SPECIFICATIONS FOR 3743 LI

	1-cell Li-Ion	2-cell Li-Ion	3-cell Li-Ion	4-cell Li-Ion
Available versions	x			
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz			
Max output power	6.3 W	12.6 W	15.1 W	16.8 W
Step 0 < 10min Yellow	CC 100mA ± 25mA, when battery voltage < 3V.	CC 100mA ± 25mA, when battery voltage < 6V.	CC 100mA ± 25mA, when battery voltage < 9V.	CC 100mA ± 25mA, when battery voltage < 12V.
Step 0 > 10min Red (4 blinks)	0A / 0V			
Step 1 (Constant Current) Yellow	CC 1.5A ± 0.1A, when 3V < Vbat < 4.2V.	CC 1.5A ± 0.1A, when 6V < Vbat < 8.4V.	CC 1.2A ± 0.1A, when 9V < Vbat < 12.6V.	CC 1A ± 0.1A, when 12V < Vbat < 16.8V.
Step 2 (Constant Voltage) Flashing Yellow	CV 4.2V ± 0.05V, til Icharge < 100mA or max. 1h.	CV 8.4V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 12.6V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 16.8V ± 0.1V, til Icharge < 100mA or max. 1h.
Charge timer (step2, CV)	1h			
Safety timer (all steps) Red (5 blinks)	72h			
Step 3 (Charge Completed) Green	0A			
Restart voltage	4.1V	8.2V	12.3V	16.4V
Efficiency (at 100% load) approx.	0.79	0.81	0.82	0.83
Average efficiency	> 76 %	> 78 %	> 80 %	> 80 %
No load consumption	< 0,5 W			
Switch frequency approx.	56kHz			
Ripple	< 100mV p-p			
Rec. battery capacity	1,5Ah (1C) to 10Ah (cut off current as EoC) or up to 60Ah (CV Timer as EoC)	1,5Ah (1C) to 10Ah (cut off current as EoC) or up to 60Ah (CV Timer as EoC)	1,2Ah (1C) to 10Ah (cut off current as EoC) or up to 48Ah (CV Timer as EoC)	1Ah (1C) to 10Ah (cut off current as EoC) or up to 40Ah (CV Timer as EoC)
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.			
Wake-up of deeply discharged battery.	Yes, will apply voltage which deactivates deep discharge protection in battery pack.			
Indication when “Battery not connected”	Flashing Green (1s/1s)			
NTC input, on request (std is 10kohm, B-value approx. 4000)	0 – 45 °C: Normal charge. Battery temperature < 0 °C (too cold) or > 45°C (too hot): No charge, wait until temp. is OK.			
Leakage current from battery with mains switched off	< 300 µA at nominal battery voltage (< 0.22 Ah/month)			
Protection	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 10min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.			
Temperature range	Operating: ÷25 to +40oC. Storage: ÷25 to +85oC			
Safety	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 (VNOM≥110VAC) / Battery Charger EN 60335-2-29			
Insulation class	Class II			
Insulation voltage: Primary – secondary	4000VAC / 5700VDC			
EMC standards	EN 55014-1 and –2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2			
Input terminal	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.			
Output terminals	Cord with/without plug. Exchangeable plugs available.			
IP-Grade	IP41			
Dimensions	108,5 × 49 × 29,3 mm			
Weight	150g			

