

RRC-SMB-4BC

4-bay standard battery charger
for smart batteries

P/N: 110329



Picture only for reference



Features

- 100W 4-bay charger
- Prioritized charging possible: faster charging of one bay integrated, triggered by push button
- For the standard battery form factors RRC203x, RRC204x, and RRC205x
- 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 desktop charger for smart batteries powering mobile devices used in e.g. medical, industrial, and consumer markets.

Specification



Input		
Voltage	19.00 – 24.00VDC	
Current	5.3A max.	
Power	100.00W	
Protection	Over-current (fuse protected), under voltage	
Output		
Voltage	0 - 17.40VDC	
Current	0 - 4.70A	
Voltage tolerance	±1% max.	
Current tolerance	±10% max. @1.0A, ±3% max. @4.00A	
Charge power	100.00W max., two charging sources with 50.00W each	
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 & Altitude	1060hPa to 533hPa -382m to 5000m	1060hPa to 533hPa -382m to 5000m
Humidity (non-condensing)	5% to 90% r.H.	5% to 90% r.H.
General		
Efficiency	~95% at 100% load	
Indicator	Multi-color LED (green, red, yellow, white)	
Battery types	Standard battery form factors RRC203x, RRC204x and RRC205x	
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 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 SoC above 80%, charger is still charging	
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	
White light (Illumination ring)	The prioritized charging mode for the left bay is activated: Continuous charging of the left bay at the highest allowed speed. The other bays operate with reduced charging power.	
Charger Mechanical Details		
Housing dimensions (LxWxH)	220x120x46 (mm)	
Weight	~420g (without power supply)	
Safety & EMC		
Regulatory approvals	Europe	EN62368-1 (CE)
	International	IEC62368-1 (CB)
Electromagnetic Emissions	Europe	EN55032, EN55035, level B
	USA	FCC15 class B
	Canada	ICES-003
	Korea	KCC
Electromagnetic Immunity	Electromagnet 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

Specification for external AC/DC power supply (RRC-PS100)

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Input		
Voltage	100.00 – 240.00VAC ±10%, 50-60Hz	
Stand by power	< 0.15W @ no load	
Output		
Voltage range	20.00VDC ± 5%	
Power	100.00W max.	
Current range	5.00A 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	325g ± 5%	
Cable length	1600mm ± 50mm	
Regulatory Approvals		
Approvals	Europe International USA & Canada Australia Russia (Customs Union) Korea China Japan India Taiwan Thailand Mexico Argentina South Africa Singapore United Kingdom Morocco South Africa Israel	CE CB cULus RCM EAC KC CCC PSE BIS BSMI TISI NOM IRAM SABS Safety Mark UKCA CMIM S-Mark SII

Recommended Accessories

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