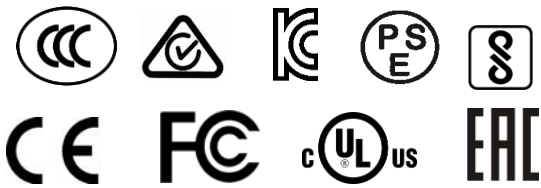


RRC-SMB-FPC

Standard battery charger
for smart batteries

P/N: 110083



Features:

- 40W single bay charger
- For the standard battery form factors RRC21xx or smart batteries with a similar footprint
- Optimized charging process for RRC batteries:
 - Longer cycle life
 - Faster charging
- Simple operation – Plug and Play
- External power supply for worldwide use
- Country specific AC input cables available

Applications:

Standard charging station for mobile devices used in medical, industrial and consumer markets



Specification

Input		
Voltage range	19.00 – 26.00VDC	
Current	2.30A max.	
Power	40.00W	
Output		
Voltage range	0 - 17.40VDC	
Current range	0 - 4.00A	
Voltage tolerance ⁽¹⁾	±1% max.	
Current tolerance ⁽¹⁾	±10% max. @1.00A, ±3% max. @4.00A	
Charge power	40.00W max.	
Protection	Short circuit, over temperature shutdown, input-/output over current	
Environmental		
Cooling	convection cooled	
Temperature	Operating: 0°C to 40°C	Non-operating: -10°C to 70°C
Pressure & Altitude	Operating: 1060hPa to 795hPa -382m to 2000m	Non-operating: 1060hPa to 572hPa -382m to 4570m
Humidity	5% to 95% r.H., non-condensing	
General		
Efficiency ⁽²⁾	~95% at 100% load	
Indicator	Multi-color LED (green, red, orange)	
Battery types	Standard battery form factors RRC21xx or smart batteries with a similar footprint	
Green procurement	RoHS 2011/65/EU WEEE 2012/19/EU Chinese RoHS	
LED Indications		
One time Red/Orange/Green	Self-test: Charger is ready for use.	
Red/Green blinking	Battery recognition and initialization.	
Orange light	The inserted battery is of the correct type and is currently being charged.	
Green light	The battery is charged and can be removed for use.	
Red blinking	The battery is too hot or too cold to be charged without damage. If the battery is too cold it will be charged as soon as it has warmed up sufficiently. If the battery is too hot it should be removed to cool down.	
Red light	The battery is damaged or it is a conventional battery which cannot be recharged.	
Charger Mechanical Details		
Housing dimensions (LxWxH)	88.5 x 38.5 x 19.9mm	
Weight	36g (excluding power supply)	
Safety & EMC		In combination with included external AC/DC power supply
Regulatory approvals	Europe International	CE CB
Electromagnetic Emissions	Europe USA	EN55011, EN55032, level B FCC15 class B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity EFT / Burst Surge Conducted Immunity Magnetic Fields Voltage dips, short instrumentations & voltage variations Immunity characteristics	EN/IEC61000-4-2 EN/IEC61000-4-3 EN/IEC61000-4-4 EN/IEC61000-4-5 EN/IEC61000-4-6 EN/IEC61000-4-8 EN/IEC61000-4-11 EN55024

Specification external AC/DC power supply

Input		
Voltage range	100.00 – 240.00VAC	
Current	1.70A max.	
Stand by power	No load < 0.50W @ 230.00VAC	
Output		
Voltage range	19.00VDC	
Power	65.00W max.	
Current range	3.40A	
Protection	Over voltage, over current, short circuit	
Environmental		
Temperature	Operating: 0°C to 40°C	Non-operating -10°C to 70°C
General		
Efficiency	California's Energy Efficiency Level VI	
Ripple & Noise	300mV (p-p)	
Power Supply Mechanical Details		
Standard output connector	DC barrel jack, 5.5 x 2.5mm	
Housing dimensions (LxWxH)	95 x 50 x 25.4mm	
Weight	270g	
Regulatory Approvals		
Approvals	Europe International USA & Canada Australia & New Zealand Russia (Customs Union) Korea China Japan India	CE CB cULus RCM EAC KC CCC PSE BIS

Recommended Accessories

Type	Product	P/N	Application
3-pol AC-Cable 	US-Version	210950	Country specific power cable for standard battery chargers from RRC and PS65.
	EU-Version	210951	
	UK-Version	211333	
	AU-Version	211334	
Car Adapter DC/DC 	RRC-SMB-CAR	110041	90W car adapter with USB charging port. Power supplying in cars and trucks for standard battery chargers and power management modules from RRC or mobile devices.

Germany/Headquarters

RRC power solutions GmbH
Technologiepark 1
66424 Homburg / Saar

Tel.: +49 6841 98090
Fax: +49 6841 9809280
Email: sales@rrc-ps.de
Web: www.rrc-ps.de

USA

RRC power solutions Inc.
18340 Yorba Linda Blvd.,
107-437 Yorba Linda,
CA 92886-4104

Tel.: +1 714 777 3604
Fax: +1 714 777 3658
Email: usa@rrc-ps.com
Web: www.rrc-ps.com

Hong Kong

RRC power solutions Ltd.
S-V,6/F, Valiant Industrial
Centre 2-12 Au Pui Wan Street
Fo Tan, N.T., Hong Kong

Tel.: +852 2376 0106
Fax: +852 2375 0107
Email: hkrrc@rrc-ps.cn
Web: www.rrc-ps.com

China

RRC power solutions Ltd.
Room 1306, C Building,
Tianan International building,
Renmin South Road, Luohu
District, Shenzhen 518021

Tel.: +86 755 8374 1908
Fax: +86 755 8374 1861
Email: hkrrc@rrc-ps.cn
Web: www.rrc-ps.com