

RRC2054

Standard Battery Pack Li-Ion
14.40V / 3.45Ah / 49.70Wh
P/N: 100568



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 | 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 |

Electrical Parameters

| | |
|---------------------|-----------------------|
| Nominal voltage | 14.40V |
| Nominal capacity | 3.45Ah |
| Initial impedance | <180mΩ @ 1kHz at 25°C |
| Max. charge current | 2.415A |
| Max. charge voltage | 16.80V |
| Max. discharge | 5.00A |

Battery Dimensions




| | |
|--------------------|---------------------|
| Length | 85.10mm +0.25/-0.25 |
| Width | 77.40mm +0.25/-0.25 |
| Thickness | 22.40mm +0.60/-0.40 |
| Weight | 230g |
| 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 | 3.35A |
| Overdischarge detection current | 5.50A |

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-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 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 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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