

# 3745 LI Max. 6,3W

## Charger for Li-ion batteries - switch mode

3845 LI: Std plug-in housing

- 3-step adaptive charge control.
- Charge adapts to battery pack type, which is automatically identified.
- Order plugs (3845) and mains cord separately
- Automatic battery temperature monitoring and thermal control to prevent charge of cold/warm batteries.
- Universal input voltage. (90-264 VAC)
- Wake up and low current start-up of deeply discharged batteries.
- Error indication for reverse polarity, short circuit, charging battery packs with wrong number of cells and safety timer run-out.
- Approvals:
  - Medically certified
  - Safety: EN 60601-1 ed. 3.1
  - EMC: EN 60601-1-2 ed. 4
  - UL approved



3845 LI

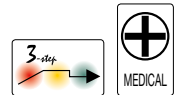
For updates: see [www.mascot.no](http://www.mascot.no)

## TECHNICAL SPECIFICATIONS 3745 LI

### GENERAL INPUT/OUTPUT

<b>Input voltage:</b>	90-264 VAC
<b>Line Frequency:</b>	47 – 63Hz
<b>Switch frequency, approx.:</b>	55 kHz
<b>Leakage current from batt. with mains switched off:</b>	≈ 0A
<b>Temperature range</b>	
• <b>Operating:</b>	-25 °C - +40 °C
• <b>Storage:</b>	-25 °C - +85 °C
<b>Ripple:</b>	< 100 mV p-p
<b>Dimensions (LxWxH):</b>	115 × 56 × 35 mm
<b>Weight:</b>	175g

### SAFETY PROTECTION EMC

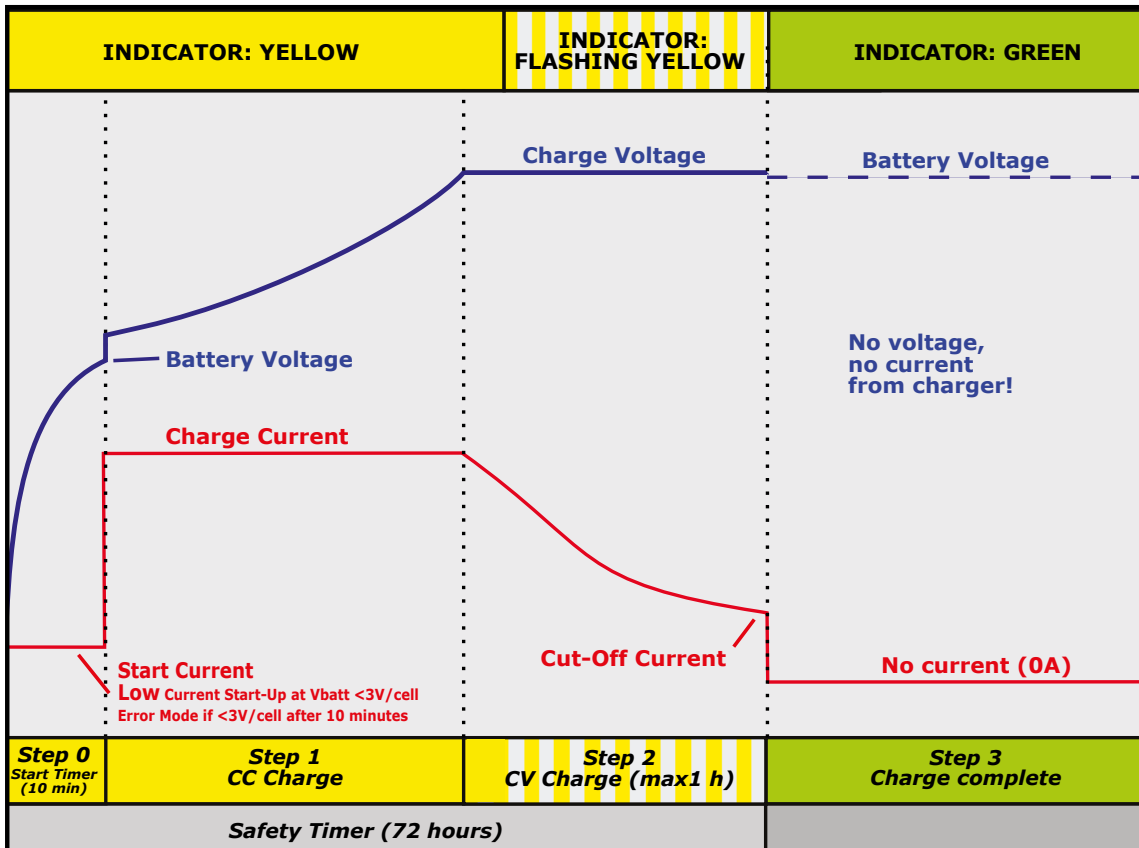


<b>Protection:</b>	Protected against reversed polarity and short circuit proof.
<b>Insulation class:</b>	Class II
<b>Insulation voltage</b>	
<b>Primary – secondary:</b>	4000VAC / 5700VDC
<b>Electrical safety std:</b>	
• <b>Medical:</b>	EN/IEC/ANSI 60601-1
• <b>Household batt. charger:</b>	EN/IEC 60335-1 and -2-29
• <b>A/V and Comm. tech:</b>	EN/IEC/UL 62368-1
	Replaces IEC 60950-1 and IEC 60065
<b>EMC standards</b>	
• <b>Generic:</b>	EN 61000-6-1 and -3
• <b>Medical:</b>	EN 60601-1-2
• <b>Household:</b>	EN 55014-1 and -2
• <b>Information tech.:</b>	EN 55022 and EN 55024
• <b>Multi media:</b>	EN 55032
<b>Input terminals:</b>	2-pin IEC 60320/C8
<b>Output terminals:</b>	Battery docking
<b>IP-code:</b>	4X

## VERSIONS

CHARGE CONTROL		Step 0 (yellow)	Step 1 (yellow)	Step 2 (Flash yellow)	Step 3 (green)	
Battery Pack	Max output power (W)	Low Current start-up for deeply discharged batt.	Charge Current	Charge Voltage	Charge termination when I <sub>ch</sub> :	Restart when V <sub>batt</sub>
EasyPack S	1.9W	CC 40mA±10mA when batt. < 3V	0.45A ±50mA	4.2V ±0.05V	< 25mA or max. 1 hr.	< 4.1V±0.05V
EasyPack L	3.6W	CC 55mA±15mA when batt. < 3V	0.85A ±0.1A		< 55mA or max. 1 hr.	
EasyPack XL	6.3W	CC 125mA±30mA when batt. < 3V	1.5A ±0.15A		< 125mA or max. 1 hr.	
EasyPack PLUS	6.3W	CC 200mA±50mA when batt. < 3V	1.5A ±0.15A		< 260mA or max. 1 hr.	

## Charging characteristics and LED indication \*



\* an animated video of this charging progress is available on our website

### 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

2 red blinks: Battery is connected to charger with wrong polarity!  
 3 red blinks: Charger output is shorted. Check output cable connection!  
 4 red blinks: Battery voltage is low. Check battery status or voltage.  
 5 red blinks: 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 blink: Battery temperature is too low ( $< 0^{\circ}C$ )  
 Yellow with 2 red blink: Battery temperature is too high ( $> 45^{\circ}C$ )