SPECIFICATIONS FOR 3743 LI

	5-cell Li-Ion	6-cell Li-Ion	7-cell Li-Ion	8-cell Li-Ion
Available versions	x		x	
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz			
Max output power	16.8 W	16.8 W	16.5 W	16.8 W
Step 0 < 10min Yellow	CC 100mA ± 25mA, when battery voltage < 15V.	CC 100mA ± 25mA, when battery voltage < 18V.	CC 100mA ± 25mA, when battery voltage < 21V.	CC 100mA ± 25mA, when battery voltage < 24V.
Step 0 > 10min Red (4 blinks)	0A / 0V			
Step 1 (Constant Current) Yellow	CC 0.8A ± 0.1A, when 15V < Vbat < 21V.	CC 0.66A ± 0.1A, when 18V < Vbat < 25.2V.	CC 0.56A ± 0.1A, when 21V < Vbat < 29.4V.	CC 0.5A ± 0.1A, when 24V < Vbat < 33.6V.
Step 2 (Constant Voltage) Flashing Yellow	CV 21V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 25.2V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 29.4V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 33.6V ± 0.1V, til Icharge < 100mA or max. 1h.
Charge timer (step2, CV)	1h			
Safety timer (all steps) Red (5 blinks)	72h			
Step 3 (Charge Completed) Green	0A			
Restart voltage	20.5V	24.6V	28.7V	32.8V
Efficiency (at 100% load) approx.	0.83	0.84	0.84	0.84
Average efficiency	> 80 %			
No load consumption	< 0,5 W			
Switch frequency approx.	56kHz			
Ripple	< 100mV p-p			
Rec. battery capacity	0,8Ah (1C) to 10Ah (cut off current as EoC) or up to 32Ah (CV Timer as EoC)	0,66Ah (1C) to 10Ah (cut off current as EoC) or up to 26,4Ah (CV Timer as EoC)	0,56Ah (1C) to 10Ah (cut off current as EoC) or up to 22,4Ah (CV Timer as EoC)	0,5Ah (1C) to 10Ah (cut off current as EoC) or up to 20Ah (CV Timer as EoC)
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.			
Wake-up of deeply discharged battery.	Yes, will apply voltage which deactivates deep discharge protection in battery pack.			
Indication when “Battery not connected”	Flashing Green (1s/1s)			
NTC input, on request (std is 10kohm, B-value approx. 4000)	0 – 45 °C: Normal charge. Battery temperature < 0 °C (too cold) or > 45°C (too hot): No charge, wait until temp. is OK.			
Leakage current from battery with mains switched off	< 300 µA at nominal battery voltage (< 0.22 Ah/month)			
Protection	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 10min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.			
Temperature range	Operating: ÷25 to +40oC. Storage: ÷25 to +85oC			
Safety	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 (VNOM≥110VAC) / Battery Charger EN 60335-2-29			
Insulation class	Class II			
Insulation voltage: Primary – secondary	4000VAC / 5700VDC			
EMC standards	EN 55014-1 and –2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2			
Input terminal	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.			
Output terminals	Cord with/without plug. Exchangeable plugs available.			
IP-Grade	IP41			
Dimensions	108,5 × 49 × 29,3 mm			
Weight	150g			

SPECIFICATIONS FOR 3743 LI

	9-cell Li-Ion	10-cell Li-Ion	11-cell Li-Ion	12-cell Li-Ion
Available versions				
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz			
Max output power	17 W	16.8 W	17.1 W	16.6 W
Step 0 < 10min Yellow	CC 100mA ± 25mA, when battery voltage < 27V.	CC 100mA ± 25mA, when battery voltage < 30V.	CC 100mA ± 25mA, when battery voltage < 33V.	CC 100mA ± 25mA, when battery voltage < 36V.
Step 0 > 10min Red (4 blinks)	0A / 0V			
Step 1 (Constant Current) Yellow	CC 0.45A ± 0.1A, when 27V < Vbat < 37.8V.	CC 0.4A ± 0.1A, when 30V < Vbat < 42V.	CC 0.37A ± 0.1A, when 33V < Vbat < 46.2V.	CC 0.33A ± 0.1A, when 36V < Vbat < 50.4V.
Step 2 (Constant Voltage) Flashing Yellow	CV 37.8V ± 0.1V, til Icharge < 100mA or max. 1h.	CV 42V ± 0.1V, til Icharge < 80mA or max. 1h.	CV 46.2V ± 0.1V, til Icharge < 80mA or max. 1h.	CV 50.4V ± 0.1V, til Icharge < 80mA or max. 1h.
Charge timer (step2, CV)	1h			
Safety timer (all steps) Red (5 blinks)	72h			
Step 3 (Charge Completed) Green	0A			
Restart voltage	36.9V	41V	45.1V	49.2V
Efficiency (at 100% load) approx.	0.84			
Average efficiency	> 80 %			
No load consumption	< 0,5 W			
Switch frequency approx.	56kHz			
Ripple	< 100mV p-p			
Rec. battery capacity	0,45Ah (1C) to 10Ah (cut off current as EoC) or up to 18Ah (CV Timer as EoC)	0,4Ah (1C) to 8Ah (cut off current as EoC) or up to 16Ah (CV Timer as EoC)	0,37Ah (1C) to 8Ah (cut off current as EoC) or up to 14,8Ah (CV Timer as EoC)	0,33Ah (1C) to 8Ah (cut off current as EoC) or up to 13,2Ah (CV Timer as EoC)
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.			
Wake-up of deeply discharged battery.	Yes, will apply voltage which deactivates deep discharge protection in battery pack.			
Indication when “Battery not connected”	Flashing Green (1s/1s)			
NTC input, on request (std is 10kohm, B-value approx. 4000)	0 – 45 °C: Normal charge. Battery temperature < 0 °C (too cold) or > 45°C (too hot): No charge, wait until temp. is OK.			
Leakage current from battery with mains switched off	< 300 µA at nominal battery voltage (< 0.22 Ah/month)			
Protection	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 10min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.			
Temperature range	Operating: ÷25 to +40oC. Storage: ÷25 to +85oC			
Safety	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 (VNOM≥110VAC) / Battery Charger EN 60335-2-29			
Insulation class	Class II			
Insulation voltage: Primary – secondary	4000VAC / 5700VDC			
EMC standards	EN 55014-1 and –2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2			
Input terminal	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.			
Output terminals	Cord with/without plug. Exchangeable plugs available.			
IP-Grade	IP41			
Dimensions	108,5 × 49 × 29,3 mm			
Weight	150g			

