

## RRC-SMB-UBC-DIS

Standard battery conditioner  
for smart batteries

P/N: 110063



### Features:

- Ensures batteries are discharge to 30% state of charge (or less) for transportation.
- Places batteries in very low power mode called "ship mode" to limit self-discharge.
- For the standard battery form factors RRC20xx or smart batteries with a similar footprint
- 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 conditioning/discharging station for mobile devices used in medical, industrial and consumer markets



## Specification

Input	
Voltage range	19.00 – 26.00VDC
Current	3.40A max.
Power	65.00W
Protection	Over current (fuse protected), under voltage

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	60.00W 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)	8% to 90% r.H.	5% to 95% r.H.

General	
Efficiency	~95% at 100% load
Indicator	Multi-color LED (green, red, orange)
Battery types	Standard battery form factors RRC20x or smart batteries with a similar footprint
Green procurement	RoHS 2011/65/EU + 2015/863 REACH 1907/2006 WEEE 2012/19/EU Chinese RoHS
Cooling	convection cooled

LED Indications	
One time Red/Orange/Green	Self-test: Charger is ready for use.
Green/Red blinking	Charger identifies inserted battery.
Orange	Progress indication – The battery is being charged.
Orange blinking	Progress indication – The battery is being discharged.
Green	Success indication - The battery successfully charged/discharged to transport State of Charge and is set into ship mode.
Red	Error indication - The battery was not successfully charged/discharged to transport State of Charge or is not set into ship mode.
Red blinking	The temperature of the battery is too low or too high.

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	EN62368-1 (CE)
	International	IEC62368-1 (CB)
Electromagnetic Emissions	Europe	EN55011, EN55032, level B
Electromagnetic Immunity	USA	FCC15 class B
	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 ± 10%
Power	65.00W max.
Current range	3.40A 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 2.5mm
Housing dimensions (LxWxH)	95 x 50 x 25.4mm
Weight	270g
Cable length	1600mm

<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	211333	
	AU-Version	211334	
Car Adapter DC/DC 	RRC-SMB-CAR	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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