

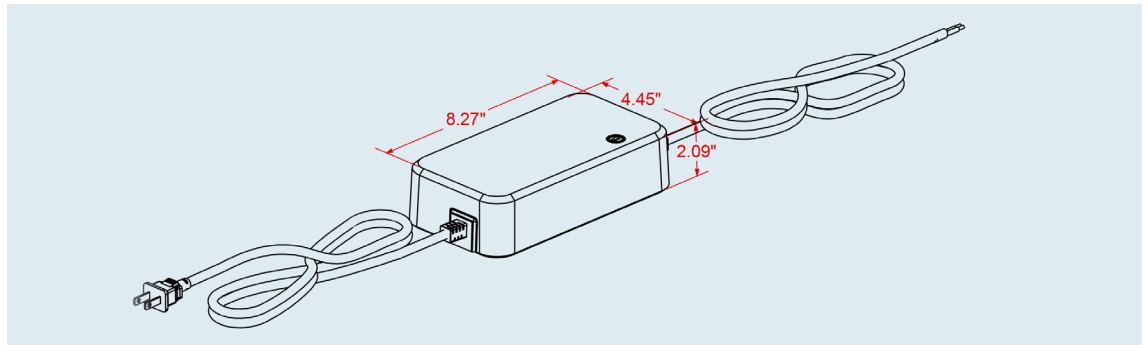
Switch mode Lithium Ion chargers are designed to effectively charge Lithium Ion batteries while protecting the batteries from overcharging. All charger ratings are based on a nominal input of 120 VAC. The output current ranges from 8.5A to 20A.



LITHIUM ION CHARGER, 300W

**Features:**

- Medically certified / UL approved
- Safety: EN 60601-1 ed. 3.1
- EMC: EN 60601-1-2 ed. 4
- Wake up and low current start-up of deeply discharged batteries
- With NTC input on request
- 3 step charge control with current detection as charge termination
- Error indication for reverse polarity, short circuit, charging battery packs with wrong number of cells, and safety timer run out



Category	Specifications
Model number	453540-L Series
Input rating	Nominal 110-120 VAC / 60Hz; 198-264 VAC / 50Hz
Cell counts	3, 4, 6, 7
Switch frequency	≈ 65kHz
Leakage current from battery	<170mA @ 29.2V
Operating/storage temp.	-25°C - +40°C / -25°C - +65°C
Ripple	< 100 mV p-p
Insulation class	Class II (double insulated)
Insulation voltage	4000VAC (primary) / 5700VDC (secondary)
Electrical safety standards	EN / IEC / ANSI 60601-1
EMC standards	EN 60601-1-2: 2015 (Edition 4)
IP-code	IP 44 (IP 41 with 2-pin IEC 60320)
Input connection	2 pin IEC 60320 or fixed mains cables
Output connection	Cord with open ends
Dimensions / weight	8.27" x 4.45" x 2.09" / with mains cable 3.08lbs / with IEC60320 2.53lbs



\* Other output connections available upon request

## Charger Specifications

Versions			Charge control				
			Step 0 * <10 min (yellow)	Step 1 (yellow)	Step 2 (flash yellow)	Step 3 (green)	
Model #	Cell count	Max output power (W)	Low Current startup for deeply discharged batt.	Charge Current	Charge Voltage	Charge term when current is:	Restart
453540-LC	3	252W	CC 1.0A+/-0.4A when batt. < 9V	20A +0.2/-0.3A	12.6V +/- 0.1V	<1.0A or max. 2hr.	12.3V
453540-LD	4	252W	CC 1.0A+/-0.2A when batt. < 12V	15A +0.2/-0.3A	16.8V +/- 0.1V	<1.0A or max. 2hr.	16.4V
453540-LF	6	252W	CC 0.8A+/-0.4A when batt. < 18V	10A +0.2/-0.3A	25.2V +/- 0.2V	<0.8A or max. 1hr.	24.6V
453540-LG	7	250W	CC 0.8A+/-0.4A when batt. < 21V	8.5A +0/-0.3A	29.4V +/- 0.2V	<0.8A or max. 1hr.	28.7V

\* If step 0 is >10 minutes, the LED will flash red 4x indicating a low battery voltage. Zero current flows.

\*\* Step 2, CV has a backup timer set between 1-2 hours depending on charger model.

- All chargers have a safety timer set for 72 hours.

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

### Charging characteristics and LED indication

#### BATTERY NOT CONNECTED INDICATIONS

Battery not connected is indicated by flashing green. In this mode charger will apply short pulses attempting to wake up deeply discharged batteries.

#### ERROR INDICATIONS (in flashing red)

- 2 red flashes: Battery is connected to charger with wrong polarity.
- 3 red flashes: Charger output is shorted. Check output cable connection.
- 4 red flashes: Battery voltage is low. Check battery status or voltage.
- 5 red flashes: Safety timer has run out. Check battery status or capacity.
- LED off: Battery voltage is too high. Check battery voltage.

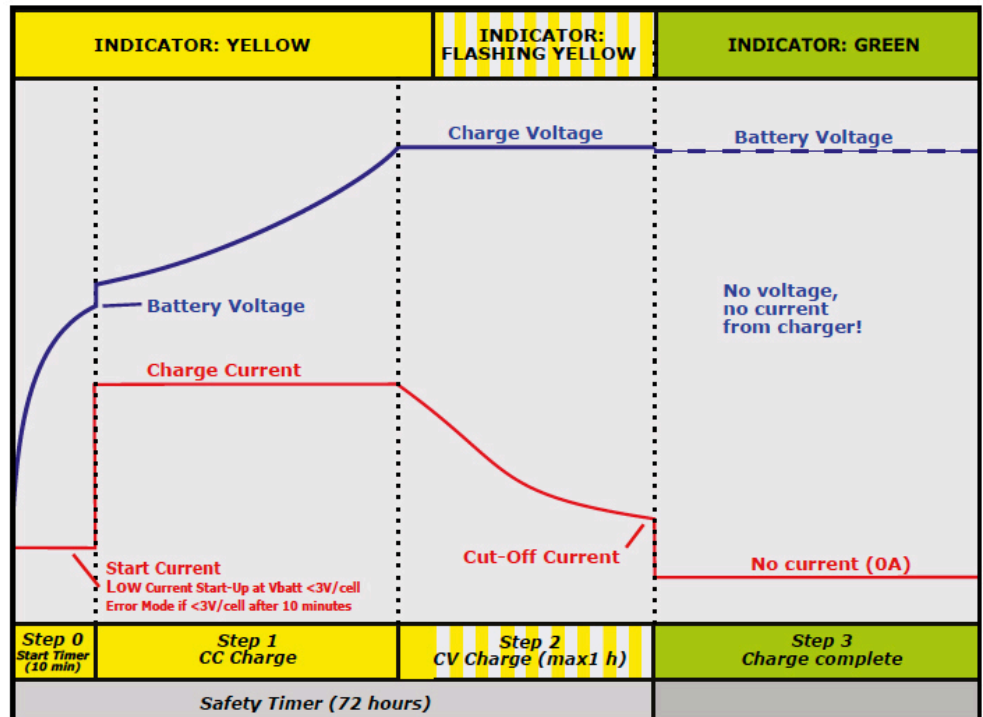
#### WAIT MODE INDICATIONS

Yellow with 1 red flash:

Battery temperature is too low (<0°C)

Yellow with 2 red flashes:

Battery temperature is too high (>45°C)



### Mounting Bracket Included

