



RESIDENTIAL ENERGY STORAGE SYSTEMS SOLUTIONS

EMPOWER TOMORROW WITH TRUSTED GREEN ENERGY

RCT 
power



SUSTAINABLE.

FLEXIBLE.

EFFICIENT.

With a modular RCT Power electricity storage unit
 You store your solar power locally and use it
 Whenever you need it



high efficiency



back-up
 power supply



support mixed use of
 old & new batteries



easy to transport
 and install



8kWh modular design
 scalable from 8 to 128kWh



5-layer safety
 protection/IP65

CATALOG

SINGLE-PHASE HV HYBRID RESIDENTIAL ENERGY STORAGE SYSTEM



Power Battery
5.0 | 7.5 | 10.0 | 12.5 | 15.0



Power Storage DC
3.68 | 4.0 | 5.0 | 6.0 SP



Power Storage DC
US15.0

THREE-PHASE HV HYBRID RESIDENTIAL ENERGY STORAGE SYSTEM



Power Battery
8.0 | 16.0 | 24.0 | 32.0



Solarwave series
5.0 | 6.0 | 8.0 | 10.0 |
12.0 | 15.0K

SINGLE-PHASE LV HYBRID RESIDENTIAL ENERGY STORAGE SYSTEM



Power Battery LV Series
RBS5.0L051-EU-P6



Power Battery LV Series
RBS16.0L051-EU-P5 | P6



Solarlink Series
RHS3.0 | 3.68 | 4.0 | 5.0 | 6.0K



POWER BATTERY

5.0 | 7.5 | 10.0 | 12.5 | 15.0

MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS



environmentally friendly and safe LiFePO₄ battery



modular space saving design



easy to transport and install



everything needed from one source

HIGH PERFORMANCE

- LiFePO₄ technology
- Max.0.78C charging/discharging rate
- Intelligent equalization
- High voltage, high efficiency, low stress operation

EASY INSTALLATION

- Lightweight components
- Modern and space-saving design
- Modular concept and simple wiring for easy transport and installation
- Master battery management system
- Plug & play

MONITORING VIA APP

- Powerful RCT RESS App
- Full data visualization
- Monitoring from every location
- Configuration options
- One click update

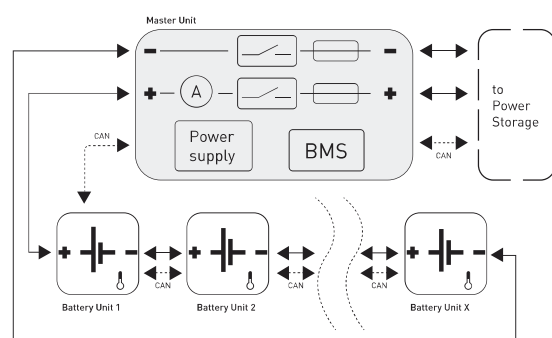
FLEXIBLE AND UPGRADEABLE

- Extendable capacity for lifetime use: 5-15 kWh
- Usable capacity scalable in increments of 2.25 kWh
- Upgradeable
- Suitable for back-up systems

SUSTAINABLE

- Lithium-iron-phosphate cell chemistry
- 10 years time value guarantee
- IP65: Suitable for outdoor installation
- Suitable for salt water-wet locations
- Corrosion-resistant aluminum housing
- All components carry necessary UL certifications

BLOCK DIAGRAM



POWER BATTERY

2.5¹**5.0****7.5****10.0****12.5****15.0**

ELECTRICAL PARAMETERS

Nominal capacity [kWh]	2.5	5	7.5	10	12.5	15
Usable capacity (90% DoD) [kWh]	2.25	4.5	6.75	9	11.25	13.5
Cycle Life	≥ 8,000 ²					
Voltage range [V]	73 - 83	145 - 166	218 - 248	291 - 331	364 - 414	436 - 497
Nominal voltage [V]	77	154	230	307	384	461
Maximum charge / discharge current [A]	25 / 25					
Standby consumption [W]	< 5					

INTERFACES

Power Storage interface	CAN
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GENERAL

