TIER 1
Bloomberg
NEW ENERGY FINANCE

INTELLIGENT POWER STORAGE FROM ONE SOURCE.

SUSTAINABLE. FLEXIBLE. EFFICIENT.

RCT power

GET THE MOST OUT OF YOUR SOLAR POWER.

Germany
Technology and Design

With a modular RCT Power electricity storage unit you store your solar power locally and use it whenever you need it. Flexible and sustainable.

RCT power

Catalogue

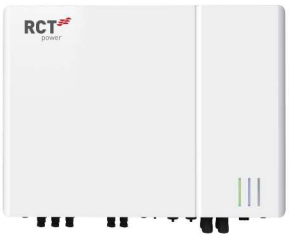
POWER BATTERY

Power Battery
5.0 | 7.5 | 10.0 | 12.5 | 15.0

Power Battery
8.0 | 16.0 | 24.0 | 32.0

Power Battery
5.0 | 10.0 | 15.0 | 20.0

HYBRID INVERTER



Power Storage DC
5.0 | 6.0 SP

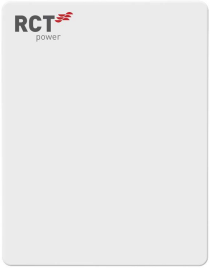
SolarWave Series
15K | 20K | 25K | 30K

SolarWave Series
5K | 6K | 8K | 10K | 12K | 15K

SolarLink Series
3K | 3.6K | 4K | 4.6K | 5K |
6K | 8K | 10K | 10.5K

Germany
Technology and Design

POWER SWITCH



AC Power Switch

POWER SENSOR

Power Sensor 50 | 100

CLOUD & APP

RCT Power Cloud & APP

RCT power

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 $LiFePO_4$ battery

modular space saving design

easy to transport and install

everything needed from one source

HIGH PERFORMANCE

- $LiFePO_4$ technology
- Max.0.7C charging/discharging rate
- Intelligent equalization
- High voltage, high efficiency, low stress operation

FLEXIBLE AND UPGRADEABLE

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

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

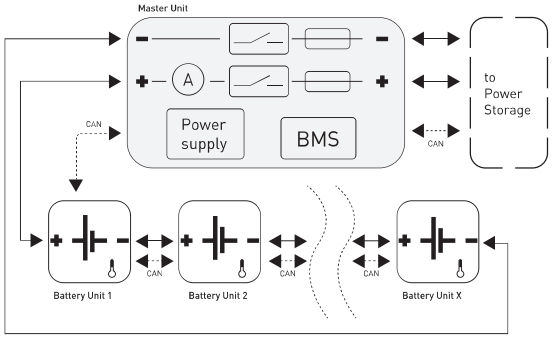
SUSTAINABLE

- 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

MONITORING VIA APP

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

BLOCK DIAGRAM



POWER BATTERY	5.0	7.5	10.0	12.5	15.0
ELECTRICAL PARAMETERS					
Nominal capacity	5 kWh	7.5 kWh	10 kWh	12.5 kWh	15 kWh
Usable capacity (90% DoD)	4.5 kWh	6.75 kWh	9 kWh	11.25 kWh	13.5 kWh
Cycle Life	6000				
Voltage range	145 V...166 V	218 V ... 248 V	291 V ... 331 V	364 V ... 414 V	436 V ... 497 V
Nominal voltage	154 V	230 V	307 V	384 V	461 V
Maximum charge / discharge current	25 A / 25 A	25 A / 25 A	25 A / 25 A	25 A / 25 A	25 A / 25 A
Standby consumption	< 5 W				
INTERFACES					
Power Storage interface	CAN				
GENERAL					
Battery technology	$LiFePO_4$				
Dimensions (height x width x depth)	597x344x344 mm	829x344x344 mm	1058x344x344 mm	1289x344x344 mm	1518x344x344 mm
	1.96'x1.13'x1.13'	2.72'x1.13'x1.13'	3.47'x1.13'x1.13'	4.23'x1.13'x1.13'	4.98'x1.13'x1.13'
Weight (single stack 25.2 kg(55.5 lb))	56.4kg (124.3 lb)	81.6kg (179.9 lb)	106.8kg (235.5 lb)	132kg (291.0 lb)	157.2kg (346.6 lb)
Number of battery units	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, IEC 62619, IEC63056				
EMC	FCC Part 15B, ICES-003, IEC 61000-6-1&-6-3				
Safety	UL1973, UL60730-1, UL9540A, IEC60730, IEC62040				
WARRANTY					
Warranty	10 years*				

