

# POWERBLOQ 400

Standard Battery Pack Li-Ion  
**25.20V / 16Ah / 408Wh**

Datasheet

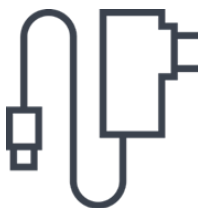


The POWERBLOQ 400 is designed for mid-power applications in robotic environments, including service carts, cleaning, inspection, production and security robots, as well as transport robots, and more.

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 POWERBLOQ 400 standard Li-Ion battery pack:**


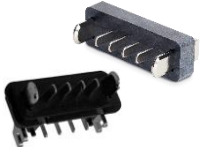
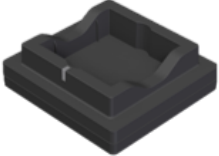
- Worldwide approvals and certification of safety standards
- No development costs, fast time-to-market
- CANBus communication possible
- Integrated LED for State of Charge (SoC) and State of Health (SoH)
- IP54 ingress protection
- Easy to handle
- State-of-the-art lithium-ion cells
- High discharge performance
- JEITA charging profile optimization
- Numerous and redundant safety features
- 80% of initial capacity after 1.000 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**

| <b>General</b>                      |  |
|-------------------------------------|--|
| Delivery status battery capacity    | <30%   |
| Compliance information              | IEC62133-2 / CE / UL2054 / CAN ICES-003(B) / NMB-003(B) / FCC / ICES / UKCA / PSE / KC / BSMI / GOST-R / CMIM / CCC / RCM / BIS<br>UN 38.3 / RoHS / REACH<br><i>Pending: IEC62619/UL2271</i> |
| Operating temperature               | 0°C to 45°C (charge)<br>-20°C to 60°C (discharge)  |
| Storage temperature                 | -20°C to 60°C max.<br>-20°C to 25°C recommended  |
| Communication interface             | CAN: CANopen implementation according CiA418   |
| P/N                                 | 110376<br>Each battery has an individual serial number (S/N), which is located on the hardpack label for tracking & traceability.  |
| Country of origin                   | Vietnam  |
| <b>Electrical Parameters</b>        |  |
| Nominal voltage                     | 25.20V   |
| Nominal (rated) capacity            | 16Ah   |
| Standard charge current             | 8.00A (0.5C)   |
| Maximum charge current              | 16.00A (1.0C)  |
| Discharge current                   | 30.00A   |
| Peak discharge current              | 48.00A   |
| Energy                              | 408Wh  |
| <b>Battery Dimensions</b>           |  |
| Length                              | 188.50mm ± 1.00mm  |
| Width                               | 85.00mm ± 0.50mm   |
| Thickness                           | 81.50mm ± 0.70mm   |
| Weight                              | ~ 2.08 kg  |
| Contacts                            | +, -<br>CANBus<br>Sys Detect   |
| Ingress protection                  | IP54   |
| <b>Safety Features</b>              |  |
| 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   |
| SCD (Short Circuit in Discharge)    | Protection against short circuits during discharging   |

**Recommended Accessories**

| Type  | Product                           | P/N              | Application   |
|---|-----------------------------------|------------------|---|
| Power Management Module<br>  | RRC-PMM35                         | 110297           | Power management module for smart battery charging with automatic power source selection. Fits to the POWERBLOQ 400 standard smart batteries. |
| Battery Mating Connector<br> | RRC-MC35-180-30<br>RRC-MC35-90-30 | 211947<br>212418 | Mating connector for standard smart batteries from RRC. Suitable for POWERBLOQ 400 batteries. Available for 90° or 180° PCB mounting.         |
| Battery Charger<br>         | RRC-SMB-PBC                       | 110365           | Desktop battery charger for POWERBLOQ 400.  |

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  
GmbHTechnologiepark 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.Flat F43, 7/F, Wah Lok  
Industrial Centre (Phase  
2), 31-35 Shan Mei  
Street, Fo Tan, N.T.+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 LIMITEDBlock C, Lot CN4  
Dinh Vu - Cat Hai Economic  
Zone, Dong Hai 2 Ward  
Hai An District, 180000  
Hai Phong City

vietnam@rrc-ps.com