



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 64kWh



easy to transport
and install



5-layer safety
protection/IP65

- **Modular Stackable Design** with pack-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 capacity 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 Capacity** up to 64kWh.

POWER BATTERY

RDM080040-EUR1

ELECTRICAL PARAMETERS

Battery Cell Type	LiFePO ₄
Battery Cell capacity	314Ah
Battery Cycle	6000*
Battery usable capacity	8 kWh
Max. output power	4 kW
Nominal voltage	650 V
Operating voltage range	600~710V

COMMUNICATION

Display	LED indicator
Communication	RS485 / CAN (only for parallel operation)

GENERAL SPECIFICATION

Power module dimension	80 x 760 x 268 mm
Power module weight	20 kg
Battery module dimension	358 x 760 x 268 mm
Battery module 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
Cooling	Natural
IP rating	IP65
Noise emission	< 29dB
Scalability	Max. 2 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 modules	1	2	3	4
Battery usable capacity	8 kWh	16 kWh	24 kWh	32 kWh
Max. output power	4 kW	8 kW	12 kW	16 kW
Weight (Floor stand toolkit included)	100 kg	180 kg	260 kg	340 kg
Height (Floor stand and Power module 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.