* Test condition of 77±35.6°F, 0.3C charge and discharge rate and SOH=70%

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

TECHNICAL SPECIFICATION

	RBS8.0 HM650T-EU	RBS16.0 HM650T-EU	RBS24.0 HM650T-EU	RBS32.0 HM650T-EU
				
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.

POWER BATTERY
5.0 | 10.0 | 15.0 | 20.0

MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS

support mixed use of old & new batteries

5kWh modular design scalable from 5 to 40kWh

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 2.5 kW. Maximum charge/discharge power per cluster system reaches 10 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 40kWh.

POWER BATTERY RDM050025-EUR1

ELECTRICAL PARAMETERS

Battery Cell Type	$LiFePO_4$
Battery Cell capacity	314Ah
Battery Cycle	6000*
Battery usable capacity	5 kWh
Max. output power	2.5 kW
Nominal voltage	400 V
Operating voltage range	370~450V

COMMUNICATION

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

GENERAL SPECIFICATION

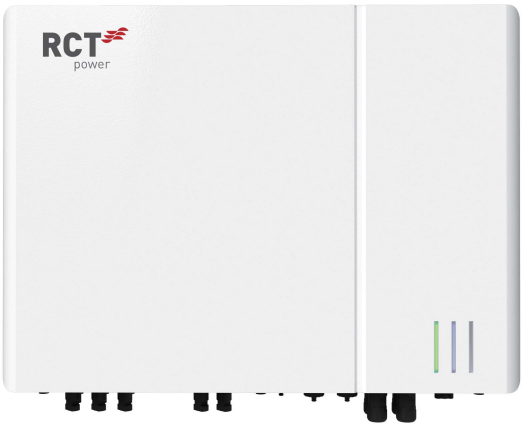
Power module dimension	80 x 760 x 268 mm
Power module weight	20 kg
Battery module dimension	358 x 760 x 268 mm
Battery module weight	50 kg
Installation	Floor stand
Operating temperature	Charge: 0~ 55°C
	Discharge: -20 ~ 50°C
Max. operating altitude	4000 m
Relative humidity	5% - 95% RH
Cooling	Natural
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

TECHNICAL SPECIFICATION

	RBS5.0 HM400T-EU	RBS10.0 HM400T-EU	RBS15.0 HM400T-EU	RBS20.0 HM400T-EU
				
ELECTRICAL PARAMETERS				
Number of battery modules	1	2	3	4
Battery usable capacity	5 kWh	10 kWh	15 kWh	20 kWh
Max. output power	2.5 kW	5.0 kW	7.5 kW	10.0 kW
Weight (Floor stand toolkit included)	70 kg	120 kg	170 kg	220 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.



POWER STORAGE DC 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 MPP 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

