

## RRC-SMB-MBC

Standard battery charger  
for smart batteries

P/N: 110017

Distributed by:



### Features:

- 50W single bay charger
- 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



**Specification**

<b>Input</b>	
Voltage range	19.00 – 26.00VDC
Current	2.80A max.
Power	50.00W

<b>Output</b>	
Voltage range	0 - 17.40VDC
Current range	0 - 4.80A
Voltage tolerance	±1% max.
Current tolerance	±10% max. @1.00A, ±3% max. @4.00A
Charge power	50.00W max.
Protection	Short circuit, over temperature shutdown, input-/output over current

<b>Environmental</b>		
	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.

<b>General</b>	
Efficiency	~95% at 100% load
Indicator	Multi-color LED (green, red, orange)
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>	
One time Red/Orange/Green	Self-test: Charger is ready for use.
Red/Green blinking	Battery recognition and initialization.
Orange light	The inserted battery is of the correct type and is currently being charged.
Green light	The battery is charged and can be removed for use.
Red blinking	The battery is too hot or too cold to be charged without damage. If the battery is too cold it will be charged as soon as it has warmed up sufficiently. If the battery is too hot it should be removed to cool down.
Red light	The battery is damaged or it is a conventional battery which cannot be recharged.

<b>Charger Mechanical Details</b>	
Housing dimensions (LxWxH)	120 x 64 x 43mm
Weight	110g (excluding power supply)

<b>Safety &amp; EMC</b>	<b>In combination with included external AC/DC power supply</b>	
Regulatory approvals	Europe International	EN62368-1 (CE) IEC62368-1 (CB)
Electromagnetic Emissions	Europe USA	EN55011, EN55032, level B FCC15 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	EN55024



**Specification external AC/DC power supply**

<b>Input</b>	
Voltage range	100.00 – 240.00VAC ±10%, 50-60Hz
Current	1.70A max.
Stand by power	< 0.21W @ no load

<b>Output</b>	
Voltage range	19.00VDC ± 5%; Ripple < 300mV <sub>pk-pk</sub>
Power	65.00W max.
Current range	3.42A max.
Protection	Short circuit, over voltage, over current, over temperature



<b>General</b>	
Efficiency	California's Energy Efficiency Level VI
Ripple & Noise	300mV (p-p)

<b>Power Supply Mechanical Details</b>	
Standard output connector	DC barrel jack, 5.5 x 2.5 x 11mm
Housing dimensions (LxWxH)	95 x 50 x 25.4mm
Weight	270g
Cable length	1600mm ±50mm

<b>Regulatory Approvals</b>		
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
	Mexico	NOM
	Argentina	IRAM
	South Africa	SABS
	Singapore	Safety Mark
	United Kingdom	UKCA
	Morocco	CMIM



**Recommended Accessories**

Type	Product	P/N	Application
3-pol AC-Cable 	US-Version	210950	Country specific power cable for standard battery chargers from RRC and PS65.
	EU-Version	210951	
	UK-Version	211133	
	AU-Version	211134	
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.

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