

RRC2054-2



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	14.40V
Nominal capacity	6.90Ah
Initial impedance	<180mΩ @ 1kHz at 25°C
Max. charge current	4.83A
Max. charge voltage	16.80V
Max. discharge current	8.50A

Battery Dimensions	
Length	150.40mm +0.40/-0.40
Width	77.40mm +0.25/-0.25
Thickness	22.40mm +0.60/-0.40
Weight	440g
Contacts	+, C, D, T, -
Ingress protection	IP40

Safety Parameters PCM	
Overcharge detection voltage / cell	4.27V
Overdischarge detection voltage / cell	2.50V
Overcharge detection current	6.00A
Overdischarge detection current	10.50A



Recommended Accessories

Туре	Product	P/N	Application
Standard Battery Charger	RRC-SMB-UBC	100485	60.00W standard battery charger for optimized charging process. With external power supply for worldwide use.
Standard Battery Charger	RRC-SMB-MBC	110017	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.
AC Power 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 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	100122	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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