

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	
Cooling	convection cooled	
IP rating	IP40	
LED Indications		
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	
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)	
Compliance		
	In combination with included external AC/DC power supply	
Regulatory approvals	Europe International United Kingdom	EN62368-1 (CE) IEC62368-1 (CB) BS EN62368-1
Material Compliance	Europe	RoHS2011/65/EU + 2015/863/EU REACH 1907/2006 WEEE 2012/19/EU POP
	USA China	TSCA, PROP65, PFAS Chinese RoHS
Electromagnetic Emissions	Europe United Kingdom USA Canada Korea International	EN55032, Class B BS EN 55032, Class B FCC15 class B ICES-003, Class B KCC CISPR 32, Class B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity EFT / Burst	EN/IEC61000-4-2 EN/IEC61000-4-3 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	EN 55035, BS EN 55035, CISPR 35

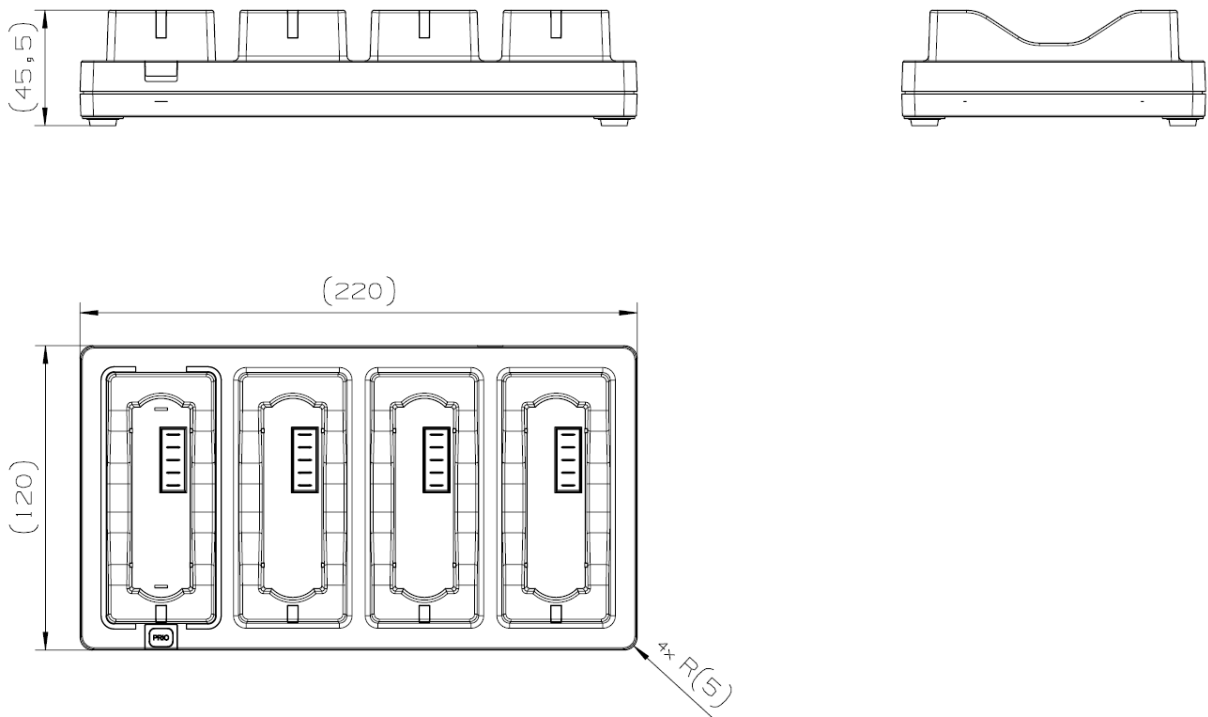
Specification for external AC/DC power supply (PS100)

