BATTERY CHARGER, 453743-L, LI-ION

SPECIFICATIONS	1 CELL	2 CELLS	3 CELLS	4 CELLS	5 CELLS	6 CELLS	7 CELLS
Cell-Con part number:	453743-LA	453743-LB	453743-LC	453743-LD	453743-LE	453743-LF	453743-LG
Input voltage:	90-264VAC						
Line frequency:	47-63Hz						
Max output power:	6.3W	12.6W	15.1W	16.8W			16.5W
Step 0 < 10min Yellow:	CC 100mA ±25mA, when battery voltage <3V	CC 100mA ±25mA, when battery voltage <6V	CC 100mA ±25mA, when battery voltage <9V	CC 100mA ±25mA, when battery voltage <12V	CC 100mA ±25mA, when battery voltage <15V	CC 100mA ±25mA, when battery voltage <18V	CC 100mA ±25mA, when battery voltage <21V
Step 0 > 10min Red (4 blinks):	0A/0V						
Step 1 (constant current) Yellow:	CC 1.5A ±0.1A, when 3V <Vbat <4.2V	CC 1.5A ±0.1A, when 6V <Vbat <8.4V	CC 1.2A ±0.1A, when 9V <Vbat <12.6V	CC 1A ±0.1A, when 12V <Vbat <16.8V	CC 0.8A ±0.1A, when 15V <Vbat <21V	CC 0.66A ±0.1A, 18V <Vbat <25.2V	CC 0.56A ±0.1A, when 21V <Vbat <29.4V
Step 2 (constant voltage) Flashing Yellow:	CV 4.2V ±0.05V, til Icharge <100mA or max. 1h	CV 8.4V ±0.1V, til Icharge <100mA or max. 1h	CV 12.6V ±0.1V, til Icharge <100mA or max. 1h	CV 16.8V ±0.1V, til Icharge <100mA or max. 1h	CV 21V ±0.1V, til Icharge <100mA or max. 1h	CV 25.2V ±0.1V, til Icharge <100mA or max. 1h	CV 29.4V ±0.1V, til Icharge <100mA or max. 1h
Charge timer (step2, CV):	1h						
Safety timer (all steps) Red (5 blinks):	72h						
Step 3 (charge completed) Green:	0A						
Restart voltage:	4.1V	8.2V	12.3V	16.4V	20.5V	24.6V	28.7V
Efficiency (at 100% load) approx:	0.79	0.81	0.82	0.83	0.83	0.84	0.84
Average efficiency:	>76%	>78%	>80%	>80%			
No load consumption:	<0.5W						
Switch frequency approx.:	56kHz						
Ripple:	<100mV p-p						
Rec. battery capacity:	1.5Ah (1C) to 10Ah (cut off current as EoC) or up to 60Ah (CV Timer as EoC)	1.5Ah (1C) to 10Ah (cut off current as EoC) or up to 60Ah (CV Timer as EoC)	1.2Ah (1C) to 10Ah (cut off current as EoC) or up to 48Ah (CV Timer as EoC)	1Ah (1C) to 10Ah (cut off current as EoC) or up to 40Ah (CV Timer as EoC)	0.8Ah (1C) to 10Ah (cut off current as EoC) or up to 32Ah (CV Timer as EoC)	0.66Ah (1C) to 10Ah (cut off current as EoC) or up to 26.4Ah (CV Timer as EoC)	0.56Ah (1C) to 10Ah (cut off current as EoC) or up to 22.4Ah (CV Timer as EoC)
Formation charge (step 0):	Low current start-up of deeply discharged battery						
Wake-up of deeply discharged battery:	Yes, will apply voltage which deactivates deep discharge protection in battery pack						
Indication when “battery not connected”:	Flashing Green (1s/1s)						
NTC input, on request (std is 10kohm, B-value approx. 4000):	0–45 °C: Normal charge. Battery temperature <0 °C (too cold) or >45°C (too hot): No charge, wait until temp. is OK.						
Leakage current from battery with mains switched off:	<300µA at nominal battery voltage (<0.22Ah/month)						
Protection:	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 10min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OF.						
Temperature range:	**Operating:** -25 to +40°C / **Storage:** -25 to +85°C						
Safety:	**Medical:** EN 60601-1 / **Home Health Care:** EN 60601-1-11 (VNOM≥110VAC) / **Battery Charger:** EN 60335-2-29						
Insulation class:	Class II						
Insulation voltage: primary–secondary:	4000VAC/5700VDC						
EMC standard:	EN 55014-1 and –2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2						
Input terminal:	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector						
Output terminals:	Cord with/without plug. Exchangeable plugs available.						
IP-Grade:	IP41						
Dimensions:	108.5×49×29.3mm						
Weight:	150g						

