

## RRC-SMB-1BC

Standard battery charger  
for smart batteries

P/N: 110345

Distributed by:



### Features:

- For the standard battery form factors RRC203x, RRC204x and RRC205x 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

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## Specification

<b>Input</b>		
Voltage range	19.00 - 24.00VDC	
Current	2.37A max.	
Power	45.00W	
<b>Output</b>		
Voltage range	0 - 17.40VDC	
Current range	0 - 4.70A	
Voltage tolerance	±1% max.	
Current tolerance	±10% max. @1.00A, ±3% max. @4.00A	
Charge power	45.00W max.	
Protection	Short circuit, over temperature shutdown, input-/output over current	
<b>Environmental</b>		
Operation:		
Ambient Temperature	0°C to 35°C	-30°C to 80°C
Pressure and Altitude	1060hPa to 533hPa -382m to 5000m	1060hPa to 533hPa -382m to 5000m
Humidity (non-condensing)	5% to 90% r.H.	5% to 95% r.H.
<b>General</b>		
Efficiency	~95% at 100% load	
Indicator	Multi-color LED	
Battery types	Standard battery form factors RRC203x, RRC204x and RRC205x 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	
<b>LED Indications</b>		
White blinking (1-2 seconds)	Charger is plugged in	
LED off	Charger is ready for use, and no battery is installed	
Red blinking	Charger has an error	
White blinking	Battery is plugged in and recognized	
White breathing (slow blinking)	Battery is charging. SoC below 100%	
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	
<b>Charger Mechanical Details</b>		
Housing dimensions (LxWxH)	120x64x43 (mm)	
Weight	~110g (without power supply)	
<b>Safety &amp; EMC</b>		<b>In combination with included external AC/DC power supply</b>
Regulatory approvals	Europe	EN62368-1 (CE)
	International	IEC62368-1 (CB)
Electromagnetic Emissions	Europe	EN55032, EN55035, 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 interruptions & voltage variations	EN/IEC61000-4-11
	Immunity characteristics	EN55035

## Specification external AC/DC power supply (PS45)

P/N: 212721

<b>Input</b>		
Voltage range	100.00 – 240.00VAC ±10%, 50-60Hz	
Stand by power	< 0.075W @ no load	
<b>Output</b>		
Voltage range	19.00VDC ± 5%	
Power	45.00W max.	
Current range	2.37A max.	
Protection	Short circuit, over voltage, over current, over temperature	
<b>General</b>		
Efficiency	California's Energy Efficiency Level VI	
Ripple & Noise	380mV (p-p)	
<b>Power Supply Mechanical Details</b>		
Standard output connector	DC barrel jack, 5.5 x 2.5 x 10mm	
Housing dimensions (LxWxH)	95 x 40 x 26.5mm	
Weight	~155g	
Cable length	1600mm ±50mm	
<b>Regulatory Approvals</b>		
Approvals	Europe International USA & Canada Australia & New Zealand Russia (Customs Union) Korea China Japan India Taiwan Thailand Argentina Singapore United Kingdom Morocco Mexico South Africa Israel	CE CB cULus RCM EAC KC CCC PSE BIS BSMI TISI IRAM Safety Mark UKCA CMIM NOM SABS SII


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## Recommended Accessories

Type	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 PS45.
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.


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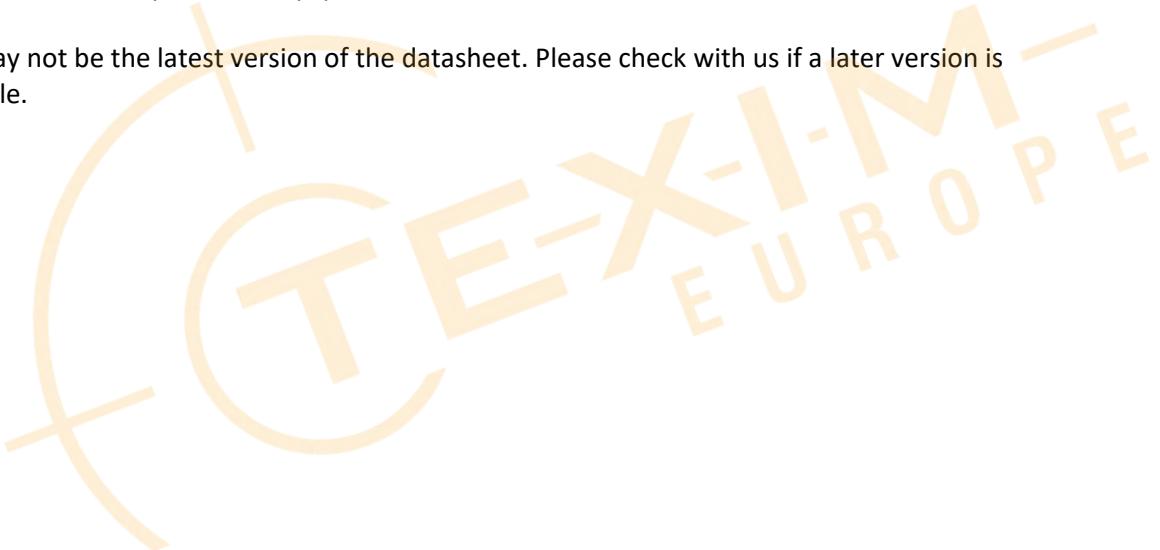
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Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time.

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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