

SPECIFICATIONS FOR 4340 NiMH	4-8 cell	6-12 cell	10-20 cell	15-30 cell	20-40 cell
Available versions	x				
Input voltage	90 - 264VAC / 47 - 63Hz				
Max. output power	80W				
Min. output voltage for ΔV detection	5.0V (min 4 cells x min 1.25V pr. cell)	7.8V (min 6 cells x min 1.3V pr. cell)	13.0V (min 10 cells x min 1.3V pr. cell)	19.5V (min 15 cells x min 1.3V pr. cell)	26.0V (min 20 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 1.60V pr. cell)
ΔV sensitivity mV/cell	3mV/cell (approx.)				
SoftStart current	200mA ± 50mA2@ Vbat < 5.0V	200mA ± 50mA2@ Vbat < 7.8V	150mA ± 50mA2@ Vbat < 13.0V	100mA ± 50mA2@ Vbat < 19.5V	100mA ± 25mA2@ Vbat < 26.0V
Fast charge current	5.8A ± 250mA	3.9A ± 200mA	2.35A +0.10 /-0.2A	1.55A +0.10 /-0.2A	1.25A +0 /-0.2A
Top off charge	730mA ± 100mA	560mA ± 100mA	370mA ± 100mA	245mA ± 50mA	210mA ± 50mA
Trickle charge current	200mA ± 50mA		150mA ± 50mA	100mA ± 25mA	
Efficiency at 100% load	89%	90%			
ΔV mask start timer	3 min, no ΔV de-tection 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, approx.	65kHz				
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. (Class I on request)				
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	IP4X (IP44 on request)				
Dimensions	172.5 × 73 × 42 mm				
Weight	400g				
Other	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC.				