Battery technology	LiFePO ₄					
Dimensions (H x W x D) [mm]	227 x 347 x 345	599 x 347 x 345	826 x 347 x 345	1053 x 347 x 345	1208 x 347 x 345	1507 x 347 x 345
Weight [kg]	25	59	84	109	134	159
Number of battery units	1	2	3	4	5	6
IP degree of protection	IP65					
Type of installation	floor stand / indoor / outdoor					
Operating temperature range	-18 ~ 55°C (-0.4 °F ~ 131°F)					
Connector type	Quick Contact MC4 - Evo 2					

SAFETY / STANDARDS

Safety class	I
Certificates	UN 38.3, UL1973, UL60730-1, UL9540A, IEC60529, IEC60068-2-52, IEC60068-2-5
EMC	FCC Part 15B, ICES-003, IEC 61000-6-1&-6-3
Safety	IEC 62477, IEC62040, IEC62619, IEC63056

WARRANTY

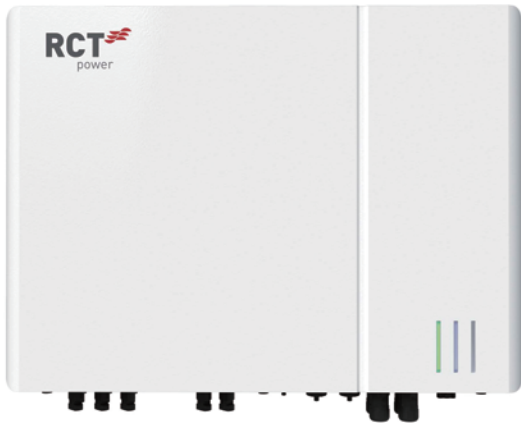
Warranty	10 years ³
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¹ Parameters above are for a single battery pack. A minimum of two packs is required for system operation.

² Cycle life test conditions: @25°C±2°C, @90% DOD, @70% SOH

³ Test condition of 5.2°C ~ 44.8°C (41.4°F ~ 112.6°F), 0.3C charge and discharge rate and SOH=70%

⁴ Supports two 15kWh battery clusters in parallel for a 30kWh system.



POWER STORAGE DC 3.68 | 4.0 | 5.0 | 6.0 SP

SINGLE-PHASE HYBRID OUTDOOR INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 3 roof
orientations



quick and easy
installation



everything needed
from one source

HIGH EFFICIENCY

- Three independent MPP-Trackers
- Input for high voltage battery
- Suitable for dynamic power adjustment
- Intelligent energy storage management with forecast based charging
- Exact and fast control behaviour

UNIQUE FLEXIBILITY

- DC & AC Coupling compatible
- 1-phase feed-in
- Up to 2 high voltage batteries per inverter
- Wide MPPT range for flexible string planning and easy repowering
- Max-Power Control - self-learning shade management
- Cascadable, expandable and combinable with existing PV-systems
- Hybrid-ready charging of the battery also with external AC sources
- Emergency power capability in conjunction with the RCT Power Switch

EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT RESS App solution

USER FRIENDLY COMMUNICATION

- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- With 22 kg a lightweight in its category
- IP65 protection: Suitable for outdoor installation

MODEL

RHS-3.68K-H**RHS-4K-H****RHS-5K-H****RHS-6K-H**

PV INPUT

Max. Recommended DC Power [W]	7,360	8,000	10,000	12,000
No. of MPP Trackers	3			
Strings Per MPP Tracker	1			
Max. Input Current [A]	16			
Max. Short Circuit Current [A]	20			
Rated Input voltage [V]	360			
Max. DC Voltage [V]	600			
MPPT Voltage Range [V]	90 - 580			
Start-up Voltage [V]	120			

BATTERY INPUT

DC Voltage Range [V]	120 - 520			
Max. Charge/ Discharge Current [A]	25 / 25			
No. of Battery input	2			
Battery Type	LiFePO ₄			

AC INPUT / OUTPUT (ON-GRID SIDE)

