

## RRC-SMB-HBC

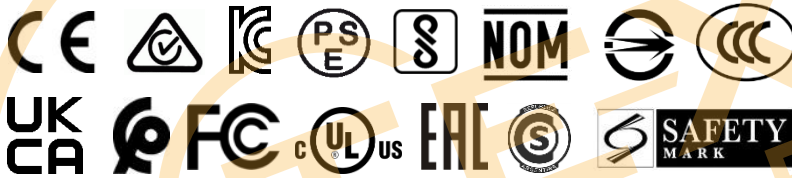
Standard battery charger  
for smart batteries

P/N: 110311



Picture only for reference

Distributed by:



### 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 <sub>pk-pk</sub>
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 International USA & Canada Australia & New Zealand Russia (Customs Union) Korea China Japan India Taiwan Mexico Argentina Singapore South Africa Morocco United Kingdom Israel	CE CB cULus RCM EAC KC CCC PSE BIS BSMI NOM IRAM Safety Mark SABS CMIM UKCA 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	



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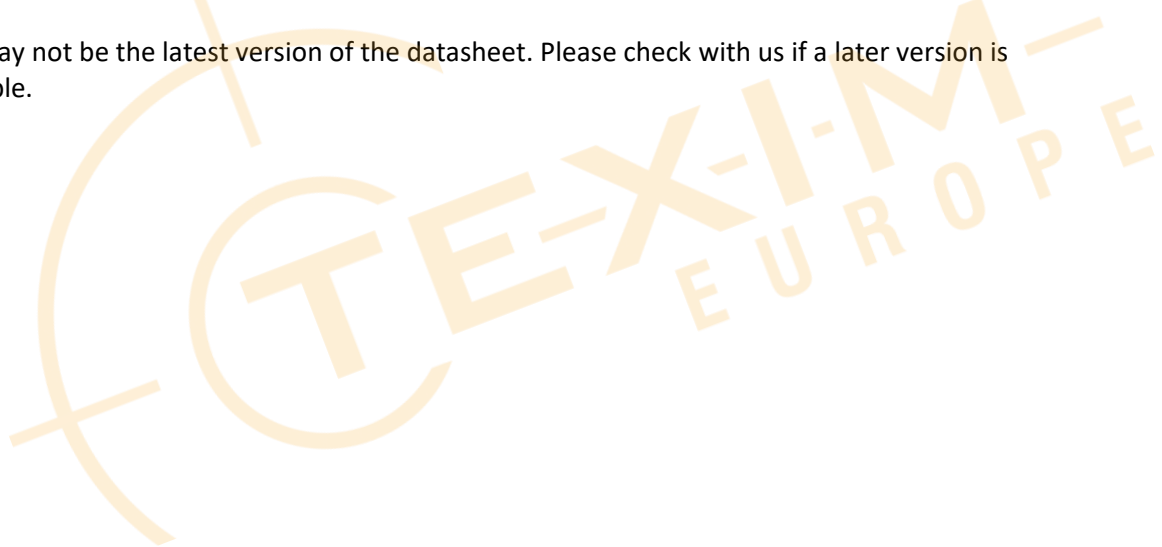
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Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

Please contact us if you have any questions about the contents of the datasheet.

This may not be the latest version of the datasheet. Please check with us if a later version is available.





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