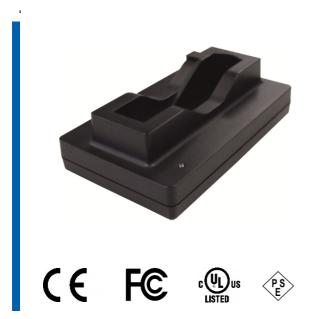
Technical Data Sheet

RRC-SMB-UBC-M RRC Medical SMBUS Universal Battery Charger





Specification RRC-SMB-UBC

Input		
Voltage range	19 - 26VDC	
Current	3400mA max.	
Power	65W	

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

65 Watt Medical SMBUS Desktop Universal **Battery Charger for Smart Batteries**

Features:

- Single bay fast charger
- For the 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.)
- 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

Output	
Voltage range	0 - 17.4VDC
Current range	0 - 4.8A
Voltage tolerance(1)	±1% max.
Current tolerance(1)	±10% max. @1A, ±3% max. @4A
Protection	Short circuit
	Over temperature shutdown
	Input-/output over current
General	
Efficiency ⁽²⁾	~95% at 100% load

General		
Efficiency ⁽²⁾	~95% at 100% load	
Indicator	Multi-color LED	
Battery types	(green, red, orange) 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.)	
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.

- Total regulation tolerance includes initial set accuracy, line and load regulation
- Power losses of input and output cables are not considered here.

Technical Data Sheet

RRC-SMB-UBC-M

RRC Medical SMBUS Universal Battery Charger



Charger Mechanical Details

Housing dimensions (LxWxH) 151 x 90 x 43mm

Weight 198g (excluding power supply)

Safety & EMC	In combination with specified external AC/DC power supply	
Regulatory approvals	Europe	CE
Electromagnetic Emissions	Europe USA	EN55011, EN55032, level B FCC15 class B
Electromagnetic	ESD immunity	EN/IEC61000-4-2
Immunity	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 medical power supply

Input

Voltage range 100 - 240VAC Current 1.6A max.

Stand by power No load < 0.21W @ 230 VAC Output

Voltage 19VDC ±5% Power 65W max. Current range 0 - 3.43A

Protection Over voltage, over current,

Short circuit

Environmental

Temperature Operating:

0°C to 40°C Non-operating -20°C to 80°C General Efficiency

DoE VI, ErP (Stage 2), GEMS,

NRCan, CEC, EPA

Ripple & Noise 190mV (p-p)

Power Supply Mechanical Details

DC barrel jack (Ø5.5 x Ø2.5 x 9.5mm) Standard output connector

Housing dimensions (LxWxH) 119 x 60 x 36mm

Weight 310g

Safety & EMC

Safety ITE CB, PSE

Medical cULus, T-mark, EN/IEC60601-1

EMI Europe CE

USA / Canada FCC15 class B

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