SPECIFICATIONS FOR 3743 NiMH	2-cell	3-6 cell	4-8 cell	5-10 cell	6-12 cell	10-20 cell	15-30 cell
Available versions	x	x	x	x	x	x	x
Input voltage	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz	90 - 264VAC / 47 - 63Hz
Max. output power	6.5W	14W	14.7W	14.9W	15.3W	14.4W	15.3W
Min. output voltage for ΔV detection	2.5V (min 2 cells × min 1.25V pr. cell)	3.75V (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)	18.75V (min 15 cells x min 1.25V pr. cell)
Max. output voltage for ΔV detection	3.4V (max 2 cells × max 1.7V pr. cell)	10.2V (max 6 cells x max 1.7V pr. cell)	13.6V (max 8 cells x max 1.7V pr. cell)	17V (max 10 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)	51V (max 30 cells x max 1.7V pr. cell)
ΔV sensitivity mV/cell	3mV/cell	3mV/cell	3mV/cell (approx.)	3mV/cell (approx.)	3mV/cell (approx.)	3mV/cell (approx.)	3mV/cell (approx.)
SoftStart current	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	25mA ± 10mA	25mA ± 10mA
null	@ Vbat < 2V	@ Vbat < 3.5V	@ Vbat < 4.8V	@ Vbat < 6V	@ Vbat < 7.2V	@ Vbat < 12.25V	@ Vbat < 18.75V
Fast charge current	1.3A ± 100mA	1.3A ± 100mA	1.0A ± 100mA	0.8A ± 100mA	0.7A ± 100mA	400mA ± 50mA	300mA ± 50mA
Top off charge	160mA ± 30mA	160mA ± 30mA	130mA ± 30mA	110mA ± 30mA	100mA ± 30mA	65mA ± 20mA	55mA ± 20mA
Trickle charge current	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	30mA ± 15mA	25mA ± 10mA	25mA ± 10mA
Efficiency at 100% load	0.7	0.76	0.78	0.8	0.81	0.84	0.84
Average efficency	>62%	>72%	>74%	>76%	>77%	>80%	>80%
No load consumption	0.5W	0.6W	0.6W	0.65W	0.7W	0.5W	0.75W
ΔV mask start timer	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period	3 min, no ΔV de-tection in this period
SoftStart Timer	10 minutes	10 min	10 min	10 min	10 min	10 min	10 min
Top-off timer	1 hour	1 hour	1 hour	1 hour	1 hour	1 hour	1 hour
Safety timer. The charger switch to trickle charge if no ΔV is detected before the safety timer has run out.	5 hours	5 hours	5 hours	5 hours	5 hours	5 hours	5 hours
Switch frequency	56kHz.	56kHz.	56kHz.	56kHz.	56kHz.	56kHz.	35kHz.
Temperature range	-20 to +40°C (these values are only for the charger, not for the batteries).	-20 to +40°C (these values are only for the charger, not for the batteries).	-20 to +40°C (these values are only for the charger, not for the batteries).	-20 to +40°C (these values are only for the charger, not for the batteries).	-20 to +40°C (these values are only for the charger, not for the batteries).	-20 to +40°C (these values are only for the charger, not for the batteries).	-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.	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.	ΔV principle. Fast charging stops when the voltage has dropped 3mV/cell below its maximum recorded level.	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.	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.
Leakage current from battery with mains switch off	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	< 0.5 mA at nominal battery voltage (< 0.4 Ah/month)
Fuses	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch at the output protects the unit against wrong polarity.	Fuse at input. Mosfet switch 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	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 / Battery Charger EN 60335-2-29

EMC-standards	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	EN 55014-1 and −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.
Input terminals	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS).
Output terminals	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.	Cord with/without plug. Exchangeable plugs available.
LED-indication	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	SoftStart / Fast charge: Yellow Top off charge: Flashing yellow Trickle charge: Green Battery not connected: Flashing green (1s/1s)	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.	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.	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.	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.	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.	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.	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.
Thermal control (Optional, requires battery with NTC)	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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).	+dT/dt principle. Fast charging stops when the temperature increment is over 0.5^{0}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.	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	IP 41.	IP 41.	IP 41.	IP 41.	IP 41.	IP 41.	IP 41.
Dimensions	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm	108,5 × 49 × 29,3 mm
Weight	150g.	150g.	150g.	150g.	150g.	150g.	150g.

Other	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.	Possible options on request: Charger parameters programmable with “Configurator tool”. Constant current charge (no battery management). 0dV detection for EoC. DoE compliance.