

### RRC2040-2



- 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	IEC62133 / CE / UL2054 / FCC / PSE / KC / Gost / EAC / CQC / RCM / BIS / TISI / BSMI / UN38.3 / 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

<b>Electrical Parameters</b>	
Nominal voltage	10.80V
Nominal capacity	6.90Ah
Initial impedance	<180mΩ @ 1kHz at 25°C
Max. charge current	4.83A
Max. charge voltage	12.60V
Max. discharge	7.50A

<b>Battery Dimensions</b>	
Length	150.25mm +0.25/-0.25
Width	58.75mm +0.25/-0.25
Thickness	21.90mm +0.50/-0.25
Weight	336g
Contacts	+, D, C, T, -
Ingress protection	IP40

Safety Parameters PCM	
Overcharge detection voltage / cell	4.23V
Overdischarge detection voltage / cell	2.50V
Overcharge detection current	6.70A
Overdischarge detection current	8.00A



## **Recommended Accessories**

Туре	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-MBC RRC-SMB-MBC-M	110017 110104	50.00W 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 211333 211334	Country specific power cable for PS65.
Car Adapter DC/DC	RRC-SMB-CAR	110041	90.00W car adapter with USB charging port. Power suppling in cars and trucks for RRC-SMB-UBC, RRC-SMB-MBC, RRC-PMM240 or mobile devices.

#### **TECHNICAL DATA SHEET**





Туре	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 Connector	SMBus-Battery- Cable	400665	Extension cable for battery applications. Suitable for RRC204x and RRC205x batteries.
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.

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