RRC2040



# **RRC2040**

Standard Battery Pack Li-Ion 10.80V / 3.35Ah / 36.20Wh P/N: 100498





### 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

### Applications

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

RRC2040

# Specification



General	
Delivery status battery capacity	<30%
Compliance information	IEC 62133 / CE / UL2054 / FCC / PSE / KC / BSMI / Gost / EAC / 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	10.80V
Nominal capacity	3.35Ah
Initial impedance	Max. 350mΩ @ 1kHz at 25°C
Max. charge current	2.35A
Max. charge voltage	12.60V
Cont. discharge	4.00A
Peak discharge	4.80A
Life expectancy @ 25°C 1.625A Charge/3.25A Discharge	300 cycles with $\geq$ 63% of initial capacity

Battery Dimensions	
Length	84.87mm +0.25/-0.25
Width	58.76mm +0.25/-0.25
Thickness	21.89mm +0.50/-0.25
Weight	170g
Contacts	+, C, D, T, -

Safety Parameters PCM	
Overcharge detection voltage / cell	4.25V
Overcharge release voltage / cell	4.00V
Overdischarge detection voltage / cell	2.50V
Overdischarge release voltage / cell	2.75V
Overcharge detection current	3.00A
Overdischarge detection current	4.80A

RRC2040



## **Recommended Accessories**

Туре	Product	P/N	Application
Standard Battery Charger	RRC-SMB-UBC	100485	65.00W standard battery charger for optimized charging process with external power supply for world- wide use.
Standard Battery Charger	RRC-SMB-MBC	110017	50.00W standard battery charger for optimized charging process with external power supply for world- wide use.
Power Management Module	RRC-PMM240	100576	Power management module for smart battery charging with auto- matic power source selection. 82.00W max. output power to bat- tery and 240.00W max. output power to application. Fits to all 20XX standard smart batteries from RRC.
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	USA/CAN/JPN EU/KOR UK/SGP AUS/NZL	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 suppling in cars and trucks for RRC-SMB-UBC, RRC-SMB-MBC, RRC-PMM240 or mobile devices
Design-In Tool	SMBus Reader	100122	Simple read out of SMBus batteries data. No external power supply re- quired. 5way blade connector and RS232 interface.

### **TECHNICAL DATA SHEET**





Туре		Product	P/N	Application
Battery Connector		SMBus Battery Cable	400665	Extension cable for battery applica- tions. Suitable for RRC204X and RRC205X batteries.
Battery Mating Connector	ACCES OF	RRC-MC20-90-10 RRC-MC20-180-10	210519 210518	Mating Connector for standard smart batteries from RRC (e.g. RRC2020, RRC2054,). Available for 90° or 180° PCB mounting.

#### Germany/Headquarters

RRC power solutions GmbH Technologiepark 1 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., # 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 1306, C Building, Tianan International building, Renmin South Road, Luohu District, Shenzhen 518021

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