




INTELLIGENT POWER STORAGE FROM ONE SOURCE.

SUSTAINABLE. FLEXIBLE. EFFICIENT.





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.

Catalogue

POWER BATTERY



Power Battery
5.0 | 7.5 | 10.0 | 12.5 | 15.0

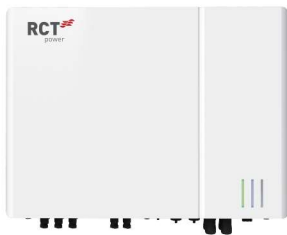


Power Battery
8.0 | 16.0 | 24.0 | 32.0



Power Battery
5.0 | 10.0 | 15.0 | 20.0

HYBRID INVERTER



Power Storage DC
3.68 | 4.0 | 5.0 | 6.0 SP

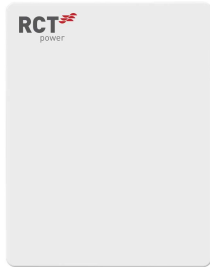


SolarSlink Series
8K



SolarSlink Series
10K | 15K | 20K

POWER SWITCH



AC Power Switch

POWER SENSOR



Power Sensor 50 | 100

CLOUD & APP



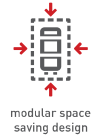
RCT Power Cloud & APP



POWER BATTERY

5.0 | 7.5 | 10.0 | 12.5 | 15.0

MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS



HIGH PERFORMANCE

- LiFePO₄ technology
- Max.0.7C 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

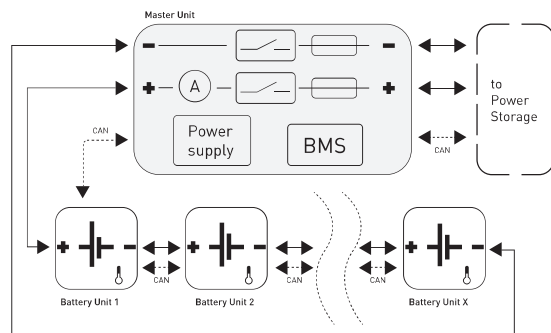
FLEXIBLE AND UPGRADEABLE

- 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

5.0

7.5

10.0

12.5

15.0

ELECTRICAL PARAMETERS

Nominal capacity [kWh]	5	7.5	10	12.5	15
Usable capacity (90% DoD) [kWh]	4.5	6.75	9	11.25	13.5
Cycle Life	6000				
Voltage range [V]	145 - 166	218 - 248	291 - 331	364 - 414	436 - 497
Nominal voltage [V]	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]	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]	59	84	109	134	159
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*
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* 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 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 usable energy	8 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

	1	2	3	4
Number of battery packs	1	2	3	4
Battery pack usable 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.



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 80kWh



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 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 Energy** up to 80kWh.

POWER BATTERY

RDM050025-EUR1

ELECTRICAL PARAMETERS

Battery cell type	LiFePO ₄
Battery cell capacity	314Ah
Battery cell cycle	8000*
Battery pack usable energy	5 kWh
Max. output power	2.5 kW
Battery pack nominal voltage	400 V
Battery pack operating voltage range	350~450V

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	60 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

**RBS5.0
HM400T-EU**

**RBS10.0
HM400T-EU**

**RBS15.0
HM400T-EU**

**RBS20.0
HM400T-EU**

TECHNICAL SPECIFICATION



ELECTRICAL PARAMETERS

	1	2	3	4
Number of battery packs	1	2	3	4
Battery pack usable energy	5 kWh	10 kWh	15 kWh	20 kWh
Max. output power	2.5 kW	5.0 kW	7.5 kW	10.0 kW
Weight (Junction box & base included)	77 kg	137 kg	197 kg	257 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.



