SPECIFICATIONS FOR 2415 NiMH	3-6 cell	4-8 cell	5-10 cell	6-12 cell	10-20 cell	12-25 cell	15-30 cell
Available versions	x	x	x	x	x	x	x
Input voltage	90-265VAC, 50-60Hz	90-265VAC, 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	12.8V ± 0.7V	16.5V ± 1V	21V ± 1.2V	24.7V ± 1.5V	41V ± 2V	51V ± 2V	55V ± 3V
Max. output power	49W	58W	63W	65W	65W	67W	65W
Min. output voltage for ΔV detection	3.7V (min 3 cellsx min 1.25V pr. cell)	5.0V (min 4 cellsx min 1.25V pr. cell)	6.2V (min 5 cellsx min 1.25V pr. cell)	7.5V (min 6 cellsx min 1.25V pr. cell)	12.5V (min 10 cellsx min 1.25V pr. cell)	15V (min 12 cellsx min 1.25V pr. cell)	19V (min 15 cellsx min 1.25V pr. cell)
Max. output voltage for ΔV detection	10.8V (max 6 cellsx max 1.8V pr. cell)	14.4V (max 8 cellsx max 1.8V pr. cell)	18V (max 10 cellsx max 1.8V pr. cell)	21.6V (max 12 cellsx max 1.8V pr. cell)	36V (max 20 cellsx max 1.8V pr. cell)	45V (max 25 cellsx max 1.8V pr. cell)	49.5V (max 30 cellsx max 1.65V pr. cell)
ΔV sensitivity mV/cell	10mV/0.6% at 6 cells.	8mV / 0.5%	8mV / 0.5%	8mV / 0.5%	8mV / 0.5%	8mV / 0.5%	8mV / 0.5%
Fast charge current	4.5A ± 350mA	4.0A ± 300mA	3.5A ± 300mA	3.0A ± 200mA	1.8A ± 150mA	1.5A ± 100mA	1.3A ± 100mA
Top off charge (duration 1h after -dV detection)	630mA ± 100mA	560mA ± 80mA	480mA ± 70mA	420mA ± 60mA	300mA ± 60mA	210mA ± 50mA (duration 1h after	175mA ± 50mA (duration 1h after
Trickle charge current	150mA ± 50mA (continously)	130mA ± 50mA (continously)	100mA ± 50mA (continously)	100mA ± 50mA (continously)	100mA ± 50mA (continously)	50mA ± 30mA (continously)	50mA ± 30mA (continously)
Leakage current from battery with mains switch off	< 1mA	< 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	3 min, no ΔV detection in this period
Top-off timer	1hour	1hour	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	2 h
Switch frequency	40kHz.	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).	-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.	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.	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).	Max. 20 sec after mains connection / battery connection (yellow LED).
Efficiency	Appr. 78%.	Appr. 78%.	Appr. 78%.	Appr. 78%.	Appr. 78%.	Appr. 78%.	Appr. 78%.
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.	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.	Class II.
Electrical safety	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.	EN 60601-1, EN 60950-1, EN 60335-2-29.
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.	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.	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.	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.	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	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.	A new charging cycle starts by reconnecting a battery at the output, or by disconnecting and connecting the mains voltage.
IP-grade	IP41	IP41	IP41	IP41	IP41	IP41	IP41
Dimensions	135 x 80 x 44mm.	135 x 80 x 44mm.	135 x 80 x 44mm.	135 x 80 x 44mm.	135 x 80 x 44mm.	135 x 80 x 44mm.	135 x 80 x 44mm.
Weight	390g.	390g.	390g.	390g.	390g.	390g.	390g.
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.	Possible options on request: +dT/dt, 0dV and timer charge. The charger may be both software and hardware programmable.