RRC-SMB-1BC

Standard battery charger
for smart batteries

P/N: 110345



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

Input	
Voltage range	19.00 – 24.00VDC
Current	2.37A max.
Power	45.00W

Output	
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

Environmental	Operation:	Storage:
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.

General	
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

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

Charger Mechanical Details	
Housing dimensions (LxWxH)	120x64x43 (mm)
Weight	~110g (without power supply)

Safety & EMC	In combination with included external AC/DC power supply	
Regulatory approvals	Europe International	EN62368-1 (CE) IEC62368-1 (CB)
Electromagnetic Emissions	Europe USA Canada	EN55032, EN55035, level B FCC15 class B ICES-003, class B
Electromagnetic Immunity	ESD immunity Electromagnetic field immunity EFT / Burst Surge Conducted Immunity Magnetic Fields Voltage dips, short interruptions & voltage variations Immunity characteristics	EN/IEC61000-4-2 EN/IEC61000-4-3 EN/IEC61000-4-4 EN/IEC61000-4-5 EN/IEC61000-4-6 EN/IEC61000-4-8 EN/IEC61000-4-11 EN55035

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Specification external AC/DC power supply (PS45)

P/N: 212721

Input	
Voltage range	100.00 – 240.00VAC ±10%, 50-60Hz
Stand by power	< 0.075W @ no load

Output	
Voltage range	19.00VDC ± 5%
Power	45.00W max.
Current range	2.37A 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 10mm
Housing dimensions (LxWxH)	95 x 40 x 26.5mm
Weight	~155g
Cable length	1600mm ±50mm

Regulatory Approvals		
Approvals	Europe	CE
	International	CB
	USA & Canada	cULus
	Australia & New Zealand	RCM
	Russia (Customs Union)	EAC
	Korea	KC
	China	CCC
	Japan	PSE
	India	BIS
	Taiwan	BSMI
	Thailand	TISI
	Argentina	IRAM
	Singapore	Safety Mark
	United Kingdom	UKCA
	Morocco	CMIM
	Mexico	NOM
	South Africa	SABS
	Israel	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 suppling in cars and trucks for standard battery chargers and power management modules from RRC or mobile devices.

Germany/HQ
RRC power solutions GmbH

Technologiepark 1
66424 Homburg / Saar

+49 6841 98090
sales@rrc-ps.com

USA
RRC power solutions Inc.
18340 Yorba Linda Blvd.,
107-437
Yorba Linda, CA 92886

+1 714 777 3604
usa@rrc-ps.com

Hong Kong
RRC power solutions Ltd.

S-V,6/F, Valiant Industrial Centre 2-12
Au Pui Wan Street
Fo Tan, N.T., Hong Kong

+852 2376 0106
hkrrc@rrc-ps.cn

China
RRC power solutions Ltd.

Room 1306, C Building, Tianan International Building, Renmin South Road, Luohu District, Shenzhen 518021

+86 755 8374 1908
hkrrc@rrc-ps.cn

Vietnam
RRC POWER SOLUTIONS COMPANY LIMITED

Block C, Lot CN4
Dinh Vu – Cat Hai Economic Zone,
Dong Hai 2 Ward
Hai An District 180000
Hai Phong City

vietnam@rrc-ps.com

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