

## **RRC-SMB-HBC**

Standard battery charger for smart batteries

P/N: 110311





## **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 - 30.45VDC
Current range	0 - 6.00A
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	4(	
	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-ç <del>olor</del> (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
	WEE 2012/19/EU

Chinese RoHS
Cooling

# LED Indications

TBC

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	
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 &	EN/IEC61000-4-11	
	voltage variations		
	Immunity characteristics	EN55035	



# Specification external AC/DC power supply

Input			
Voltage range	100.00 - 240.00VAC ±10%, 50-60Hz		
Current	5A max.	$\langle \rangle$	
Stand by power	0.15W @ no load		
Output			
Voltage range	20.00VDC ± 5%; Ripple < $380$ mV <sub>Rk-pk</sub>	$\setminus$ $\cup$	
Power	100.00W max.	$\searrow$	
Current range	5A max.	7	
Protection	Short circuit, over-voltage, over-curren	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 10mm		
Housing dimensions (LxWxH)	127 x 51 x 30mm		
Weight	400g max		
Cable length	1800mm +250/-0		
Regulatory Approvals			
Approvals	Europe International USA & Canada Australia & New Zealand Russia (Customs Union) Korea China Japan India Taiwan Mexico Singapore	CE CB cULus RCM EAC KC CCC PSE BIS BSMI NOM Safety Mark UKCA	
	United Kingdom Morocco	CMIM	



## **Recommended Accessories**

Туре	Product	P/N	Application
3-pol AC-Cable	US-Version EU-Version UK-Version AU-Version CN-Version	210950 210951 211133 211134 211959	Country-specific power cable for standard battery chargers from RRC and PS65.
Car Adapter DC/DC	RRC-SMB-CAR	110041	90W car adapter with USB charging port (charging power 90W max.). Power supply in cars and trucks for standard battery chargers and power management modules from RRC or mobile devices.

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