

RRC-SMB-HBC

Standard battery charger
for smart batteries

P/N: 110311



Picture only for reference



Features

- 100W single-bay charger
- For the standard battery form factors RRC35xx 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

Characteristics

Input		
Voltage range	19.00 – 24.00VDC	
Current	5.3A max.	
Power	100.00W max.	
Output		
Voltage range	0 – 29.40VDC	
Current range	0 – 4.20A	
Voltage tolerance	±1% max.	
Current tolerance	±10% max. @1.00A ±3% max. @4.00A	
Charge power	90.00W max.	
Protection	Short circuit, over temperature shutdown, input-/output over current	
Environmental		
	Operation:	Storage:
Ambient Temperature	0°C to 40°C	-30°C to 80°C
Pressure and Altitude	1060hPa to 795hPa -382m to 2000m	1060hPa to 533hPa -382m to 5000m
Humidity (non-condensing)	8% to 90% r.H.	5% to 95% r.H.
General		
Efficiency	~95% at 100% load	
Indicator	Multi-color LED	
Battery types	Standard battery form factors RRC35xx or smart batteries with a similar footprint	
Green procurement	RoHS 2011/65/EU + 2015/863/EU REACH 1907/2006 WEEE 2012/19/EU Chinese RoHS	
Cooling	convection cooled	
LED Indications		
White blinking (1-2 seconds)	Charger is plugged in	
LED off	Charger has been recognized, is ready for use and no battery is installed	
Yellow light	Charger has an error	
White blinking	Battery is plugged in and recognized	
White pulsating (slow blinking)	Battery is charging. SoC below 80%.	
White continuously illuminated	Battery is charged from 80% SoC	
Green continuously illuminated	Battery is fully charged	
Yellow blinking	Reversible errors	
Red continuously illuminated	The battery has a severe defect, or it is a non-smart battery	
Charger Mechanical Details		
Housing dimensions (LxWxH)	125 x 67 x 53mm	
Weight	170g (excluding power supply)	
Safety & EMC		
	In combination with included external AC/DC power supply	
Regulatory approvals	Europe	EN62368-1 (CE)
	International	IEC62368-1 (CB)
Electromagnetic Emissions	Europe	EN55011, EN55032, level B
	USA	FCC15 class B
	Canada	ICES-003, class B
Electromagnetic Immunity	ESD immunity	EN/IEC61000-4-2
	Electromagnetic field immunity	EN/IEC61000-4-3
	EFT / Burst	EN/IEC61000-4-4
	Surge	EN/IEC61000-4-5
	Conducted Immunity	EN/IEC61000-4-6
	Magnetic Fields	EN/IEC61000-4-8
	Voltage dips, short instrumentations & voltage variations	EN/IEC61000-4-11
	Immunity characteristics	EN55035

Specification external AC/DC power supply

Input		
Voltage range	100.00 – 240.00VAC ±10%, 50-60Hz	
Current	1.90A max.	
Stand by power	0.15W @ no load	
Output		
Voltage range	20.00VDC ± 5%; Ripple < 380mV _{pk-pk}	
Power	100.00W max.	
Current range	5A max.	
Protection	Short circuit, over-voltage, over-current, over temperature	
General		
Efficiency	California's Energy Efficiency Level VI	
Ripple & Noise	380mV (p-p)	
Power Supply Mechanical Details		
Standard output connector	DC barrel jack, 5.5 x 2.5 x 11mm	
Housing dimensions (LxWxH)	127 x 51 x 30mm	
Weight	400g max.	
Cable length	1500mm +/-50	
Regulatory Approvals		
Approvals	Europe	CE
	International	CB
	USA & Canada	cULus
	Australia & New Zealand	RCM
	Russia (Customs Union)	EAC
	Korea	KC
	China	CCC
	Japan	PSE
	India	BIS
	Taiwan	BSMI
	Mexico	NOM
	Argentina	IRAM
	Singapore	Safety Mark
	South Africa	SABS
	Morocco	CMIM
	United Kingdom	UKCA
	Israel	SII

Recommended Accessories

Type	Product	P/N	Application
3-pol AC-Cable	US-Version	210950	Country-specific power cable for standard battery chargers from RRC, PS65 and PS100.
	EU-Version	210951	
	UK-Version	211133	
	AU-Version	211134	
	CN-Version	211959	



Germany/HQ
RRC power solutions GmbH
Technologiepark 1
66424 Homburg / Saar

+49 6841 98090
sales@rrc-ps.com

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

+1 714 777 3604
usa@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

+852 2376 0106
hkrrc@rrc-ps.cn

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

+86 755 8374 1908
hkrrc@rrc-ps.cn

Vietnam
RRC Power Solutions
Company Ltd.
Block C, Lot CN4
Dinh Vu – Cat Hai
Economic Zone,
Dong Hai 2 Ward
Hai An District 180000
Hai Phong City

vietnam@rrc-ps.com