

Technical Data Sheet

Rechargeable Lithium-ion Battery Pack RRC2024



Standard Li-ion battery pack RRC2024 12 x 18650 cells (4S3P) with 14.40V / 6600mAh / 95.0Wh

Features:

- Highest available energy density
- SMBus & SBDS Rev 1.1 compliant
- Fulfills JEITA standards, advanced temperature-dependent charging profile
 - Fastest charging
 - Maximized cycle life
- Impedance tracking and cell balancing
 - No manual recalibration necessary
 - Longest lifetime
- Comprehensive charging/discharging and passive safety systems
- Worldwide approvals
- Registered with recycling systems worldwide

Applications:

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

Specification

General

Basic cell type	18650
Delivery status	30%
battery capacity	
Operating temperature	0°C to 45°C (charge) -20°C to 60°C (discharge)
Storage temperature	-20°C to 60°C max. -20°C to 20°C recommended
Compliance information	CE / UL2054 / FCC / PSE / KC / Gost / EAC / CQC / RCM / IEC 62133 / UN 38.3 / RoHS / REACH / BIS

Electrical Parameters

Nominal voltage	14.4V
Nominal capacity	6600mAh
Initial impedance	<150mΩ @ 1kHz at 20°C
Max. charge current	4620mA
Max. charge voltage	16.8V
Cont. discharge	10000mA
Peak discharge	14000mA
Life expectancy @25°C	>300 cycles with 3.3A Charge/3.3A Discharge
	min 80% of initial capacity

Battery Dimensions

Length	167.2mm±0.5
Width	107.5mm+0.4/-0.3
Thickness	21.5mm+0.3/-0.5
Weight	590g
Contacts	+, C, D, T, -

Safety Parameters PCM

Overcharge detection voltage	4300mV/cell
Overcharge release voltage	4100mV/cell
Overdischarge detection voltage	2750mV/cell
Overdischarge release voltage	3000mV/cell
Overcharge detection current	5300mA
Overdischarge detection current	11000mA

Germany/Headquarters

RRC power solutions GmbH
Technologiepark 1
D-66424 Homburg / Saar

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

USA

RRC power solutions Inc.
18340 Yorba Linda Blvd.,
Suite 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.com

China

RRC power solutions Ltd.
Room 520, Yuanlin Building,
Aiguo Road No. 3066,
Luohu District,
Shenzhen 518021

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

Technical Data Sheet

Rechargeable Lithium-ion Battery Pack RRC2024



Recommended Accessories

Type		Product	Application
Desktop Battery Charger		RRC-SMB-UBC	65W standard desktop battery charger for optimized charging process with external power supply* for worldwide use.
Desktop Battery Charger		PMC02A	65W 2-bay desktop battery charger for optimized charging process with external power supply* for worldwide use.
Desktop Battery Charger		PMC10A	320W 10-bay desktop battery charger for optimized charging process with internal power supply*. Wide input voltage range for worldwide use.
Embedded Battery Charger		RRC-PM240	Power management module for smart battery charging with automatic power source selection. 82W max. output power to battery and 240W max. output power to application. Fits to all 20XX standard smart batteries from RRC.
Power Supply		PS65	External power supply (worldwide use) for embedded battery charger RRC-PM240 or for mobile devices. Included in RRC-SMB-UBC/MBC and PMC02A.
AC Power Cable		210950 for USA/CAN/JPN 210951 for EU/KOR 211333 for UK/SGP 211334 for AUS/NZL	Country specific power cable for PS65.
Car Adapter		RRC-SMB-CAR	90W car adapter with USB charging port. Power supplying in cars and trucks for RRC-SMB-UBC, RRC-SMB-MBC, PMC02A, RRC-PM240 or mobile devices.
Battery Diagnostic Tool		SMBus Reader	Simple read out of SMBus batteries data. No external power supply required. 5way blade connector and RS232 interface.
Extension Cable		SMBus Battery Cable	Extension cable for battery applications. Suitable for RRC204X and RRC205X batteries.
Battery Mating Connector		RRC-MC20-90-10 RRC-MC20-180-10	Mating Connector for standard smart batteries from RRC (e.g. RRC2020, RRC2054, ...). Available for 90° or 180° PCB mounting.

* - Additional country specific power cable for power supply available

Germany/Headquarters	USA	Hong Kong	China
RRC power solutions GmbH Technologiepark 1 D-66424 Homburg / Saar	RRC power solutions Inc. 18340 Yorba Linda Blvd., Suite 107-437 Yorba Linda, CA 92886-4104	RRC power solutions Ltd. S-V,6/F, Valiant Industrial Centre 2-12 Au Pui Wan Street Fo Tan, N.T., Hong Kong	RRC power solutions Ltd. Room 520, Yuanlin Building, Aiguo Road No. 3066, Luohu District, Shenzhen 518021
Tel.: +49 6841 98090 Fax: +49 6841 9809280 Email: sales@rrc-ps.de Web: www.rrc-ps.de	Tel.: +1 714 777 3604 Fax: +1 714 777 3658 Email: usa@rrc-ps.com Web: www.rrc-ps.com	Tel.: +852 2376 0106 Fax: +852 2375 0107 Email: hkrrc@rrc-ps.cn Web: www.rrc-ps.com	Tel.: +86 755 8374 1908 Fax: +86 755 8374 1861 Email: hkrrc@rrc-ps.cn Web: www.rrc-ps.com