POWER STORAGE DC	5.0 SP	6.0 SP
DC INPUT		
Max. recommended DC power	9300 W	
MPPT	3	
Input per MPPT	1	
Max. DC current per MPPT	16 A	
Max. Short circuit current PV input (Iscmax)	20 A	
Rated DC voltage	360 V	
DC start up voltage / power	120 V / 50W	
MPP voltage range	90 V ... 580 V	
Max. voltage DC	600 V	
Connector type	Phoenix XLIX	
BATTERY INPUT		
DC Voltage range	120 V ... 520 V	
Max. charge / discharge current	25 A / 25 A	
Number of battery input	2	
Connector-type	MC4 Evo2	
AC OUTPUT (GRID-MODE)		
Gird connection	1 phase	
Real AC output power	5000 W	6000 W
Max. active power	5000 W	6000 W
Max. apparent power	5000 VA	6000 VA
Max. AC input apparent power from grid	5000 VA	6000 VA
Nominal AC current per phase	21,7 A	26,1 A
Max. AC current per phase	21,7 A	26,1 A
Rated frequency	50 Hz	
Frequency range	45 Hz ... 55 Hz	
Rated AC voltage	230 V, L/N/PE	
AC voltage range	184 ... 265 V	
Total harmonic distortion (THD)	< 3 %	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap....0,8 ind)	
Earth fault protection	RCD	
Type of AC connection	quick connection plug	
AC OUTPUT (BACK-UP MODE)*		
Max. AC output apparent power	5000 VA	6000 VA
Rated AC voltage	230 V, L/N/PE	
Max. AC output current	21,7 A	26,1 A
Rated frequency	50 Hz	
PERFORMANCE		
Stand-by consumption	< 5 W	
Max. efficiency (PV2AC)	97,1 %	
Max. efficiency (Battery2Grid)	97,1 %	
European weighted efficiency	96,6 %	
Topology	transformerless	
OTHERS		
Dark start function	yes	
PV disconnect switch	integrated	
Data interface	BAT/CAN, WLAN, LAN, RS485	
Display	LED indicator	
Cooling	convection	
IP degree of protection	IP 65	
Max. operating altitude	4000 m	
Max. relative humidity	0 - 100 %	
Typical noise	< 30 dB	
Operating temperature range	-25°C ... 60°C (derating above 45°C)	
Dimensions (height x width x depth)	445 x 605 x 165 mm	
Weight	22 kg	
SAFETY / STANDARDS		
Safety	EN/IEC 62109-1, EN/IEC 62109-2	
Grid support 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	IEC/EN 61000-6-1/2/3/4	
WARRANTY		
Warranty	10 years	

SOLARWAVE SERIES

THREE-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

- < 10ms UPS-level switching
- Three MPPTs, Max.36A input per MPPT
- Up to 98.1% operating efficiency
- Optimized for high-power solar panel
- Max.150% PV oversizing
- 150% Peak backup power for 10 seconds

UNIQUE FLEXIBILITY

- Support 100% unbalanced loads
- Supports microgrid and generator functions
- Supports up to two high-voltage battery groups per inverter

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
- IP66 Design: suitable for indoor and outdoor
