SPECIFICATIONS FOR 2115 NiMH	2-cell	3-6 cell	4-8 cell	5-10 cell	6-12 cell	10-20 cell
Available versions	x	x	x	x	x	x
Input voltage	190-265VAC, 50-60Hz	90-265VAC, 50-60Hz	90-265VAC, 50-60Hz	90-265VAC, 50-60Hz	90-265VAC, 50-60Hz	90-265VAC, 50-60Hz
No-load voltage	6.3V ± 0.7V	12.8V ± 0.7V	16.5V ± 1V	21V ± 1.2V	24.7V ± 1.5V	41V ± 2V
Max. output power	8.2W	16W	16W	16W	16W	16W
Min. output voltage for ΔV detection	2.5V (min 2 cells × min 1.25V pr. cell)	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)	12.5V (min 10 cells x min 1.25V pr. cell)
Max. output voltage for ΔV detection	5.4V (max 2 cells × max 1.8V pr. cell)	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)	36V (max 20 cells x max 1.8V pr. cell)
ΔV sensitivity mV/cell	10mV/0.6% at 2 cells.	10mV/0.6% at 6 cells.	8mV / 0.5% for 4-8 cells	8mV / 0.5% for 5-10 cells	8mV / 0.5% for 6-12 cells	8mV / 0.5% for 10-20 cells
Fast charge current	1.3A ± 100mA	1.3A ± 100mA	1.0A ± 100mA	0.8A ± 100mA	0.7A ± 100mA	400mA ± 50mA
Top off charge (duration 1h after -dV detection)	160mA ± 30mA	160mA ± 30mA	130mA ± 30mA	110mA ± 30mA	100mA ± 30mA	65mA ± 20mA
Trickle charge current	30mA ± 15mA (continuously)	30mA ± 15mA (continuously)	30mA ± 15mA (continuously)	30mA ± 15mA (continuously)	30mA ± 15mA (continuously)	30mA ± 15mA (continuously)
Leakage current from battery with mains switch off	< 1mA	< 1mA	< 1mA	< 1mA	< 1mA	< 1mA
Start timer	3 min, no ΔV detection in this period	3 min, no ΔV detection in this period	3 min, no ΔV detection in this period	3 min, no ΔV detection in this period	3 min, no ΔV detection in this period	3 min, no ΔV detection in this period
Top-off timer	1 hour	1hour	1hour	1hour	1hour	1hour
Safety timer The charger switch to trickle charge if no ΔV is detected before the safety timer has run out.	2 h	2 h	2 h	2 h	2 h	2 h
Switch frequency	40kHz.	40kHz.	40kHz.	40kHz.	40kHz.	40kHz.
Temperature range	-20 to +40oC (these values are only for the charger, not for the batteries).	-20 to +40oC (these values are only for the charger, not for the batteries).	-20 to +40oC (these values are only for the charger, not for the batteries).	-20 to +40oC (these values are only for the charger, not for the batteries).	-20 to +40oC (these values are only for the charger, not for the batteries).	-20 to +40oC (these values are only for the charger, not for the batteries).
Charge control	ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 0.5% below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 0.5% 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.	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.	ΔV detection is disabled if the voltage changes quickly. This to avoid false ΔV if an external load kicks in during charging.
Battery analyzing	Max. 20 sec after mains connection / battery connection (yellow LED).	Max. 20 sec after mains connection / battery connection (yellow LED).	Max. 20 sec after mains connection / battery connection (yellow LED).	Max. 20 sec after mains connection / battery connection (yellow LED).	Max. 20 sec after mains connection / battery connection (yellow LED).	Max. 20 sec after mains connection / battery connection (yellow LED).
Efficiency	Appr. 80%.	Appr. 80%.	Appr. 80%.	Appr. 80%.	Appr. 80%.	Appr. 80%.
Fuses	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.	Fusible resistor at input. Polyswitch fuse at the output protects the unit against wrong polarity.
Insulation class	Class II.	Class II.	Class II.	Class II.	Class II.	Class II.
Electrical safety	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1	EN 60601-1, EN 60950, EN 60335-2-29, UL 60601-1
EMC-standards	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.	EN 61000-6-3, EN 61000-6-1, EN 60601-1-2.
Insulation voltage (prim-sec)	4000V AC / 5700V DC.	4000V AC / 5700V DC.	4000V AC / 5700V DC.	4000V AC / 5700V DC.	4000V AC / 5700V DC.	4000V AC / 5700V DC.

Mains connection	2-pins IEC 320 mains connector.	2-pins IEC 320 mains connector.	2-pins IEC 320 mains connector.	2-pins IEC 320 mains connector.	2-pins IEC 320 mains connector.	2-pins IEC 320 mains connector.
Output terminals	Secondary cable with exchangeable plugs.	Secondary cable with exchangeable plugs.	Secondary cable with exchangeable plugs.	Secondary cable with exchangeable plugs.	Secondary cable with exchangeable plugs.	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	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	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	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	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	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.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.
IP-grade	IP4X	IP4X	IP4X	IP4X	IP4X	IP4X
Dimensions	90 x 45 x 32mm.	90 x 45 x 32mm.	90 x 45 x 32mm.	90 x 45 x 32mm.	90 x 45 x 32mm.	90 x 45 x 32mm.
Weight	125g.	125g.	125g.	125g.	125g.	125g.
Other	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.