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

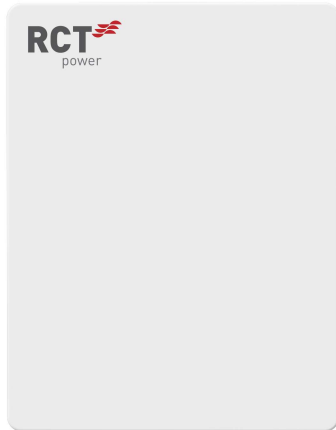
MPPT efficiency	99.90%			
Max. efficiency (BAT to AC)	97.10%			
Max. efficiency (PV to BAT)	98.00%			
Max. efficiency	97.10%			
European efficiency	96.60%			

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			



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 2s
- Battery and PV system can be used as energy source

EASY INSTALLATION

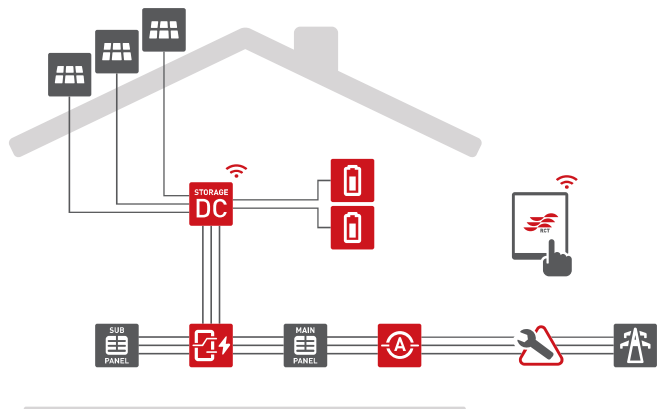
- Compact and lightweight housing
- Wall mounting
- Upgradeable

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	Single phase
Rated voltage	230 V
AC frequency	50 Hz
AC output voltage range	184 ~265 V

AC OUT (BACK UP)

Load connection	Single phase
Rated voltage	230 V
AC frequency	50 Hz
Rated apparent power	6,000 VA
Rated output current	26.1 A
Switch over time	< 2 s

AC INPUT (INVERTER)

Rated voltage	230 V
AC frequency	50 Hz

OTHERS

Operating temperature range	-25°C ... +60°C
Relative humidity	0 % - 100 %, non-condensing
Type of installation	wall mounting
Dimensions (height x width x depth)	450 x 350 x 110 mm
Weight	8 kg

SAFETY / STANDARDS

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

WARRANTY

Warranty	10 years
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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
- 160% DC oversizing boosts solar capture
- 100% full load charge and discharge
- Continuous 110% AC overloading sustains power

FULLY COMPATIBILITY

- Lithium batteries voltage range 85-450V
- Max. PV input current per string 15A
- Enhanced compatibility with 2 MPPTs
- IP65 protects both indoors and outdoors

EXPANDABLE SOLUTION

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

SMART SYSTEM

- Multiple working modes and diverse uses
- The newly enhanced RCT EMS platform for peak intelligent energy management
- Centralized smart management for efficiency

EASY TO USE

- Plug-and-play installation
- Easy anytime, anywhere monitoring
- Remote upgrades maintain system health

MODEL

MHS-8K-30

PV INPUT

Max. Recommended PV Power [W]	12,800
PV Over-Matching	160%
Max. PV Input Voltage [V]	600
Rated PV Input Voltage [V]	360
Star-up Voltage [V]	80
MPPT Voltage Range [V]	100-550
No. of MPPT Trackers	2
No. of Strings per MPPT	1/1
Max. Input Current [A]	15/15
Max. Short Circuit Current [A]	20/20

BATTERY CONNECTION

Battery Type	LiFePO ₄
Battery Voltage Range [V]	85 - 450
Max. Charging/Discharge Current [A]	30 / 30
Max. Charging/Discharge Power [W]	8,000
Communicate Interface	CAN, RS485

AC OUTPUT

Rated AC Output Power [W]	8,000
Max. AC Output Apparent Power [VA]	8,000
Rated AC Voltage [V]	L+N+PE; 220/230/240
Grid Frequency [HZ]	50 / 60
Rated AC Output Current [A]	36.3 / 34.8 / 33.3
Max. AC Output Current [A]	36.3
Adjustable Power Factor [cosφ]	0.8 leading ~ 0.8 lagging
Output THDi (@Rated Power)	< 3%

BACKUP OUTPUT (WITH BATTERY)

Rated Output Power [W]	8,000
Peak Output Apparent Power [VA]	10,400 @10s
Rated Output Voltage [V]	L+N+PE; 220/230/240
Rated Frequency [HZ]	50 / 60
Rated Output Current [A]	36.3 / 34.8 / 33.3
Automatic Switch Time [ms]	< 10
Output THDv (@Linear Load)	< 3%

