# RRC2024

## Standard Battery Pack Li-Ion

**14.40V / 6.60Ah / 95.00Wh**

## Datasheet



The RRC2024 is in use in more than 50 different industries in a variety of applications, such as ventilators, ultrasound devices, audio systems, and many more.

In total, we count more than 4000 design-ins for our standard batteries, which is why the safety and reliability of our products is unmatched.

**Characteristics & Benefits of the RRC2xxx series standard Li-Ion battery packs:**

- 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
- Battery Life Management: increased protection in case of cell aging
- Increased ESD protection up to 8.00kV
- Up to 80% of initial capacity after 800 cycles

**PRODUCT DATA SHEET** **RRC2024**



**Worldwide Approvals**




**No NRE**



**Fast Time-to-Mar-**



**Highest Safety**



**Highest Quality**



**Highest Performance**



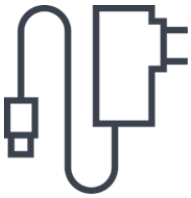
**Worldwide Availability**




**No Obsolescence**



**Independent of Quantity**



**Extensive Accessories**



**Dual Sourcing Stra-**



**Design-In Support**

## Characteristics

| General | |
|---|---|
| Delivery status battery capacity | <30% |
| Compliance information | IEC 62133 / CE / UL2054 / CAN ICES-003(B) / NMB-003(B) / FCC / UKCA / PSE / KC / BSMI / GOST-R / CMIM / CCC / RCM / BIS / TISI / UN 38.3 / RoHS / REACH |
| Operating temperature | 0°C to 45°C (charge)<br>-20°C to 60°C (discharge) |
| Storage temperature | -20°C to 50°C max.<br>-20°C to 25°C recommended |
| Communication interface | SMBus |
| P/N | 100497<br>Each battery has an individual serial number (S/N), which is located on the hardpack label for tracking & traceability. |

| Electrical Parameters | |
|---|---|
| Nominal voltage | 14.40V |
| Nominal capacity | 6.60Ah |
| Initial impedance | <150mΩ @ 1kHz at 25°C |
| Max. charge current | 4.53A |
| Max. charge voltage | 16.80V |
| Max. discharge current | 10.00A |

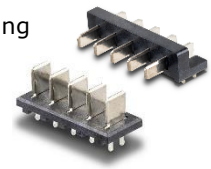
| Battery Dimensions | |
|---|---|
| Length | 167.20mm +0.50/-0.50 |
| Width | 107.20mm +0.40/-0.30 |
| Thickness | 21.51mm +0.30/-0.50 |
| Weight | 600g |
| Contacts | +, C, D, T, - |
| Ingress protection | IP40 |

| Safety Features | |
|---|---|
| CUV (Cell Under Voltage) | Protection against deep discharge |
| COV (Cell Over Voltage) | Protection against overcharge |
| OTC (Over Temperature in Charge) | Protection against overheating while charging |
| OTD (Over Temperature in Discharge) | Protection against overheating during discharging |
| OCC (Over Current in Charge) | Protection against overcurrent while charging |
| OCD (Over Current in Discharge) | Protection against overcurrent during discharging |
| OL (Overload in Discharge) | Protection against overload during discharging |
| SCC (Short Circuit in Charge) | Protection against short circuits while charging |
| SCD (Short Circuit in Discharge) | Protection against short circuits during discharging |



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## Recommended Accessories

| Type | Product | P/N | Application |
|---|---|---|---|
| Standard Battery Charger  | RRC-SMB-UBC<br>RRC-SMB-UBC-M | 100485<br>110105 | 60.00W standard battery charger for optimized charging process. With external power supply for worldwide use. |
| Power Management Module  | RRC-PMM20<br>RRC-PMM20-NC | 110269<br>110354 | Power management module for smart battery charging with automatic power source selection. Fits to all RRC20xx standard smart batteries. |
| Power Supply AC/DC  | PS45<br>PS100 | 212721<br>212532 | External 45 W / 100 W power supply (worldwide use) for embedded battery charger RRC-PMM20 or for mobile devices. |
| 3-pol AC-Cable  | US-Version<br>EU-Version<br>UK-Version<br>AU-Version<br>CN-Version | 210950<br>210951<br>211133<br>211134<br>211959 | Country specific power cable for PS45 and PS100. |
| 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-PMM20 or mobile devices. |
| 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<br>RRC-MC20-180-10 | 210519<br>210518 | Mating connector for standard smart batteries from RRC. Suitable for RRC20xx batteries. Available for 90° or 180° PCB mounting. |



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Our special competence is the development of power solutions according to the concrete requirements of our customers. We offer both standardized as well as customized solutions for customer's applications, while guaranteeing the highest level of safety and reliability to all our products. As an international company with German roots, we have a worldwide market operation - where we provide our proven German engineering skills combined with our technical expertise and flexibility, which are necessary to meet the challenges of the growing global market.

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