Rated output power [W]	3,680	4,000	5,000	6,000
Max. output power [W]	3,680	4,000	5,000	6,000
Max. output apparent power [VA]	3,680	4,000	5,000	6,000
Rated input apparent power [VA]	3,680	4,000	5,000	6,000
Max. AC input apparent power from grid [VA]	3,680	4,000	5,000	6,000
Max. output current (@230V) [A]	16	17.4	21.7	26.1
Max. Input current from grid [A]	16	17.4	21.7	26.1
Rated frequency	50Hz			
Frequency range	45 - 55Hz			
Rated AC voltage	230V, L/N/PE			
AC voltage range	184V - 265V			
Total harmonic distortion (THD)	< 3% at rated power			
Adjustable power factor	0.8 leading ~ 0.8 lagging			

AC OUTPUT (BACK-UP MODE)

Back-Up Rated Power [VA]	3,680	4,000	5,000	6,000
Rated AC voltage	230V, L/N/PE			
Rated Frequency	50Hz			

PERFORMANCE

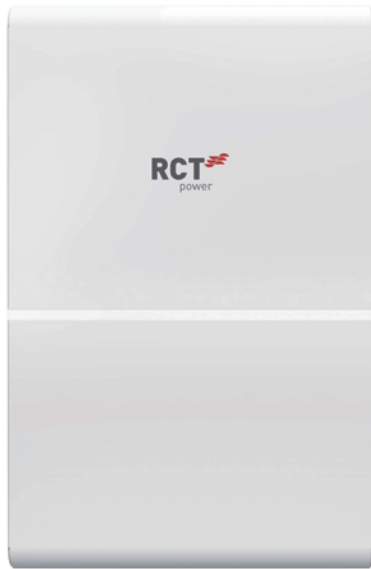
MPPT efficiency	99.90%			
Max. efficiency (BAT to AC)	97.10%			
Max. efficiency (PV to BAT)	98.00%			
Max. efficiency	97.10%			
European efficiency	96.60%			

OTHERS

Communication	RS485 / CAN / Wi-Fi / LAN			
Display	LED Indicator; WLAN + APP			
Cooling	Natural Convection			
IP degree of protection	IP65			
Max. Operating Altitude	4000 m			
Max. relative humidity	0% - 100% , non-condensing			
Typical noise	< 30 dB			
Operating temperature range	-25°C ~ +60°C (Derating above +45°C)			
Dimensions(height×width×depth)	605 × 445 × 165 mm			
Weight	22 kg			

SAFETY / STANDARDS

Safety Regulation	IEC 62109-1,IEC 62109-2			
Grid Regulation	EN 50549-1,EN 50549-10,RD 647/UNE 217001/UNE 217002/NTS 631 Type A,G99,CEI 0-21,AS/NZS4777.2			
EMC Regulation	EN61000-6-1, EN61000-6-2, EN61000-6-3, EN61000-6-4, EN 61000-4-16, EN 61000-4-18, EN 61000-4-29			



POWER STORAGE DC US-15.0

SPLIT-PHASE HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



back-up
power supply



up to 3 roof
orientations



modular space
saving design



quick and easy
installation



everything needed
from one source

HIGH PERFORMANCE

- Dynamic power adjustment (1- 100%)
- Input for high voltage battery
- 200% DC/AC ratio for higher yields
- Three MPPTs, Max.30A input per MPPT
- 160% peak backup power for 10 seconds
- Up to 96.5% operating efficiency

UNIQUE FLEXIBILITY

- Compatible with DC or AC Coupling applications
- Compatible with 120/240V and 120/208V voltage systems
- Supports microgrid and generator functions
- 200A AC passthrough current for whole-home backup
- Supports up to two high-voltage batteries per inverter
- UL 9540 Available
- External RSD, built-in transmitter

USER FRIENDLY

- Multicolor LED light path display
- Convenient remote monitoring via App and Cloud
- Flexible configuration, time-efficient and labor-saving
- Seamless switching on or off grid Installation

PREMIUM DESIGN

- German technology
- Combination of aesthetics and functionality design
- Corrosion-resistant aluminum housing
- NEMA 3R Design:suitable for indoor and outdoor

EXPANDABLE SOLUTION

- Modular 15kW hybrid inverter
- Add up to (6) 15kW hybrid inverters in parallel (90kW max)

