



Medical Standard Battery Charger RRC-SMB-UBC-M for Smart Batteries

Features:

- 65W Single bay fast charger
- For the standard battery pack form factors RRC2020, 2024, 2040, 2040-2, 2054, 2054-2, 2057 or smart batteries with a similar footprint (e.g. 202x range, 204x range, 205x range, DR36, etc.)
- Optimized charging process for RRC batteries
 - Longer cycle life
 - Faster charging
- Simple operation – Plug and Play
- Automatic recognition and calibration of smart battery learned capacity
- 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 RRC-SMB-UBC

Input		Output	
Nominal Voltage range	19 - 26VDC	Voltage range	0 - 17.4VDC
Current	3400mA max.	Current range	0 - 4.8A
Power	65W	Voltage tolerance	±1% max.
		Current tolerance	±10% max. @1A, ±3% max. @4A
		Protection	Short circuit Over temperature shutdown Input-/output over current
Environmental		General	
Cooling	convection cooled	Efficiency	~95% at 100% load
Temperature	Operating: 0°C to 40°C Non-operating -10°C to 70°C	Indicator	Multi-color LED (green, red, orange)
Pressure & Altitude	Operating: 1060hPa to 795hPa -382m to 2000m Non-operating: 1060hPa to 572hPa -382m to 4570m	Battery types	Standard battery form factors RRC2020, 2024, 2040, 2040-2, 2054, 2054-2, 2057 or smart batteries with a similar footprint (e.g. 202x range, 204x range, 205x range, DR36, etc.)
Humidity	5% to 95% r.H., non-con- densing	Green procurement	RoHS 2011/65/EU WEEE 2012/19/EU Chinese RoHS
LED Indications			
One time Red/Orange/Green	Selftest: Charger is ready for use.		
Red/Green blinking	Battery recognition and initialization.		
Orange blinking	The battery is currently being calibrated.		
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)	151 x 90 x 43mm
Weight	198g (excluding power supply)

Safety & EMC		In combination with included external AC/DC power supply
Regulatory approvals	Europe	CE
Electromagnetic Emissions	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 medical power supply AC/DC

Input		Output	
Voltage range	100 - 240VAC	Nominal Voltage	19VDC
Current	1.6A max.	Power	65W max.
Stand by power	No load < 0.21W @ 230 VAC	Current range	0 - 3.43A
		Protection	Over voltage, over current, Short circuit

Environmental		General	
Temperature	Operating:	Efficiency	DoE VI, ErP (Stage 2), GEMS, NRCan, CEC, EPA
	0°C to 40°C		
	Non-operating	Ripple & Noise	190mV (p-p)
	-10°C to 80°C		

Power Supply Mechanical Details	
Standard output connector	DC barrel jack (Ø5.5 x Ø2.5 x 9.5mm)
Housing dimensions (LxWxH)	119 x 60 x 36mm
Weight	310g

Safety & EMC	
Safety	ITE Medical CE, PSE cULus, T-mark, EN/IEC60601-1
EMI	Europe USA / Canada CE FCC15 class B

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