

# Technical Data Sheet

## Rechargeable Lithium-ion Battery Pack RRC2054-2



### Standard Li-ion battery pack RRC2054-2 8 x 18650 cells (4S2P) with 14.4V / 6900mAh / 99.4Wh

#### Features:

- Highest available energy density
- SMBus & SBDS Rev 1.1 compliant
- Fulfils 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

#### Applications:

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

### Specification

General	
Basic Cell	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 50°C max. -20°C to 25°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	6900mAh
Initial impedance	200mΩ @ 1kHz at 20°C
Max. charge current	4830mA
Max. charge voltage	16.8V
Max. discharge current	10000mA
Peak discharge current	20000mA
Life expectancy @25°C	>300 cycles with min. 63% of initial capacity
1.675A Charge/3.35A Discharge	

Battery Dimensions	
Length	150.4mm±0.4
Width	77.4mm±0.25
Thickness	22.35mm+0.6/-0.4
Weight	430g
Contacts	+, C, D, T, -

Safety Parameters PCM	
Overcharge detection voltage	4270mV/cell
Overcharge release voltage	4100mV/cell
Overdischarge detection voltage	2500mV/cell
Overdischarge release voltage	2750mV/cell
Overcharge detection current	6000mA
Overdischarge detection current	10500mA

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

# Technical Data Sheet

## Rechargeable Lithium-ion Battery Pack RRC2054-2



### 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	 RRC-SMB-MBC	50W 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-PMM240	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-PMM240 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-PMM240 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