POWER STORAGE DC

US-15.0

BATTERY INPUT DATA

Battery Type	Lithium-ion
Battery Voltage Range [V]	120-520
Max. Charging Current [A]	50
Max. Discharging Current [A]	50
Number of battery input	2

PV STRING INPUT DATA

Max DC Input Power [W]	30,000
Max DC Input Voltage [V]	600
Start-up Voltage [V]	150
MPPT Voltage Range [V]	120-520
Rated DC Input Voltage [V]	380
Max Input Short-Circuit Current [A]	45/45/45
Max Operating PV Input Current [A]	30/30/30
No. of MPP Trackers	3
No. of String Per MPP Tracker	2

AC INPUT/OUTPUT DATA

Rated AC Input/Output Active Power [W]	15,000
Max AC Input/Output Apparent Power [VA]	15,000
Peak Power (off-grid) [W]	24,000, 10s
Rated AC Input/Output Current [A]	62.5
Max AC Input/Output Current [A]	200
Max Continuous AC Passthrough (grid to load) [A]	200
Rated Input/Output Voltage/Range [V]	120/240, 120/208, 0.88Un-1.1Un
Grid Connection Form [V]	2L+N+PE, 208 / 240
Rated Input/Output Grid Frequency/Range	60Hz / 58.8-61.2Hz / 57-63Hz (HECO)
Power Factor Adjustment Range	0.8 leading - 0.8 lagging
Total Current Harmonic Distortion THDi	<3% (of nominal power)
DC Injection Current	< 0.5% In
Backup Transfer Time	< 10ms

EFFICIENCY

Max Efficiency	97.60%
CEC Efficiency	96.50%
MPPT Efficiency	> 99%

EQUIPMENT PROTECTION

PV Reverse Polarity Protection	Yes
AC Output Overcurrent Protection	Yes
AC Output Overvoltage Protection	Yes
AC Output Short Circuit Protection	Yes
DC Terminal Insulation Impedance Monitoring	Yes
Ground Fault Detection — NEC 690.5	Yes
Anti-islanding Protection	Yes
PV DC Disconnect Switch — NEC 240.15	Yes
Residual Current (RCD) Detection	Yes
PV Rapid Shutdown Control (RSD) — NEC 690.12	Yes
PV Arc Fault Detection (AFCI) — NEC 690.11	Yes
Surge Protection Level	Type II(DC), Type II(AC)

INTERFACE

Communication Interface	WIFI, RS485, CAN, Ethernet
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GENERAL DATA

Operating Temperature	-13 °F ~ 140 °F
Permissible Ambient Humidity	0 - 100%, non-condensing
Permissible Altitude [m]	2,000
Noise	≤ 45 dB (A) (3.28 ft)
Ingress Protection (IP) Rating	IP65 / TYPE 3R
Inverter Topology	Non-Isolated
Dimensions (WxHxD) [mm]	540 x 850 x 302
Weight [kg]	75

CERTIFICATIONS

Certifications and Listings	UL1741-3rd & CSA C22.2 No.107.1-16, UL1998, UL1699B, IEEE1547-2018 & IEEE1547.1-2020, UL1741 SB, FCC 15 Part B, UL1741 CRD PCS, UL3141, CA Rule 21, HECO Rule 14H(SRD-V2.0)
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WARRANTY

Warranty	10 Years*
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* The ambient temperature during the operation of the products shall not fall below -13°F or exceed 140°F. Inverter need to connect to RCT power cloud and generation data been successfully uploaded to RCT power server. See the warranty document for specific test conditions.



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	8 kg
Base dimension	50 x 760 x 268 mm
Base weight	7.5 kg
Battery pack dimension	358 x 760 x 268 mm
Battery pack weight	77 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

	1	2	3	4
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)	93 kg	170 kg	247 kg	324 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.

