# RRC3570

Standard Battery Pack Li-Ion 25.20V / 3.90Ah / 98.28Wh

# **Datasheet**





The RRC3570 is in use in more than 50 different industries in a variety of applications, such as exoskeletons, respirators, autonomous robots 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 RRC35xx 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
- Increased ESD protection up to 8.00kV
- Up to 80% of initial capacity after 800 cycles





**Worldwide Approvals** 



**No NRE** 



**Fast Time-to-Market** 



**Highest Safety** 



**Highest Quality** 



**Highest Performance** 



**Worldwide Availability** 



**No Obsolescence** 



**Independent of Quantity** 



**Extensive Accessories** 



**Dual Sourcing Strategy** 



**Design-In Support** 



# **Characteristics**

General			
Delivery status battery capacity	< 30%		
Compliance information	IEC 62133 / CE / UL2054 / CAN ICES-003(B) / NMB-003(B) / FCC / ICES / UKCA / PSE / KC / BSMI / GOST-R / CMIM / CCC / 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 60°C max. 0°C to 25°C recommended		
Communication interface	SMBus		
P/N	110125		
	Each battery has an individual serial number (S/N), which is located on the hardpack label for tracking & traceability.		

<b>Electrical Parameters</b>	
Nominal voltage	25.20V
Nominal (rated) capacity	3.90Ah
Initial impedance	Max. 100mΩ @ 1kHz at 25°C
Max. charge current	6.00A
Max. charge voltage	29.40V
Max. discharge current	30.00A

Battery Dimensions	
Length	173mm ± 0.50mm
Width	80mm ± 0.40mm
Thickness	30mm ± 0.50mm
Weight	~ 655g
Contacts	+, C, D, T, -, -
Ingress Protection	IP40

Safety Features	
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
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
SCD (Short Circuit in Discharge)	Protection against short circuits during discharging





## **Recommended Accessories**

Туре	Product	P/N	Application
Power Management Module	RRC-PMM35	110297	Power management module for smart battery charging with automatic power source selection. Fits to the RRC35xx standard smart batteries.
Standard Battery Charger	RRC-SMB-HBC	110311	120.00W standard battery charger for the optimized charging process. With external power supply for worldwide use.
Battery Mating Connector	RRC-MC35-180-30 RRC-MC35-90-30	211947 212418	Mating connector for standard smart batteries from RRC. Suitable for RRC35xx batteries. Available for 90° or 180° PCB mounting.



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.

**Germany / HQ** RRC power solutions GmbH

Technologiepark 1 66424 Homburg / Saar

+49 6841 98090 sales@rrc-ps.com

#### USA

RRC power solutions Inc.

18340 Yorba Linda Blvd., Suite 107-437, Yorba Linda, CA 92886

+1 714 777 3604 usa@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

+852 2376 0106 hkrrc@rrc-ps.cn

### China

RRC power solutions Ltd.

Room 1306, C Building, Tianan International Building Renmin South Road Luohu District Shenzhen 518021

+86 755 8374 1908 hkrrc@rrc-ps.cn

### Vietnam

RRC Power Solutions Company Ltd.

Block C, Lot CN4 Dinh Vu - Cat Hai Economic Zone, Dong Hai 2 Ward Hai An District, 180000 Hai Phong City

vietnam@rrc-ps.com