

## RRC2020

Standard Battery Pack Li-Ion  
10.80V / 9.22Ah / 99.60Wh  
P/N: 100496



Picture only for reference



### Features

- Worldwide approvals and certification of safety standards
- No development costs, fast time-to-market
- Smart batteries with numerous features according to the SMBus specification
- Integrated LED State of Charge (SoC) indicator
- State-of-the-art lithium-ion cells with the market's highest energy density
- High discharge performance
- JEITA charging profile optimization
- Numerous and redundant safety features, e.g.:
  - CUV (Cell Under Voltage): protection against deep discharge
  - COV (Cell Over Voltage): protection against over charge
  - OTC (Over Temperature in Charge): protection against overheating while charging
  - OTD (Over Temperature in Discharge): protection against overheating during discharging
  - Battery Life Management: protection against rapid cell ageing
- Increased ESD protection up to 8.00kV
- SHA-1 cryptosystem to prevent plagiarism
- Life expectancy: Up to 80% of initial capacity after 800 cycles

### Applications

Suitable for use with tablet PC's, notebooks, industrial and medical devices, etc.

## Specification

### General

Delivery status battery capacity	<30%
Compliance information	IEC 62133 / CE / UL2054 / FCC / UKCA / PSE / KC / BSMI / Gost / CMIM / CQC / RCM / BIS / TISI / UN 38.3 / RoHS / REACH
Operating temperature	0°C to 45°C (charge) -20°C to 60°C (discharge)
Storage temperature	-20°C to 50°C max. -20°C to 25°C recommended

### Electrical Parameters

Nominal voltage	10.80V
Nominal capacity	9.22Ah
Initial impedance	<200mΩ @ 1kHz at 25°C
Max. charge current	6.20A
Max. charge voltage	12.30V
Max. discharge current	10.00A

### Battery Dimensions



Length	149.00mm +0.70/-0.70
Width	89.00mm +0.25/-0.25
Thickness	19.70mm +0.40/-0.25
Weight	480g
Contacts	+, C, D, T, -
Ingress protection	IP40

### Safety Parameters PCM

Overcharge detection voltage / cell	4.15V
Overdischarge detection voltage / cell	2.50V
Overcharge detection current	8.00A
Overdischarge detection current	11.00A

**Recommended Accessories**

Type	Product	P/N	Application
Standard Battery Charger	 RRC-SMB-UBC RRC-SMB-UBC-M	100485 110105	60.00W standard battery charger for optimized charging process. With external power supply for worldwide use.
Standard Battery Charger	 RRC-SMB-DBC	110111	Dual bay standard battery charger for optimized charging process. With external power supply for worldwide use.
Power Management Module	 RRC-PMM240	100576	Power management module for smart battery charging with automatic power source selection. Fits to all RRC20xx standard smart batteries.
Power Supply AC/DC	 PS65	210919	External power supply (worldwide use) for embedded battery charger RRC-PMM240 or for mobile devices. Included in RRC-SMB-UBC/MBC.
3-pol AC-Cable	 US-Version EU-Version UK-Version AU-Version	210950 210951 211133 211134	Country specific power cable for PS65.
Car Adapter DC/DC	 RRC-SMB-CAR	110041	90.00W car adapter with USB charging port. Power supplying in cars and trucks for RRC-SMB-UBC, RRC-SMB-MBC, RRC-PMM240 or mobile devices.

Type	Product	P/N	Application
Design-In Tool 	SMBus-Reader	100127	Simple read out of SMBus batteries data. No external power supply required. 5way blade connector and RS232 interface.
Battery Mating Connector 	RRC-MC20-90-10 RRC-MC20-180-10	210519 210518	Mating connector for standard smart batteries from RRC. Suitable for RRC20xx batteries. Available for 90° or 180° PCB mounting.

### Germany/Headquarters

RRC power solutions GmbH  
Technologiepark 1  
66424 Homburg / Saar

Tel.: +49 6841 98090  
Fax: +49 6841 9809280  
Email: sales@rrc-ps.de  
Web: www.rrc-ps.com

### USA

RRC power solutions Inc.  
18340 Yorba Linda Blvd.,  
# 107-437 Yorba Linda,  
CA 92886-4104

Tel.: +1 714 777 3604  
Fax: +1 714 777 3658  
Email: usa@rrc-ps.com  
Web: www.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

Tel.: +852 2376 0106  
Fax: +852 2375 0107  
Email: hkrrc@rrc-ps.cn  
Web: www.rrc-ps.cn

### China

RRC power solutions Ltd.  
Room 1306, C Building,  
Tianan International building,  
Renmin South Road, Luohu  
District, Shenzhen 518021

Tel.: +86 755 8374 1908  
Fax: +86 755 8374 1861  
Email: hkrrc@rrc-ps.cn  
Web: www.rrc-ps.cn