- Optional AFCI & RSD function

EXPANDABLE SOLUTION

- Support AC retrofit application
- Support up to 3 units parallel connection

MODEL	RHT15.0KHR-EU	RHT20.0KHR-EU	RHT25.0KHR-EU	RHT30.0KHR-EU
PV INPUT				
Max. Recommended DC Power [W]	30,000	40,000	45,000	45,000
Max. DC Voltage [V]	1,000			
Max. Input Current [A]	36 / 36 / 36			
Max. Short Circuit Current [A]	46 / 46 / 46			
MPPT Voltage Range [V]	180 - 960			
Start-up Voltage [V]	200			
No. of MPP Trackers	3			
Strings Per MPP Tracker	2			
PV Over Management	200%	200%	180%	150%
BATTERY				
Battery Type	$LiFePO_4$			
Battery Voltage [V]	180 - 800			
Max. Charge/ Discharge Power [W]	30,000 / 15,000	30,000 / 20,000	30,000 / 25,000	30,000 / 30,000
Max. Charge/ Discharge Current [A]	50 / 50			
Communication Interface	CAN			
AC OUTPUT				
Max. AC Output Apparent Power [VA]	16,500	22,000	27,500	33,000
Rated AC Output Power [W]	15,000	20,000	25,000	30,000
Max. AC Output Current [A]	25.0	33.4	41.7	50
Rated AC Output Current [A]	22.8	30.3	37.9	45.5
Rated AC Voltage [V]	3 / N / PE, 220 / 380, 230 / 400			
Grid Frequency [Hz]	50 / 60			
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging			
Output THDi (@Rated Output)	< 3%			
AC INPUT				
Max. AC Input Power [VA]	30,000	40,000	41,500	41,500
Max. AC Input Current [A]	45.5	60.3	63.0	63.0
Rated AC Voltage [V]	3 / N / PE, 220 / 380, 230 / 400			
Grid Frequency [Hz]	50 / 60			
BACKUP OUTPUT (WITH BATTERY)				
Rated Power [W]	15,000	20,000	25,000	30,000
Rated Voltage[V]	3 / N / PE, 220 / 380, 230 / 400			
Rated Frequency [Hz]	50 / 60			
Rated Current [A]	22.8	30.3	37.9	45.5
Output THDv (@Linear Load)	< 3%			
Automatic Switch Time [ms]	< 10			
Peak Apparent Power, Duration [VA, 10s]	22,500	30,000	37,500	45,000
EFFICIENCY				
Max. Efficiency	98.10%			
Euro-Efficiency [%]	97.70%			
Max. Battery Charge/Discharge Efficiency	97.60%			
GENERAL DATA				
Dimensions (W*H*D) [mm]	630 x 514 x 239			
Weight [kg]	45.32	45.32	47.00	47.00
Display	LED + LCD			
Communication	RS485, USB Update, 4 × DI, 2 × DO, Optional： WiFi or 4G or Ethernet			
Ambient Temperature Range [°C]	-30 ~ +60			
Relative Humidity	0 ~ 100%			
Operating Altitude [m]	< 2000			
Night Self-consumption [W]	< 15			
Topology	Non-isolated			
Cooling	Natural	Natural	Fan	Fan
Ingress Protection	IP66			
CERTIFICATIONS & STANDARDS				
Grid Regulation	IEC61727/IEC62116, EN50549-1/EN50549-10, EN50549-PL, EN50549-CZ, VDE-AR-N 4105, CEI 0-21			
Safety Regulation	IEC 62109-1, IEC 62109-2, EN 62109-1, EN 62109-2			
EMC	EN / IEC 61000-6-1, EN / IEC 61000-6-2, EN / IEC 61000-6-3, EN / IEC 61000-6-4			

