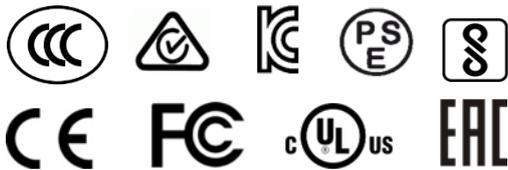


## RRC-SMB-MBC

Standard battery charger  
for smart batteries

P/N: 110017



### Features:

- 50W single bay charger
- For the standard battery form factors RRC204x, RRC205x and RRC203x 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

Input	
Voltage range	19.00 – 26.00VDC
Current	2.80A max.
Power	50.00W

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

Environmental		
Cooling	convection cooled	
Temperature	Operating: 0°C to 40°C	Non-operating: -10°C to 70°C
Pressure & Altitude	Operating: 1060hPa to 795hPa -382m to 2000m	Non-operating: 1060hPa to 572hPa -382m to 4570m
Humidity	5% to 95% r.H., non-condensing	

General	
Efficiency <sup>(2)</sup>	~95% at 100% load
Indicator	Multi-color LED (green, red, orange)
Battery types	Standard battery form factors RRC204x, RRC205x and RRC203x or smart batteries with a similar footprint
Green procurement	RoHS 2011/65/EU WEEE 2012/19/EU Chinese RoHS

LED Indications	
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.

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

Safety & EMC	In combination with included external AC/DC power supply	
Regulatory approvals	Europe	CE
	International	CB
Electromagnetic Emissions	Europe	EN55011, EN55022, level B
	USA	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 power supply AC/DC

Input		
Voltage range	100.00 – 240.00VAC	
Current	1.70A max.	
Stand by power	No load < 0.50W @ 230.00VAC	
Output		
Voltage range	19.00VDC	
Power	65.00W max.	
Current range	3.40A	
Protection	Over voltage, over current, short circuit	
Environmental		
Temperature	Operating: 0°C to 40°C	Non-operating -10°C to 70°C
General		
Efficiency	California's Energy Efficiency Level VI	
Ripple & Noise	300mV (p-p)	
Power Supply Mechanical Details		
Standard output connector	DC barrel jack, 5.5 x 2.5mm	
Housing dimensions (LxWxH)	95 x 50 x 25.4mm	
Weight	270g	
Regulatory Approvals		
Approvals	Europe International USA & Canada Australia & New Zealand Russia (Customs Union) Korea China Japan India	CE CB cULus RCM EAC KC CCC PSE BIS

**Recommended Accessories**

Type	Product	P/N	Application
3-pol AC-Cable	 <p>US-Version EU-Version UK-Version AU-Version</p>	<p>210950 210951 211333 211334</p>	Country specific power cable for standard battery chargers from RRC and PS65.
Car Adapter DC/DC	 <p>RRC-SMB-CAR</p>	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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