V
452440-FO	15	71W	1.3A +/- 0.1A	54.75V +/- 0.3V	0.6A +/- 0.1A	52.5V +/- 0.2V
452440-FP	16	70W	1.2A +/- 0.1A	58.4V +/- 0.3V	0.6A +/- 0.1A	56.0V +/- 0.2V

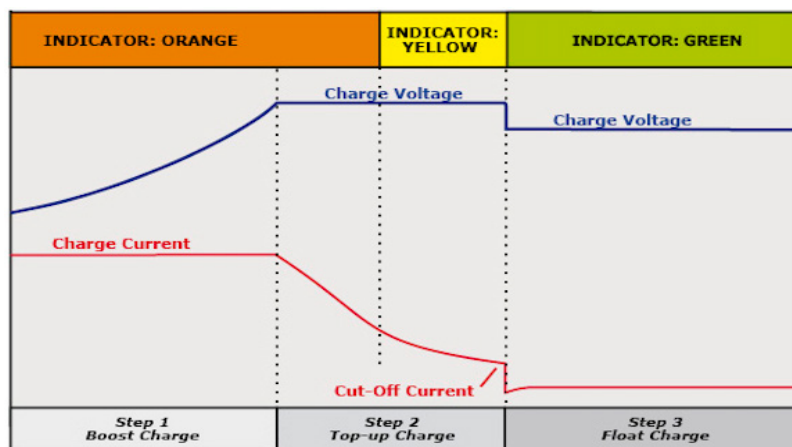Charge termination when current is: 300mA +/- 30%

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.

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