

## RRC-SMB-1BC-M

Standard battery charger  
for smart batteries

P/N: 110367



### Features:

- Medical 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

Input		
Voltage range	19.00 – 26.00VDC	
Current	2.80A max.	
Power	50.00W	
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	50.00W max.	
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 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 USA	CE CB EN55011, EN55032, level B FCC15 class B
Electromagnetic Emissions	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 EN55024

## Specification external, medical power supply AC/DC (PS65M)

P/N: 211249

Input	
Voltage range	100.00 – 240.00VAC, 50 to 60 Hz
Current	1.60A max.
Stand by power	< 0.21W @ no load


Output	
Voltage range	19.00VDC $\pm$ 5%
Power	65.17W max.
Current range	3.43A max.
Protection	Short circuit, over-voltage, over-current

General	
Efficiency	California's Energy Efficiency Level VI
Ripple & Noise	190mV (p-p)

Power Supply Mechanical Details	
Standard output connector	DC barrel jack, 5.5 x 2.5 x 11mm
Housing dimensions (LxWxH)	119 x 60 x 36mm, without cables and connectors
Weight	310g, without input cable
Cable length	1500mm $\pm$ 30mm

Regulatory Approvals		
Safety	ITE Medical	CE, PSE cURus EN / IEC60601-1
EMI	Europe USA & Canada United Kingdom Morocco	CE FCC 15 class B UKCA CMIM

## Recommended Accessories

Type	Product	P/N	Application
2-pol AC-Cable	 US-Version EU-Version	201497 201496	Country specific power cable for medical battery chargers and medical power supplies from RRC.

### 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 Build-  
ing, 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