

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 90-264 VAC. The output current ranges from 300mA to 1.5A.

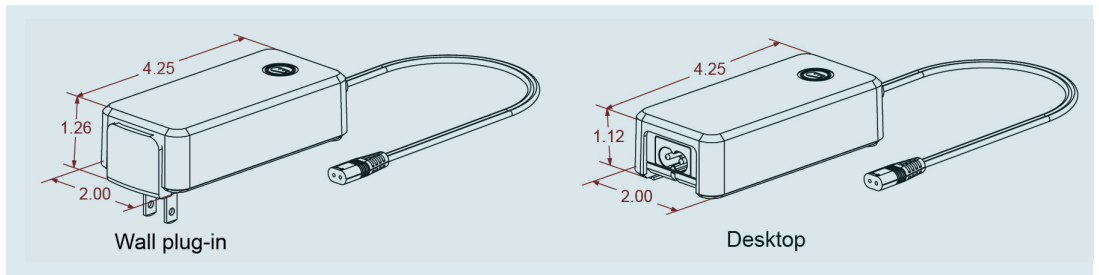


LITHIUM ION CHARGER, 16W

Features:

- Medically certified / UL approved
- Safety: EN 60601-1 ed. 3.1
- EMC: EN 60601-1-2 ed. 4
- Universal input voltage (90-264VAC)
- 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

Use as a wall plug-in or desktop charger



Category	Specifications
Model number	453743-L Series
Input rating	Nominal 90-264VAC/47-63Hz
Cell counts	1, 2, 3, 4, 5, 6, 7
Switch frequency	≈ 56kHz
Leakage current from battery	<0.3mA @ nominal battery voltage
Operating/storage temp.	-25°C - +40°C / -25°C - +85°C
Ripple	< 100 mV p-p
Insulation class	Class II
Insulation voltage	4000VAC (primary) / 5700VDC (secondary)
Electrical safety approvals	UL 60601-1, EN / IEC 60335-2-29, EN 60601-1-11, EN / IEC / ANSI 60601-1
EMC standards	EN 60601-1-2 (Medical), EN 61000-6-3 / EN55014-1 (Emission), EN55014-2 / EN 61000-6-1 (Immunity)
IP-code	41
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	4.25" x 2.00" x 1.12" (108 x 50 x 28mm) / .33 lbs. (150g)

* Other output connections available upon request



Charger Specifications

Versions			Charge control				
			Step 0 * (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
453743-LA	1	6W	CC 100mA+/-25mA when batt. < 3V	1.5A +/- 0.1A	4.2V +/- 0.1V	< 100mA or max. 1 hr.	4.1V
453743-LB	2	13W	CC 100mA+/-25mA when batt. < 6V	1.5A +/- 0.1A	8.4V +/- 0.1V		8.2V
453743-LC	3	15W	CC 100mA+/-25mA when batt. < 9V	1.2A +/- 0.1A	12.6V +/- 0.1V		12.3V
453743-LD	4	16W	CC 100mA+/-25mA when batt. < 12V	1.0A +/- 0.1A	16.8V +/- 0.1V		16.4V
453743-LE	5	16W	CC 100mA+/-25mA when batt. < 15V	0.8A +/- 0.1A	21V +/- 0.1V		20.5V
453743-LF	6	16W	CC 100mA+/-25mA when batt. < 18V	0.66A +/- 0.1A	25.2V +/- 0.1V		24.6V
453743-LG	7	17W	CC 100mA+/-25mA when batt. < 21V	.56A +/- 0.1A	29.4V +/- 0.1V		28.7V

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

** 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.

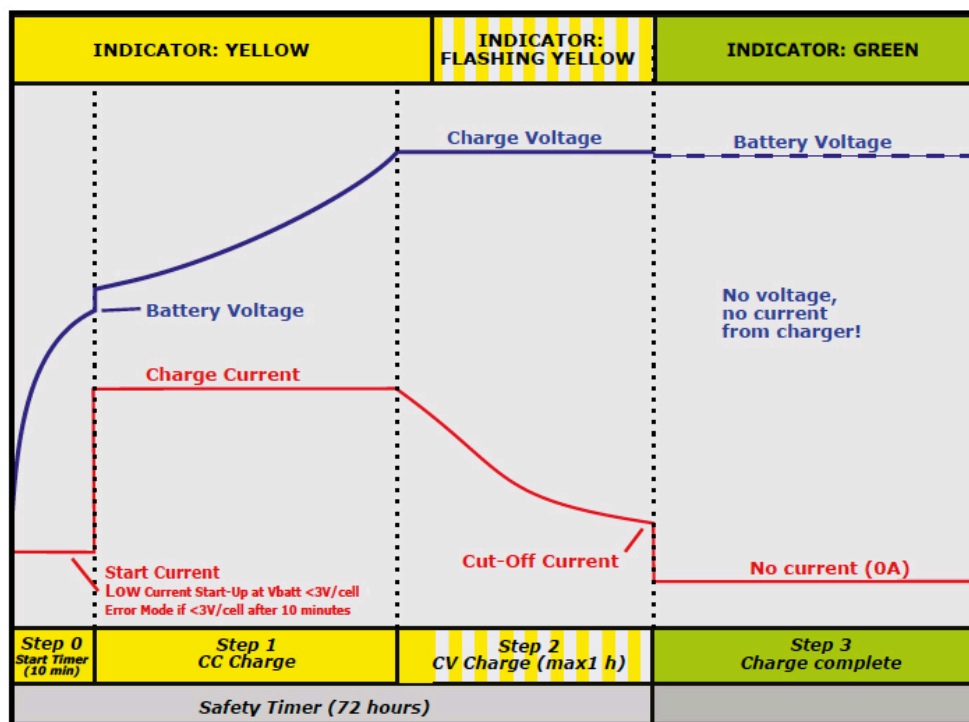
WAIT MODE INDICATIONS

Yellow with 1 red flash:

Battery temperature is too low (<0°C)


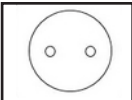
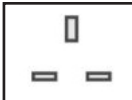
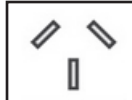
Yellow with 2 red flashes:

Battery temperature is too high (>45°C)



AC plug / cordset options

- Removeable AC blades for wall plug-in chargers, or 6' long input cordsets for desktop chargers

Version	USA	European	UK	Australian
Desktop #	470001	470003	470006	470002
WPI #	470209	470210	470211	470212
				

- Cordsets for other countries available upon request