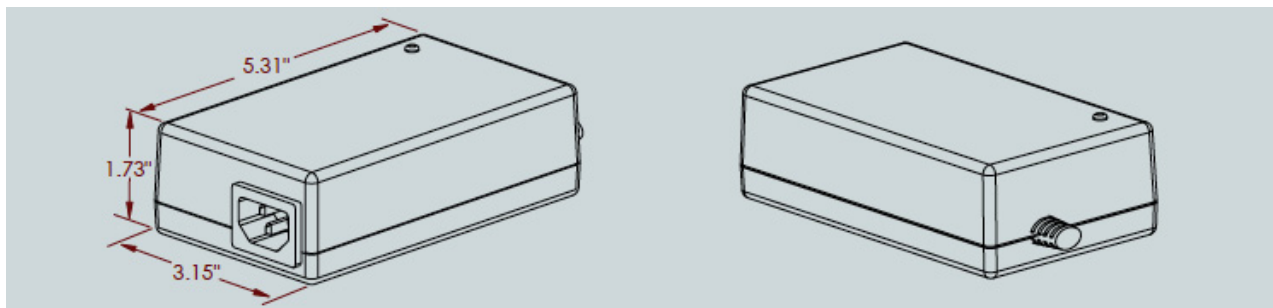


Switch mode Lithium Iron Phosphate chargers are designed to effectively charge Lithium Iron Phosphate batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal input of 90-264VAC/47-63Hz. The output current ranges from 2A to 4A.



**Features:**

- 3 step charge control with timer as charge termination
- Switch mode charger with universal input voltage
- Protected against reverse polarity and short circuit
- Charges 3-8 cell battery packs
- Complies w/ medical standard EN60601
- 3 Color LED status indicator
- Custom specifications on request



Category	Specifications
Model number	452040-F
Input rating	Nominal 90-264VAC/47-63Hz
Maximum output power	60W
Cell count	3-8 cells
Switch frequency	≈ 40kHz
Leakage current from battery	<200 uA (10-40°C: <500 UA) - mains disconnected
Operating	-10°C - +40°C
Ripple	< 100 mV p-p (10-14°C: <200mV)
Insulation class	Class I
Electrical safety approvals	60601-1, EN 60950-1, EN 60335-2-29, in compliance with UL-60601-1
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 (Emission), EN 61000-6-1 (Immunity)
Termination	Timer 4 hours +/- 30%, other values available
Input connection	3 pin IEC 320 (input cordset not included)
Output connection	Battery Clips*
Dimensions/weight	5.31" x 3.15" x 1.73" (135 x 80 x 44mm) / .77 lbs. (350g)

\* 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 (timer mode), the battery will be 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 timer has run out.

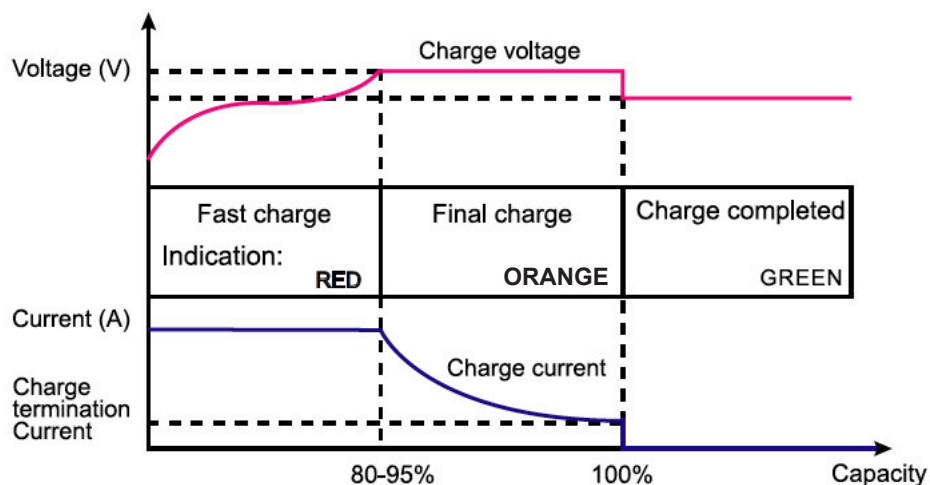
In the third step, the charge process has stopped. Charging has ceased as no current flows to the battery.

Model #	Cell count	Nominal battery Voltage	Charge voltage	Charge current	Float charge	
452040-FC	3	9.6V	10.95V	4A	10.35V +/- .1V-.15	Or mains turned on
452040-FD	4	12.8V	14.45V	4A	13.65V +/- .15V	
452040-FE	5	16.0V	18.25V	2A	17.25V +/- .2V	
452040-FF	6	19.2V	21.9V	2A	21.0V +/- .3V	
452040-FG	7	22.4V	25.55V	2A	24.55V +/- .3V	
452541-FH	8	25.6V	29.2V	2A	27.9 V +/- .3V	

### 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.

