

BATTERY CHARGER, 454040-N, NiMH

SPECIFICATIONS	6-8	8-12	12-20	20-30	25-40
Cell-Con part number:	454040-NG	454040-NH	454040-NJ	454040-NL	454040-NN
Input voltage:	90-264VAC/47-63Hz				
Max output power:	109W	110W	109W	111W	115W
Min. output voltage for -ΔV detection:	7.8V (min 6 cells x min 1.3V pr. cell)	10.4V (min 8 cells x min 1.3V pr. cell)	15.6V (min 12 cells x min 1.3V pr. cell)	26.0V (min 20 cells x min 1.3V pr. cell)	32.5V (min 25 cells x min 1.3V pr. cell)
Max. output voltage for -ΔV detection:	13.6V (max 8 cells x max 1.7V pr. cell)	20.4V (max 12 cells x max 1.7V pr. cell)	34V (max 20 cells x max 1.7V pr. cell)	51.0V (max 30 cells x max 1.7V pr. cell)	64.0V (max 40 cells x max 1.6V pr. cell)
-ΔV sensitivity mV/cell:	3mV/cell (approx.)				
SoftStart current:	300mA ±50mA @Vbat <7.8V	200mA ±50mA @Vbat <10.4V	200mA ±50mA @Vbat <15.6V	200mA ±50mA @Vbat <26.0V	100mA ±25mA @Vbat <32.5V
Fast charge current:	8.0A ±250mA	5.4A ±200mA	3.2A ±200mA	2.18A +0.10/-0.2A	1.8A +0.1 /-0.2A
Top off charge:	1.0A ±100mA	720mA ±100mA	500mA ±100mA	400mA ±50mA	270mA ±50mA
Trickle charge current:	300mA ±50mA	200mA ±50mA			100mA ±25mA
Efficiency at 100% load:	0.89	0.9		0.89	
-ΔV mask start time:	3 min, no -ΔV detection in this period.				
SoftStart timer:	30 min				
Top-off timer:	1 hour				
Safety timer - The charger switch to trickle charge if no ΔV is detected before the safety timer has run out:	5 hours				
Switch frequency:	45-75kHz				
Temperature range:	-20 to +40°C (these values are only for the charger, not for the batteries).				
Charge control:	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.				
Voltage changes during charging:	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.				
Leakage current from battery with mains switch off:	<1 mA at nominal battery voltage (<0.72 Ah/month)				
Insulation class:	Class II				
LED-indication:	SoftStart / Fast charge: Yellow Top off charge: Flashing Yellow Trickle charge: Green Battery not connected: Flashing Green (1s/1s)				
Protection:	Protected against reversed polarity. Error indication: Red (2 blinks). Short circuit proof. Error indication: Red (3 blinks). Low battery voltage (SoftStart timer). Error indication: Red (4 blinks). No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.				
NTC input, on request (std is 10kohm, B-value approx. 4000):	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5°C/min. Battery temperature is too low (<0°C). Wait mode. Indication: Yellow with 1 red blink. Battery temperature is too high (>40°C). Wait mode. Indication: Yellow with 2 red blinks. High temperature (>60°C). Error Indication: Red (5 blinks). NTC missing or shorted. Error Indication: Red (6 blinks).				
Resetting:	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.				
IP-grade:	IP 41. IP44 with mains cable.				
Dimensions:	203.5×87×43.5mm				
Weight:	590g				
Other:	Possible options on request: Charger parameters programmable with "Configurator tool". Constant current charge (no battery management). 0dV detection for EoC.				

CELL-CON
Battery & Charger Solutions

www.cell-con.com
2 Enterprise Lane, Bedford, PA 15522 | P: 800.771.7139 | sales@cell-con.com