SOLARWAVE SERIES



THREE-PHASE HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



back-up
power supply



up to 2 roof
orientations



modular space
saving design



quick and easy
installation



everything needed
from one source

HIGH PERFORMANCE

- <10ms UPS-level switching
- Two MPPTs, Max.15A input per MPPT
- Optimized for high-power solar panel
- Max.150% PV oversizing
- 100% Full load charge and discharge

UNIQUE FLEXIBILITY

- Lithium batteries voltage range 160-800V
- Lithium battery charging strategy automatically adapts to the BMS
- Support 100% unbalanced loads
- Support microgrid and generator functions

USER FRIENDLY

- Convenient remote monitoring via App and Cloud
- Flexible configuration, time-efficient and labor-saving
- Remote diagnosis & update

PREMIUM DESIGN

- Compact and lightweight hardware design
- IP65 Design : suitable for indoor and outdoor

EASY TO USE

- Plug-and-play installation
- Easy anytime, anywhere monitoring
- Smart-Built Inverter: Integrated MES, FCT, and CRM

MODEL	RHT5.0K HH-EU	RHT6.0K HH-EU	RHT8.0K HH-EU	RHT10.0K HH-EU	RHT12.0K HH-EU	RHT15.0K HH-EU
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PV INPUT

Max. Recommended DC Power [W]	7,500	9,000	12,000	15,000	18,000	18,000
Max. DC Voltage [V]	1,000					
Max. Input Current [A]	15 / 15	15 / 15	15 / 15	15 / 15	15 / 15	30 / 15
Max. Short Circuit Current [A]	20 / 20	20 / 20	20 / 20	20 / 20	20 / 20	40 / 20
MPPT Voltage Range [V]	150 - 850					
Start-up Voltage [V]	145					
No. of MPP Trackers	2					
Strings Per MPP Tracker	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	2 / 1
PV Over Management	150%	150%	150%	150%	150%	120%
PV Connector Model	MC4					
MPPT Efficiency	99.90%					

BATTERY

Battery Type	LiFePO ₄
Battery Voltage Range [V]	160 - 800
Rated Voltage [V]	400
Max. Charge/ Discharge Current [A]	25 / 25
Communication Interface	CAN
No. of Battery Port	1

AC OUTPUT (On-Grid Side)

Max. AC Output Apparent Power [VA]	5,500	6,600	8,800	11,000	13,200	16,500
Rated AC Output Power [W]	5,000	6,000	8,000	10,000	12,000	15,000
Max. AC Output Current [A]	8.5	10	13.5	16	20	24
Rated AC Output Current [A]	8.5	10	13.5	16	20	24
Rated Grid voltage [V] (3P/N/PE)	380 / 400, 3W/N/PE					
Rated Grid Frequency [Hz]	50 / 60					
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging					
Output THDi (@Rated Output)	< 3%					
Max. Efficiency of "PV to AC"	98.0%	98.0%	98.2%	98.2%	98.2%	98.5%
EU Efficiency of "PV to AC"	97.3%	97.3%	97.3%	97.4%	97.4%	97.5%

BACK-UP OUTPUT

Back-Up Rated Power [W]	5,000	6,000	8,000	10,000	12,000	12,000
Peak Apparent Power for 60s [W]	10,000	12,000	15,000	15,000	15,000	15,000
Rated Voltage[V]	380 / 400					
Rated output current[A]	8.5	10	13.5	16	20	20
Rated Frequency [Hz]	50 / 60					
Output THDv (@Linear Load)	< 3%					
Automatic Switch Time [ms]	< 10					

GENERAL DATA

Inverter Dimensions (W*H*D) [mm]	425 x 351 x 200	
Inverter Weight [kg]	20	23
Network Connection Type	WiFi / 4G(Optional)	
Ambient Temperature Range [C]	-25 ~ +60	
Relative Humidity	0 ~ 100%	
Max. Operating Altitude [m]	2000 (>2000 Derating)	
Topology	Transformerless	
Cooling	Natural Cooling	Smart Fan
Ingress Protection	IP65	

CERTIFICATIONS & STANDARDS

Grid Regulation	IEC61727, EN 50549-1, CEI 0-16, CEI 0-21(5-10K), C10-11, VDE 4105, RfG:2016, NC RfG:2018, PTPIREE:2021, UNE 217001:2020, UNE 217002:2020, RD 244:2019, NTS V2.1, TOR-Type A, VDE-AR-N 4105
Safety Regulation	IEC62109-1, IEC62109-2
EMC Regulation	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3