P/N: 212532

Input		
Voltage	100.00 – 240.00VAC ±10%, 50-60Hz	
Current	1.90A max.	
Standby power	< 0.15W @ no load	
Output		
Voltage	20.00VDC ± 5%	
Power	100.00W max.	
Current	5.00A max.	
Protection	Short circuit, over-voltage, over-current, over-temperature	
Environmental		
Ambient temperature	Operation: 0°C to 40°C	Storage: -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.
Mechanical Details		
Housing dimensions (LxWxH)	127 x 51 x 30mm	
Output cable length	1600mm ±50mm	
Weight	325g ± 5%	
AC input socket	IEC 320 C6 Type	
Standard output connector	DC barrel jack, 5.5 x 2.5 x 10mm	
General		
Efficiency	California's Energy Efficiency Level VI Natural Resources Canada (NRCan) Energy Efficiency	
Cooling	Convection cooled	
MTBF	100,000h at 25°C ambient	
Ripple & Noise	380mV (p-p)	
IP rating	IP40	
Enclosure material	UL94-V0 PC	
Compliance		
Regulatory approvals	Europe United Kingdom International USA & Canada Australia & New Zealand Russia & Eurasian Customs Union Korea China Japan India Taiwan Thailand Mexico Singapore Argentina South Africa Morocco Israel Malaysia	EN62368-1 (CE) BS EN62368-1 IEC62368-1 (CB) FCC, cULus RCM EAC, EAEU KC CCC PSE BIS BSMI TISI NOM Safety Mark IRAM SABS CMIM SII ST

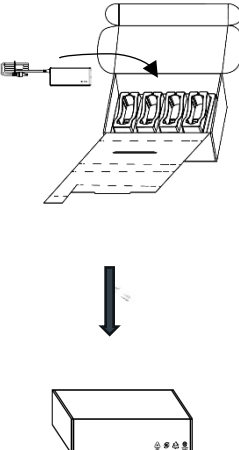
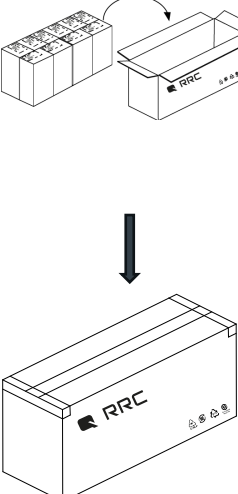
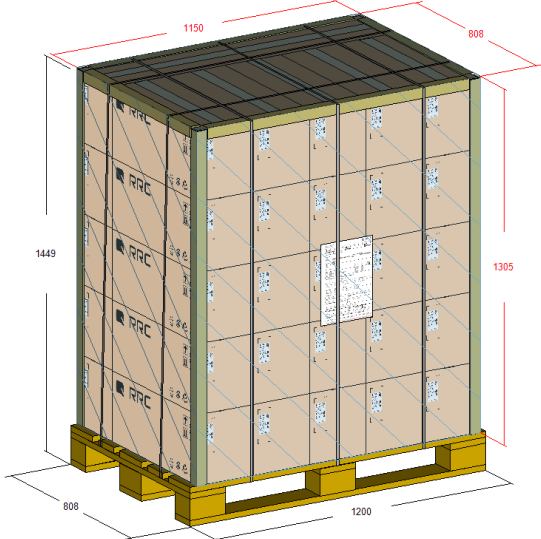
Material Compliance	Europe	RoHS 2011/65/EU + 2015/863/EU REACH 1907/2006 WEEE 2012/19/EU POP TSCA, PROP65, PFAS Chinese RoHS
	USA China	

Drawing



All dimensions in mm.

Packaging

	Single-Box	Outer-Box	Pallet	
			Euro-Pallet 	
			One Layer	Max Layer
Dimension	247x127x87mm	538x228x260mm	Net: 1150x808x260mm Gross: 1200x808x404mm	Net: 1150x808x1305mm Gross: 1200x808x1449mm
Quantity	1x RRC-SMB-4BC + 1 x PS100	10 x Single Box	5 x 1 + 2 Outer-Box	5 Layers (350 x Single Box)
Weight	895 g	9.46 kg	Net ⁽¹⁾ : ~ 66.2 kg Gross ⁽²⁾ : ~ 86.2 kg	Net ⁽¹⁾ : ~ 331 kg Gross ⁽²⁾ : ~ 351 kg

⁽¹⁾Net: without pallet

⁽²⁾Gross: with pallet

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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