



# RESIDENTIAL ENERGY STORAGE SYSTEM SOLUTIONS


EMPOWER TOMORROW WITH TRUSTED GREEN ENERGY

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# 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.

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## **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).

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LEARN MORE:  
[WWW.STROMSPEICHER-INSPEKTION.DE](http://WWW.STROMSPEICHER-INSPEKTION.DE)

# Catalogue

## POWER BATTERY

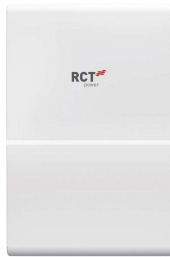
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Power Battery  
5.0 | 7.5 | 10.0 | 12.5 | 15.0

## HYBRID INVERTER

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Power Storage DC  
US-15.0

## CLOUD & APP

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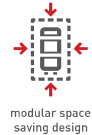
RCT Power Cloud & APP



# POWER BATTERY

## 5.0 | 7.5 | 10.0 | 12.5 | 15.0

### MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS



### HIGH PERFORMANCE

- LiFePO<sub>4</sub> 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

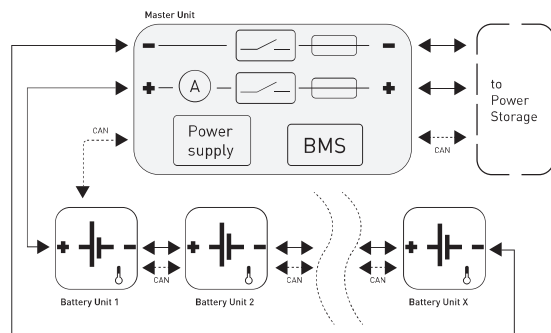
### FLEXIBLE AND UPGRADEABLE

- 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 <sub>4</sub>				
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				

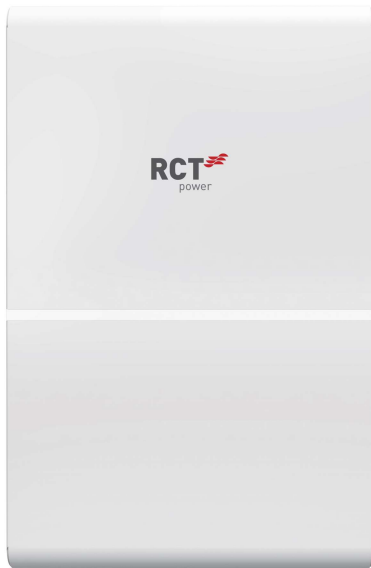
### SAFETY / STANDARDS

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 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.

# 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.



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