POWER BATTERY LV SERIES

LOW VOLTAGE
OUTDOOR AND INDOOR BATTERY
FOR PV STORAGE SYSTEMS



High cycle life and
long-term durability



Cell-level active equalization

BMS

Multiple electrical protection
settings for safer use

4 Ways Mounting

Compatible with 4 types of mounting
(floor mount, wall mount, stacked
mount, rack mount)

> 10 Parallel

Supports parallel use of
multiple devices

100A

Supports a Max. charge/
discharge current of 100A

MODEL

RBS5.0L051-EU-P6

ELECTRICAL PARAMETER

Battery Type	LiFePO ₄
Battery Capacity Per Kit [kWh]	5.12
USable Energy [kWh]	4.6
Rated Voltage [V]	51.2
Voltage Range [V]	44.8 - 57.6
Max.Charging and Discharging Rate [A]	100
Battery Cell Capacity [Ah]	100
Depth of Discharge [DoD]	≤ 90%
Cycle Life (25°C, 0.5C)	≥ 6,000 times, 80% Capacity retention
Scalability	Yes

GENERAL DATA

Communication Mode	RS485 / CAN2.0
Operation Temperature Range	0~50°C (Charge) / -10~50°C (Discharge)
Storage Temperature Range [°C]	-15 ~ 60
Cooling Method	Natural Convection
Altitude [m]	< 3,000
Ambient Humidity	20 - 95% non-condensing
Noise [dB]	< 25
Ingress Protection	IP 65
Dimensions (H*W*D) [mm]	630 x 453 x 182
Weight [kg]	51
Installation Methods	Floor Standing, Wall Mounted
Certification	IEC 61000, UN38.3



POWER BATTERY LV SERIES

LOW VOLTAGE
OUTDOOR AND INDOOR BATTERY
FOR PV STORAGE SYSTEMS



High cycle life and
long-term durability



Cell-level active equalization

BMS

Multiple electrical protection
settings for safer use



LED screen displays the Battery
SOC and working status

> 10 Parallel

Supports parallel use of
multiple devices

200A

Supports a Max. charge/
discharge current of 200A

MODEL

RBS16.0L051-EU-P5

RBS16.0L051-EU-P6

ELECTRICAL PARAMETER

Battery Type	LiFePO ₄	
Battery Capacity Per Kit [kWh]	16.08	
USable Energy [kWh]	14.47	
Rated Voltage [V]	51.2	
Voltage Range [V]	44.8 - 57.6	
Max.Charging and Discharging Rate [A]	200	
Battery Cell Capacity [Ah]	314	
Depth of Discharge [DoD]	≤ 90%	
Cycle Life (25°C, 0.5C)	≥6,000 times, 80% Capacity retention	≥6,000/8,000* times,80% Capacity retention
Scalability	Yes	

GENERAL DATA

Communication Mode	RS485 / CAN2.0	
Operation Temperature Range	0~50°C (Charge) / -10~50°C (Discharge)	
Storage Temperature Range [°C]	-15 ~ 60	
Cooling Method	Natural Convection	
Altitude [m]	≤ 3,000	
Ambient Humidity	20 - 95% non-condensing	
Noise [dB]	< 25	
Ingress Protection	IP 54	IP 65
Interaction	/	WiFi & Bluetooth
Display	LCD	
Dimensions (H*W*D) [mm]	845 x 450 x 251	
Weight [kg]	120	
Firefighting Method	Aerosol Fire Extinguisher	
Installation Methods	Floor Standing	
Certification	IEC 61000, UN38.3	

COMPATIBLE INVERTERS



*Two cycle life options are available. Please contact your sales manager for details.