SOLARWAVE SERIES

THREE-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

- < 10ms UPS-level switching
- Three MPPTs, Max.20A input per MPPT
- Up to 98.8% operating efficiency
- Optimized for high-power solar panel
- Max.200% PV oversizing
- 200% Peak backup power for 60 seconds

UNIQUE FLEXIBILITY

- Support 100% unbalanced loads
- Supports microgrid and generator functions
- Supports up to two high-voltage battery groups per inverter

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
- IP66 Design: suitable for indoor and outdoor
- Optional AFCI & RSD function

EXPANDABLE SOLUTION

- Support AC retrofit application
- Support up to 10 units parallel connection

MODEL	RHT5.0K HE-EU	RHT6.0K HE-EU	RHT8.0K HE-EU	RHT10.0K HE-EU	RHT12.0K HE-EU	RHT15.0K HE-EU
PV INPUT						
Max. Recommended DC Power [W]	10,000	12,000	16,000	20,000	24,000	30,000
Max. DC Voltage [V]	1,000					
Max. Input Current [A]	20 / 20 / 20	20 / 20 / 20	20 / 20 / 20	20 / 20 / 40	20 / 20 / 40	20 / 20 / 40
Max. Short Circuit Current [A]	30 / 30 / 30	30 / 30 / 30	30 / 30 / 30	30 / 30 / 60	30 / 30 / 60	30 / 30 / 60
MPPT Voltage Range [V]	100 - 900					
Start-up Voltage [V]	50					
No. of MPP Trackers	3					
Strings Per MPP Tracker	1 / 1 / 1	1 / 1 / 1	1 / 1 / 1	1 / 1 / 2	1 / 1 / 2	1 / 1 / 2
PV Over Management	200%					
BATTERY						
Battery Type	$LiFePO_4$					
Battery Voltage [V]	80 - 800					
Rated. Charge/ Discharge Current [A]	50 / 50					
Max. Charge/ Discharge Current [A]	60 / 60					
Communication Interface	RS485, CAN					
AC OUTPUT (On-Grid Side)						
Max. AC Output Apparent Power [VA]	5,000	6,000	8,000	10,000	12,000	15,000
Rated AC Output Power [W]	5,000	6,000	8,000	10,000	12,000	15,000
Max. AC Output Current [A]	7.2	8.7	11.6	14.5	17.4	21.7
Rated AC Output Current [A]	7.2	8.7	11.6	14.5	17.4	21.7
Rated AC Voltage [V]	3 / N / PE, 220 / 380, 230 / 400, 240 / 415, 312 ~ 520					
Grid Frequency [Hz]	50 / 60					
Adjustable Power Factor [cosφ]	> 0.99, 0.8 leading ~ 0.8 lagging					
Output THDi (@Rated Output)	< 3%					
AC OUTPUT (Back-Up)						
Rated Power [W]	5,000	6,000	8,000	10,000	12,000	15,000
Peak Apparent Power for 60s [W]	10,000	12,000	16,000	20,000	24,000	30,000
Rated Voltage[V]	3 / N / PE, 220 / 380, 230 / 400, 240 / 415, 312 ~ 520					
Rated output current[A]	7.2	8.7	11.6	14.5	17.4	21.7
Rated Frequency [Hz]	50 / 60					
Output THDv (@Linear Load)	< 3%					
Automatic Switch Time [ms]	< 10					
EFFICIENCY						
Max. Efficiency	98.80%					
Euro-Efficiency [%]	98.30%					
GENERAL DATA						
Dimensions (W*H*D) [mm]	507 x 522 x 194					
Weight [kg]	26					
Communication	WiFi, 4G, GPRS, Bluetooth, RS485, CAN					
Ambient Temperature Range [°C]	-25 ~ +60					
Relative Humidity	0 ~ 100%					
Operating Altitude [m]	< 3000					
Topology	Non-isolated					
Cooling	Fan					
Ingress Protection	IP66					
CERTIFICATIONS & STANDARDS						
Grid Regulation	AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105, CEI0-21, CEI0-16, RD1699, NA/EEA, C10:2019, PPDS:2021, Tor+R25, IEC61683, IEC61727&621611727/IEC62116, EN50549-1/EN50549-10, EN50549-PL, EN50549-CZ, CEI 0-21					
Safety / EMC Regulation	IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004					

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
- Premium grid peak shaving capabilities, friendly to grid
- 100% full load charge and discharge
- Max. 200% back-up output overloading @60S

FULLY COMPATIBILITY

- Lithium batteries voltage range 80-500V
- Max. PV input current per string 18A
- Enhanced compatibility with 2 MPPTs

UNIQUE FLEXIBILITY

- Supports diesel generators in off-grid locations
- Max. charging/discharging current 60A

SMART SYSTEM

- Intelligent EMS function, improving battery's reliability
- Longevity and almost no derating at high temperature
- Settable charge and discharge time