SPECIFICATIONS FOR 3743 LI

	13-cell Li-Ion	14-cell Li-Ion
Available versions	x	
Input voltage: / Line frequency	90 - 264VAC / 47 - 63Hz	
Max output power	16.38 W	17.6 W
Step 0 < 10min Yellow	CC 80mA ± 25mA, when battery voltage < 39V.	CC 80mA ± 25mA, when battery voltage < 42V.
Step 0 > 10min Red (4 blinks)	0A / 0V	
Step 1 (Constant Current) Yellow	CC 0.3A ± 0.1A, when 39V < Vbat < 54.6V.	CC 0.3A ± 0.1A, when 42V < Vbat < 58.8V.
Step 2 (Constant Voltage) Flashing Yellow	CV 54.6V ± 0.1V, til Icharge < 56mA or max. 1h.	CV 58.8V ± 0.1V, til Icharge < 56mA or max. 1h.
Charge timer (step2, CV)	1h	
Safety timer (all steps) Red (5 blinks)	72h	
Step 3 (Charge Completed) Green	0A	
Restart voltage	53.3V	57.4V
Efficiency (at 100% load) approx.	0.84	
Average efficiency	> 80 %	
No load consumption	< 0,5 W	
Switch frequency approx.	56kHz	
Ripple	< 100mV p-p	
Rec. battery capacity	0,3Ah (1C) to 5,6Ah (cut off current as EoC) or up to 12Ah (CV Timer as EoC)	
Formation Charge (Step 0)	Low current start-up of deeply discharged battery.	
Wake-up of deeply discharged battery.	Yes, will apply voltage which deactivates deep discharge protection in battery pack.	
Indication when “Battery not connected”	Flashing Green (1s/1s)	
NTC input, on request (std is 10kohm, B-value approx. 4000)	0 – 45 °C: Normal charge. Battery temperature < 0 °C (too cold) or > 45°C (too hot): No charge, wait until temp. is OK.	
Leakage current from battery with mains switched off	< 300 µA at nominal battery voltage (< 0.22 Ah/month)	
Protection	Protected against reversed polarity. Error Indication: Red (2 blinks) Short circuit proof. Error Indication: Red (3 blinks) Charging of wrong lower voltage battery pack will be limited to 100mA and terminated after 10min. Indication: Red (4 blinks) Safety timer. Error Indication: Red (5 blinks) No charge (or charge terminated) if connecting wrong battery pack with higher voltage. Indication: LED is OFF.	
Temperature range	Operating: ÷25 to +40oC. Storage: ÷25 to +85oC	
Safety	Medical EN 60601-1 / Home Healthcare EN 60601-1-11 (VNOM≥110VAC) / Battery Charger EN 60335-2-29	
Insulation class	Class II	
Insulation voltage: Primary – secondary	4000VAC / 5700VDC	
EMC standards	EN 55014-1 and –2, EN 61000-6-3, EN 61000-6-1, EN 60601-1-2	
Input terminal	2-pins IEC 320 connector for exchangeable mains plug (EU, US, UK and AUS) or mains cord with C7 connector.	
Output terminals	Cord with/without plug. Exchangeable plugs available.	
IP-Grade	IP41	
Dimensions	108,5 × 49 × 29,3 mm	
Weight	150g	