CELL-CON
Battery & Charger Solutions

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BATTERY CHARGER, 453743-L, LI-ION

SPECIFICATIONS	8 CELLS	9 CELLS	10 CELLS	11 CELLS	12 CELLS	13 CELLS	14 CELLS
Cell-Con part number:	453743-LH	453743-LI	453743-LJ	453743-LK	453743-LL	453743-LM	453743-LN
Input voltage:	90-264VAC						
Line frequency:	47-63Hz						
Max output power:	16.8W	17W	16.8W	17.1W	16.6W	16.38W	17.6W
Step 0 < 10min Yellow:	CC 100mA ±25mA, when battery voltage <24V	CC 100mA ±25mA, when battery voltage <27V	CC 100mA ±25mA, when battery voltage <30V	CC 100mA ±25mA, when battery voltage <33V	CC 100mA ±25mA, when battery voltage <36V	CC 80mA ±25mA, when battery voltage <39V	CC 80mA ±25mA, when battery voltage <42V
Step 0 > 10min Red (4 blinks):	0A/0V						
Step 1 (constant current) Yellow:	CC 0.5A ±0.1A, when 24V <Vbat <33.6V	CC 0.45A ±0.1A, when 27V <Vbat <37.8V	CC 0.4A ±0.1A, when 30V <Vbat <42V	CC 0.37A ±0.1A, when 33V <Vbat <46.2V	CC 0.33A ±0.1A, when 36V <Vbat <50.4V	CC 0.3A ±0.1A, when 39V <Vbat <54.6V	CC 0.3A ±0.1A, when 42V <Vbat <58.8V
Step 2 (constant voltage) Flashing Yellow:	CV 33.6V ±0.1V, til Icharge <100mA or max. 1h	CV 37.8V ±0.1V, til Icharge <100mA or max. 1h	CV 42V ±0.1V, til Icharge <80mA or max. 1h	CV 46.2V ±0.1V, til Icharge <80mA or max. 1h	CV 50.4V ±0.1V, til Icharge <80mA or max. 1h	CV 54.6V ±0.1V, til Icharge <56mA or max. 1h	CV 58.8V ±0.1V, til Icharge <56mA or max. 1h
Charge timer (step2, CV):	1h						
Safety timer (all steps) Red (5 blinks):	72h						
Step 3 (charge completed) Green:	0A						
Restart voltage:	32.8V	36.9V	41V	45.1V	49.2V	53.3V	57.4V
Efficiency (at 100% load) approx:	0.84						
Average efficiency:	>80%						
No load consumption:	<0.5W						
Switch frequency approx.:	56kHz						
Ripple:	<100mV p-p						
Rec. battery capacity:	0.5Ah (1C) to 10Ah (cut off current as EoC) or up to 20Ah (CV Timer as EoC)	0.45Ah (1C) to 10Ah (cut off current as EoC) or up to 18Ah (CV Timer as EoC)	0.4Ah (1C) to 8Ah (cut off current as EoC) or up to 16Ah (CV Timer as EoC)	0.37Ah (1C) to 8Ah (cut off current as EoC) or up to 14.8Ah (CV Timer as EoC)	0.33Ah (1C) to 8Ah (cut off current as EoC) or up to 13.2Ah (CV Timer as EoC)	0.3Ah (1C) to 5.6Ah (cut off current as EoC) or up to 12Ah (CV Timer as EoC)	0.3Ah (1C) to 5.6Ah (cut off current as EoC) or up to 12Ah (CV Timer as EoC)
Formation charge (step 0):	Low current start-up of deeply discharged battery						
Wake-up of deeply discharged battery:	Yes, will apply voltage which deactivates deep discharge protection in battery pack						
Indication when “battery not connected”:	Flashing Green (1s/1s)						
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