SOLARLINK SERIES

SINGLE-PHASE HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



back-up
power supply



up to 2 roof
orientations



modular space
saving design



quick and easy
installation



everything needed
from one source

HIGH PERFORMANCE

- < 10ms UPS-level switching
- Two MPPTs, Max.18A input per MPPT
- Max. 200% PV oversizing
- 100% Full load charge and discharge

FULLY COMPATIBILITY

- Lithium batteries voltage range 40-60V
- Lithium battery charging strategy automatically adapts to the BMS
- Dual-Mode Function: Grid-Tied & Off-Grid Ready

USER FRIENDLY

- Convenient remote monitoring via App and Cloud
- Flexible configuration, time-efficient and labor-saving
- Remote diagnosis & update

PREMIUM DESIGN

- Compact and lightweight hardware design
- IP65 Design : suitable for indoor and outdoor

EASY TO USE

- Plug-and-play installation
- Easy anytime, anywhere monitoring

MODEL

RHS3.0K
LH-EU

RHS3.68K
LH-EU

RHS4.0K
LH-EU

RHS5.0K
LH-EU

RHS6.0K
LH-EU

PV INPUT

Max. Recommended DC Power [W]	6,000	7,360	8,000	10,000	12,000
Max. DC Voltage [V]	600				
Max. Input Current [A]	18 / 18				
Max. Short Circuit Current [A]	20 / 20				
MPPT Voltage Range [V]	80 - 550				
Start-up Voltage [V]	70				
No. of MPP Trackers	2				
Strings Per MPP Tracker	1 / 1				
PV Over Management	200%				
PV Connector Model	D4 (SUNCLIX,MC4 optional)				
MPPT Efficiency	99.90%				

BATTERY

Battery Type	Lithium-ion				
Battery Voltage Range [V]	40 ~ 60				
Rated Voltage	48				
Max. Charge/ Discharge Current [A]	70 / 70	70 / 70	80 / 80	120 / 120	120 / 120
Communication Interface	CAN, RS485				
No. of Battery Port	1				

AC OUTPUT (On-Grid Side)

Max. AC Output Apparent Power [VA]	3,300	4,048	4,400	5,500	6,600
Rated AC Output Power [W]	3,000	3,680	4,000	5,000	6,000
Max. AC Output Current [A]	14.3	17.6	19.1	23.9	28.7
Rated AC Output Current [A]	13	16	17.4	21.7	26.1
Rated Grid voltage [V] (3P/N/PE)	220 / 230 / 240 (L/N/PE)				
Rated Grid Frequency [Hz]	50 / 60				
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging				
Output THDi (@Rated Output)	< 3%				
Max. Efficiency of "PV to AC"	98.0%				
EU Efficiency of "PV to AC"	97.6%				

BACK-UP OUTPUT

Back-Up Rated Power [W]	3,000	3,680	4,000	5,000	6,000
Peak Apparent Power for 60s [W]	6,000	7,360	8,000	7,500	9,000
Rated Voltage[V]	230 (±2%)				
Rated output current[A]	13	16	17.4	21.7	26.1
Rated Frequency [Hz]	50 / 60				
Output THDv (@Linear Load)	< 2%				
Automatic Switch Time [ms]	< 10				

GENERAL DATA

Inverter Dimensions (W*H*D) [mm]	485 x 365 x 180				
Inverter Weight [kg]	20				
Network Connection Type	WiFi / 4G (Optional)				
Ambient Temperature Range [C]	-30 ~ +60				
Relative Humidity	0 ~ 100%				
Max. Operating Altitude [m]	3000 (> 3000 Derating)				
Topology	Transformerless				
Cooling	Natural Cooling				
Ingress Protection	IP65				

CERTIFICATIONS & STANDARDS

Grid Regulation	IEC61727, IEC62116, IEC61683, IEC60068, EN50549-1/-10, CEI 0-21, NTS V2.1, UNE217002&RD1699, NRS 097-2-1
Safety Regulation	IEC/EN61000-6-1/-3, EN62920
EMC Regulation	IEC 62109-1/-2



TOP EFFICIENCY FOR 6 YEARS IN A ROW

HTW BERLIN ENERGY STORAGE INSPECTION

The outstanding energy efficiency of the RCT Power Storage Systems was once again confirmed in 2025. From 2020 to 2025, we ranked first in the 5 kW and 10 kW performance classes in the annual Energy Storage Inspection conducted by the University of Applied Sciences Berlin (HTW Berlin).

www.rct-power.com