EASY TO USE

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

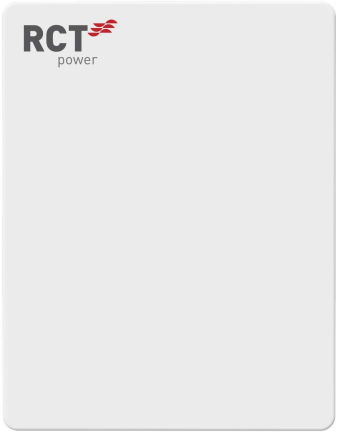
PREMIUM DESIGN

- IP66 protection for indoor and outdoor use
- Optional AFCI protection

EXPANDABLE SOLUTION

- Support AC retrofit application
- Support up to 4 units parallel connection

MODEL	RHS3.0K HE-EU	RHS3.6K HE-EU	RHS4.0K HE-EU	RHS4.6K HE-EU	RHS5.0K HE-EU	RHS6.0K HE-EU	RHS8.0K HE-EU	RHS10.0K HE-EU	RHS10.5K HE-EU
PV INPUT									
Max. Recommended DC Power [W]	3900	4680	5200	5980	6500	7800	10400	13000	13650
Max. DC Voltage [V]	600								
Max. Input Current [A]	36 / 36 / 36								
Max. Short Circuit Current [A]	46 / 46 / 46								
MPPT Voltage Range [V]	80 - 580								
Start-up Voltage [V]	40								
No. of MPP Trackers	2								
Strings Per MPP Tracker	1 / 2								
PV Over Management	130%								
BATTERY									
Battery Type	$LiFePO_4$								
Battery Voltage [V]	80 - 500								
Max. Charge/ Discharge Current [A]	60 / 60								
Communication Interface	RS485,CAN								
AC OUTPUT									
Max. AC Output Apparent Power [VA]	3,000	3,600	4,000	4,600	5,000	6,000	8,000	10,000	10,500
Rated AC Output Power [W]	3,000	3,600	4,000	4,600	5,000	6,000	8,000	10,000	10,500
Max. AC Output Current [A]	13.0	15.7	17.4	20.0	21.7	26.1	34.8	43.5	45.6
Rated AC Output Current [A]	13.0	15.7	17.4	20.0	21.7	26.1	34.8	43.5	45.6
Rated AC Voltage [V]	220 / 230 / 240 (180~300)								
Grid Frequency [Hz]	50 / 60								
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging								
Output THDi (@Rated Output)	< 3%								
BACKUP OUTPUT (WITH BATTERY)									
Rated Power [W]	3,000	3,600	4,000	4,600	5,000	6,000	8,000	10,000	10,500
Rated Voltage[V]	220 / 230 / 240 (180~300)								
Rated Frequency [Hz]	50 / 60								
Rated Current [A]	13.0	15.7	17.4	20.0	21.7	26.1	34.8	43.5	45.6
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging								
Output THDv (@Linear Load)	< 3%								
Automatic Switch Time [ms]	< 10								
EFFICIENCY									
Max. Efficiency	98.60%								
Euro-Efficiency [%]	98.10%								
GENERAL DATA									
Dimensions (W*H*D) [mm]	411 x 401 x 166								
Weight [kg]	17.7								
Communication	Wifi, 4G, GPRS, Bluetooth, RS485, CAN								
Max. operation altitude(m)	3,000								
Ambient Temperature Range [°C]	-25 ~ +60								
Topology	transformerless								
Cooling	Natural cooling	Natural cooling	Natural cooling	Natural cooling	Natural cooling	Smart Fan	Smart Fan	Smart Fan	Smart Fan
Ingress Protection	IP66								
Grid Regulation	AS/NZS4777:2020, EN50549-10:2022, G98:2021, G99:2021, NC RFG, ABNT NBR 16150, VDE-AR-N 4105,								
Grid Regulation	CEI0-21, CEI0-16, RD1699, NA/EEA, C10:2019, PPDS:2021, Tor+R25, IEC61683, IEC61727&62161								
Safety/EMC Regulation	IEC-62109-1/-2, IEC-61000-6-1/-2/-3, NB/T32004								



AC POWER SWITCH

SAFE SUPPLY OF HOUSEHOLD AND FUNCTIONAL RELIABILITY OF PV SYSTEM IN CASE OF GRID FAILURE

high efficiency

back-up power supply

quick and easy installation

everything needed from one source

BACKUP POWER SUPPLY

- Provision of backup grid
- 1-phase supply
- Automatic switching in case of power failure
- Switch-on delay less than 20 ms
- Battery and PV system can be used as energy source

EASY INSTALLATION

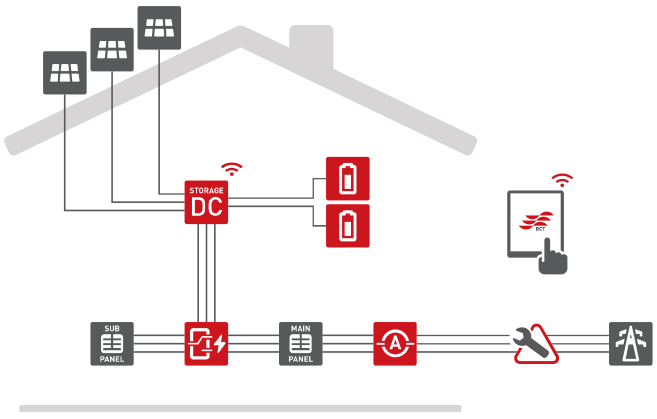
- Compact and lightweight housing
- Wall mounting
- Upgradeable

EFFICIENT

- Up to 6 kVA for single phase Storage DC 6.0 SP
- Fast switching

WHAT IS RCT BACKUP POWER?

