

	3-6 cell	4-8 cell	5-10 cell	6-12 cell
Available versions	x			
Input voltage	90-265VAC, 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	35W			
Min. output voltage for $-\Delta V$ 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 $-\Delta V$ 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)
$-\Delta V$ sensitivity mV/cell	10mV/0.6% at 6 cells.	8mV / 0.5%	8mV / 0.5%	8mV / 0.5%
Fast charge current	3.0A \pm 250mA	2.2A \pm 150mA	1.8A \pm 150mA	1.5A \pm 100mA
Top off charge (duration 1h after $-dV$ detection)	390mA \pm 80mA	310mA \pm 80mA	270mA \pm 70mA	240mA \pm 60mA
Trickle charge current	100mA \pm 50mA (continuously)			
Leakage current from battery with mains switch off	< 1mA			
Start timer	3 min, no $-\Delta V$ detection in this period			
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.	2 h			
Switch frequency	40kHz.			
Temperature range	-20 to +40oC (these values are only for the charger, not for the batteries).			
Charge control	$-\Delta V$ principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.			
Voltage changes during charging	$-\Delta V$ detection is disabled if the voltage changes quickly. This to avoid false $-\Delta V$ 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	2-pins IEC 320 connector for changeable mains plug (EU, US and UK).			
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	IP4X			
Dimensions	117 x 75 x 44mm.			
Weight	275g.			
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	90-265VAC, 50-60Hz
No-load voltage	41V \pm 2V
Max. output power	35W
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	8mV / 0.5%
Fast charge current	900mA \pm 70mA
Top off charge (duration 1h after -dV detection)	130mA \pm 40mA
Trickle charge current	50mA \pm 25mA (continuously)
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	2-pins IEC 320 connector for changeable mains plug (EU, US and UK).
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	IP4X
Dimensions	117 x 75 x 44mm.
Weight	275g.
Other	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.