



POWER BATTERY

8.0 | 16.0 | 24.0 | 32.0

MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS



support mixed use of
old & new batteries



8kWh modular design
scalable from 8 to 128kWh



easy to transport
and install



5-layer safety
protection/IP65

- **Modular Stackable Design** with cell-level optimization technology, enabling on-demand expansion and flexible adaptation for both household and commercial/industrial scenarios.
- **Active Energy Balancing** eliminates the "short-board" effect, supporting mixed use of old/new batteries and batteries with different SOH/SOC levels. New batteries feature plug-and-play for flexible energy expansion, while facilitating inventory management for distributors.
- **Independent Module Management:** Each battery pack can charge/discharge independently, achieving fast charge/discharge power up to 4 kW. Maximum charge/discharge power per cluster system reaches 16 kW.
- **Extreme Temperature Resilience:** Operates from -20°C to 55°C, suitable for homes from the equator to polar regions.
- **Wireless Installation** with plug-and-play simplicity for effortless setup.
- **5-Layer Safety Protection** for ultimate security.
- **314Ah High-Capacity Cells** with high cycle life and long-term durability.
- **IP65 Protection Rating** to withstand harsh environments.
- **One-Click System Diagnosis**, real-time monitoring, and transparent visibility.
- **Remotely Scheduled OTA Updates** available anytime.
- **Expandable Energy** up to 128kWh.

POWER BATTERY

RDM080040-EUR1

ELECTRICAL PARAMETERS

Battery cell type	LiFePO ₄
Battery cell capacity	314Ah
Battery cell cycle	8000*
Battery pack nominal capacity	8 kWh
Usable capacity (95% DoD)	7.6 kWh
Max. output power	4 kW
Battery pack nominal voltage	650 V
Battery pack operating voltage range	600~720V

COMMUNICATION

Display	LED indicator
Communication	CAN / RS485

GENERAL SPECIFICATION

Junction box dimension	80 x 760 x 268 mm
Junction box weight	10 kg
Base dimension	50 x 760 x 268 mm
Base weight	7 kg
Battery pack dimension	358 x 760 x 268 mm
Battery pack weight	80 kg
Installation	Floor stand
Operating temperature	Charge: 0~ 55°C Discharge: -20 ~ 50°C
Max. operating altitude	4000 m
Relative humidity	5% - 95% RH, non-condensing
Cooling	Natural
IP rating	IP65
Noise emission	< 29dB
Scalability	Max. 4 systems in parallel
Compatible inverters	RCT HV Inverter**
Certificates	EN61000-6-1, EN61000-6-3, IEC 62619, IEC 60730, IEC 62477, EN/IEC 62040, UN38.3

MODEL

RBS8.0
HM650T-EU

RBS16.0
HM650T-EU

RBS24.0
HM650T-EU

RBS32.0
HM650T-EU

TECHNICAL SPECIFICATION



ELECTRICAL PARAMETERS

Number of battery packs	1	2	3	4
Battery pack nominal energy	8 kWh	16 kWh	24 kWh	32 kWh
Max. output power	4 kW	8 kW	12 kW	16 kW
Weight (Junction box & base included)	97 kg	177 kg	257 kg	337 kg
Height (Junction box & base included)	488 mm	846 mm	1204 mm	1562 mm
Width	760 mm			
Depth	268 mm			

* For specific details, please refer to the RCT power warranty documentation.

** For detailed information, please consult the RCT Power sales or technical support team.