In the event of a power failure, the RCT Power Switch ensures that the PV system and connected battery storage unit keep operational. The RCT Power Switch all-pole disconnects the domestic network from the mains supply. It then creates a stand-alone grid in combination with the DC-connected RCT Power storage system.



AC POWER SWITCH

RAL8.0K-230G2

AC OUT (ON GRID)

Grid connection	1-phase
Rated voltage	230 V
AC frequency	50 Hz
AC output voltage range	184 ~265 V
Rated current	50 A

AC OUT (BACK UP)

Load connection	1-phase
Rated voltage	230 V
AC frequency	50 Hz
Rated apparent power	8000 VA
Rated output current	34.8 A
Switch over time	< 20 ms

AC INPUT (INVERTER)

Rated voltage	230 V
AC frequency	50 Hz

OTHERS

Operating temperature range	-25°C...+60°C
Relative humidity	0 % - 100 %
Type of installation	wall mounting
Dimensions (height x width x depth)	450 x 350 x 110 mm
Weight	6.2 kg

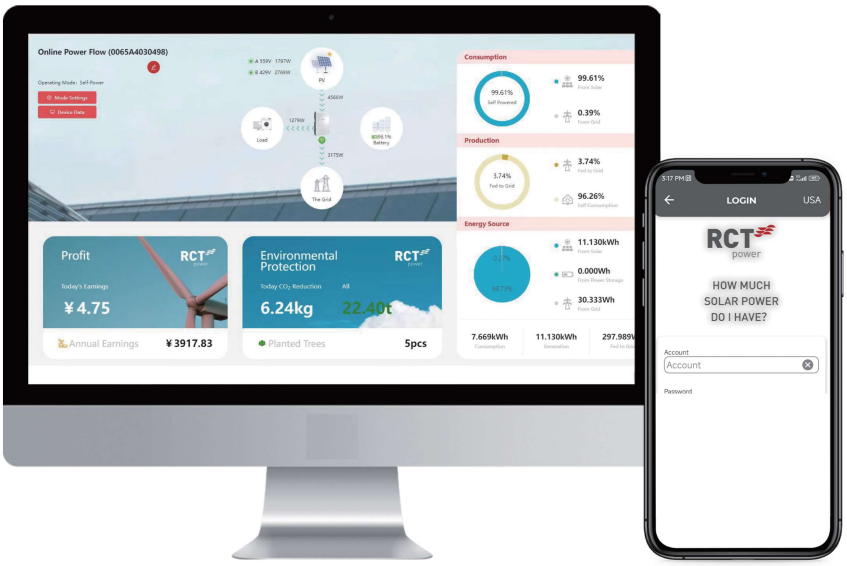
SAFETY / STANDARDS

IP-class	IP65
Standards	IEC/EN 61439-1/2

WARRANTY

Warranty	10 years

Cloud & APP



GET IT ON Google Play

Download on the App Store

RCT Power Cloud

RCT Power Cloud is independently developed and designed by RCT Power. Through the cloud platform, it can unify the management of equipment, power plants, installers and end users. By presenting the collected equipment data, it shows the operation of equipment and power station in all dimensions, and realizes 360-degree view of equipment tracking and maintenance from parameter setting, safety regulation setting, schedule task, remote control, equipment mode, equipment upgrade and operation history.

RCT Power APP

- Compatible with Android and IOS systems
- Save debugging time
- Remote upgrade and installation
- Self-developed design
- Real-time monitoring

VPP Interoperability

CSIP-AUS certified for seamless integration with virtual power plant operators.

RCT POWER IS TEST WINNER 2024 & 2025 5 & 10 kW STORAGE SYSTEMS

The outstanding energy efficiency of the RCT Power Storage Systems was once again confirmed in 2025. As the previous year, they ranked top in the 5 kW and 10 kW performance classes in the annual Energy Storage Inspection by the University of Applied Sciences Berlin (HTW Berlin).

LEARN MORE:
WWW.STROMSPEICHER-INSPEKTION.DE

RCT power

LEARN MORE:
WWW.RCT-POWER.AU