

	3-6 cell	4-8 cell	5-10 cell	6-12 cell
Available versions	x			
Input voltage	190-265VAC, 50-60Hz			
No-load voltage	12.8V $\pm$ 0.7V	16.5V $\pm$ 1V	21V $\pm$ 1.2V	24.7V $\pm$ 1.5V
Max. output power	40W			
Min. output voltage for - Δ V detection	3.7V (min 3 cells x min 1.25V pr. cell)	5.0V (min 4 cells x min 1.25V pr. cell)	6.2V (min 5 cells x min 1.25V pr. cell)	7.5V (min 6 cells x min 1.25V pr. cell)
Max. output voltage for - Δ V detection	10.8V (max 6 cells x max 1.8V pr. cell)	14.4V (max 8 cells x max 1.8V pr. cell)	18V (max 10 cells x max 1.8V pr. cell)	21.6V (max 12 cells x max 1.8V pr. cell)
- Δ V sensitivity mV/cell	10mV/0.6% at 6 cells.	8mV / 0.5% for 4-8 cells	5-10 cells	6-12 cells
Fast charge current	3.5A $\pm$ 250mA	2.8A $\pm$ 200mA	2.2A $\pm$ 150mA	1.8A $\pm$ 150mA
Top off charge (duration 1h after -dV detection)	480mA $\pm$ 100mA	400mA $\pm$ 80mA	330mA $\pm$ 70mA	270mA $\pm$ 60mA
Trickle charge current	150mA $\pm$ 70mA (continously)	150mA $\pm$ 70mA (continously)	100mA $\pm$ 50mA (continously)	100mA $\pm$ 50mA (continously)
Leakage current from battery with mains switch off	< 1mA			
Start timer	3 min, no - Δ V detection in this period			
Top-off timer	1hour			
Safety timer The charger switch to trickle charge if no Δ V is detected before the safety timer has run out.	2 h			
Switch frequency	40kHz.			
Temperature range	-20 to +40oC (these values are only for the charger, not for the batteries).			
Charge control	- Δ V principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.			
Voltage changes during charging	- Δ V detection is disabled if the voltage changes quickly. This to avoid false - Δ V if an external load kicks in during charging.			
Battery analyzing	Max. 20 sec after mains connection / battery connection (yellow LED).			
Efficiency	Appr. 78%.			
Fuses	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.			
Insulation class	Class II.			
Electrical safety	EN 60601-1, EN 60950, EN 60335-2-29.			
EMC-standards	EN 61000-6-3, EN 50081-1, EN 61000-6-1, EN 50082-1, EN 60601-1-2.			
Insulation voltage (prim-sec)	4000V AC / 5700V DC.			
Mains connection	Plug-in europlug (UK, AU and US-plug also available)			
Output terminals	Secondary cable with exchangeable plugs.			
LED-indication	Yellow: Initialization/no batt. Orange: Fast charge Green with short yellow flashes: Top off charge: Green: Trickle charge Red-Green flashing (error mode): Battery voltage low			
Resetting	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.			
IP-grade	IP 20.			
Dimensions	L100 $\times$ W63 $\times$ H47 (without plug).			
Weight	220g.			
Other	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.			

	10-20 cell
Available versions	x
Input voltage	190-265VAC, 50-60Hz
No-load voltage	41V $\pm$ 2V
Max. output power	45W
Min. output voltage for - Δ V detection	12.5V (min 20 cells x min 1.25V pr. cell)
Max. output voltage for - Δ V detection	36V (max 20 cells x max 1.8V pr. cell)
- Δ V sensitivity mV/cell	10-20 cells
Fast charge current	1.2A $\pm$ 100mA
Top off charge (duration 1h after -dV detection)	160mA $\pm$ 50mA
Trickle charge current	50mA $\pm$ 25mA (continously)
Leakage current from battery with mains switch off	< 1mA
Start timer	3 min, no - Δ V detection in this period
Top-off timer	1hour
Safety timer The charger switch to trickle charge if no Δ V is detected before the safety timer has run out.	2 h
Switch frequency	40kHz.
Temperature range	-20 to +40oC (these values are only for the charger, not for the batteries).
Charge control	- Δ V principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.
Voltage changes during charging	- Δ V detection is disabled if the voltage changes quickly. This to avoid false - Δ V if an external load kicks in during charging.
Battery analyzing	Max. 20 sec after mains connection / battery connection (yellow LED).
Efficiency	Appr. 78%.
Fuses	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.
Insulation class	Class II.
Electrical safety	EN 60601-1, EN 60950, EN 60335-2-29.
EMC-standards	EN 61000-6-3, EN 50081-1, EN 61000-6-1, EN 50082-1, EN 60601-1-2.
Insulation voltage (prim-sec)	4000V AC / 5700V DC.
Mains connection	Plug-in europlug (UK, AU and US-plug also available)
Output terminals	Secondary cable with exchangeable plugs.
LED-indication	Yellow: Initialization/no batt. Orange: Fast charge Green with short yellow flashes: Top off charge: Green: Trickle charge Red-Green flashing (error mode): Battery voltage low
Resetting	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.
IP-grade	IP 20.
Dimensions	L100 $\times$ W63 $\times$ H47 (without plug).
Weight	220g.
Other	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.