EFFICIENCY

MPPT Efficiency	99.9%
Max. Efficiency	97.6%
Euro-Efficiency	97.0%

Protection

Integrated Protection	DC reverse polarity protection / Battery input reverse connection protection / Insulation resistance protection / Surge protection(DC/AC: Type II/Type II) / Over-temperature protection / Residual current protection / Islanding protection / AC over-voltage protection / Overload protection / AC short-circuit protection
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GENERAL DATA

Dimensions (W*H*D) [mm]	534 x 418 x 210
Weight [kg]	27
Ambient Temperature Range [°C]	-30 ~ +60
Relative Humidity [%]	0 ~ 100%, non-condensing
Max. Operation Altitude [m]	3000
Cooling	Natural Convection
Ingress Protection	IP65
Noise Level [dB]	< 25
Display	LED & OLED
Topology	Transformerless
Communication	CAN, RS485
Safety/EMC Regulation	EN IEC 61000, EN IEC 62109, IEC 61727, IEC 60068, EN IEC 62116, IEC 61683, PSTI, IS 16169, IS 16221-2, AS4777.2 (Australian), CEC (Australian), C10/11 (Belgium), UNE 217001 (Spain), UNE 217002 (Spain), G99 (UK), G100 (UK), NRS 097-2-1 (South Africa), Romania.Netherland, ZAMBIA, Portugal(DGEG)
Grid-connection Certification/Region	

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.30A input per MPPT
- Up to 98.4% operating efficiency
- Continuous 110% AC overloading sustains power
- Max.160% PV oversizing
- 180% max backup @10s handles overloads

EXPANDABLE SOLUTION

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

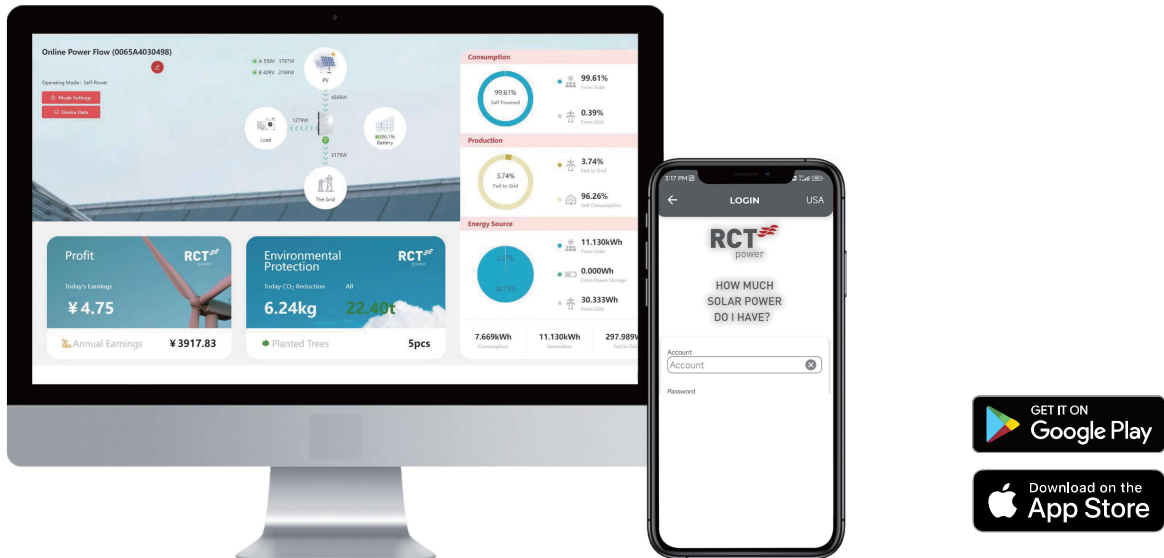
USER FRIENDLY

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

UNIQUE FLEXIBILITY

- Supports microgrid function
- Supports up to four high-voltage battery groups per inverter
- IP65 Design: suitable for indoor and outdoor

Cloud & APP



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



**LEARN MORE:
WWW.RCT-POWER.AU**