

**We are experts in energy storage systems, smart energy partners by your side.**





## About US



Established in July 2017, Jiangsu RCT Power Energy Technology Co., Ltd is a leading technology innovation company in the field of energy storage systems worldwide, and committed to providing customers with optimal energy storage system solutions and a full range of safe and efficient energy storage system products, including residential energy storage systems (RESS), commercial energy storage systems (CESS) and grid energy storage systems (GESS).

The company is headquartered in SIP (China) and has established holding subsidiaries including R&D centers and marketing & sales centers in Konstanz (Germany), California (USA), and Melbourne (Australia), and set up manufacturing bases in Malaysia.

RCT Power is committed to being a world leading energy storage brand, making green energy more reliable and future life better.



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**CESS**

RCT Power CESS LABEL Liquid-cooled Series

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# SAFE RELIABLE AND EFFICIENT

RCT Power CESS LABEL Liquid-cooled Series





## Product Display



CESS 200



CESS 200 PowerStone



CESS 1000



CESS 1500

## Core Features



### High Level of Safety

Safer than EV

- Active security in the Cloud
- Stable local control
- Reliable hardware



### Long-life

Cycle times up to cell level

- Mature equalization technique
- Extensive thermal management technology
- Complete supply chain management system



### Easy Maintenance

Convenient to use

- Predictive maintenance
- Fully Self-developed EMS -Unattended, fully automated operation
- Five-star after-sales service

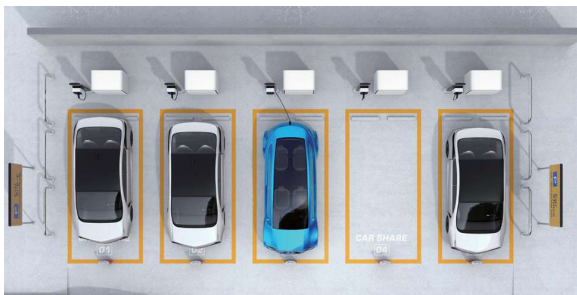
# Application Scenarios



Commercial Syntheses/ Office Building  
1491kWh+748kW-PCS



Commercial Syntheses/Office building  
932kWh+500kW-PCS



EV Storage and Charging Station / Guesthouse  
233kWh+100/125kW-PCS



RCT Power's RPEMS is a safe, adaptable, ready-to-use EMS(Energy Management System) for Commercial Energy Storage System.

By setting individual operational strategies, you can combine a wide variety of applications and thus perfectly adapt the system to the needs of commerce and industry.

## Functions

Self-consumption	Use more energy from renewable sources and minimise feed -in
Off-grid	Create your own power grid independently of energy suppliers
Physical peak shaving	Shave consumption peaks and cut demand rate costs
Fee peak shaving	Charge low and discharge high
Back-up power	Storage system immediately takes over the power supply in the event of a power outage
Charging station control	Smart control of the charging station/charge set point and central controls. This means charging processes can be digitally recorded and controlled
Generation control during utility grid operation	Generators can be actively switched on or off and controlled for greater independence from energy suppliers
Load control	Actively switch consumers on or off during utility grid operation for greater dependence on generation and consumption

## Advantages

Safe	Vehicle-grade development process, zero accidents since production
Adaptable	Cover 100kWh ~ 200MWh systems and a wide variety of applications
Ready -To-Use	One -stop solutions

### Local Control

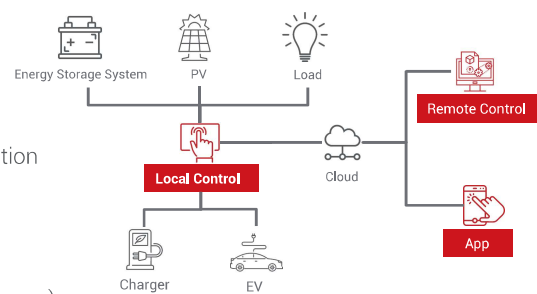
- Device communication and control
- Autonomous energy management
- Overview of power consumption and generation
- Friendly user interface
- Safety protection

### Remote Control

- Real-time dashboard and data history
- Energy reports and detailed data(billing purposes)
- Active safety by machine learning
- Predictive maintenance to lower maintenance cost
- Autonomous equipment inspecting

### App

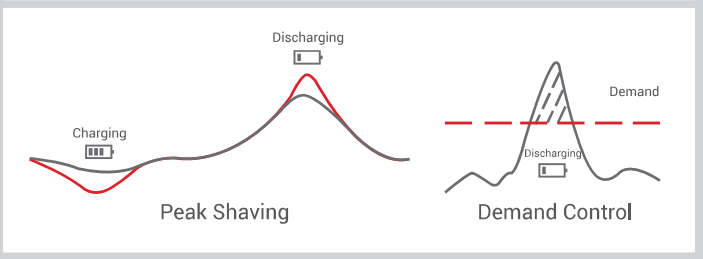
- Overview of power consumption and generation
- Real-time dashboard
- Questions and Feedback





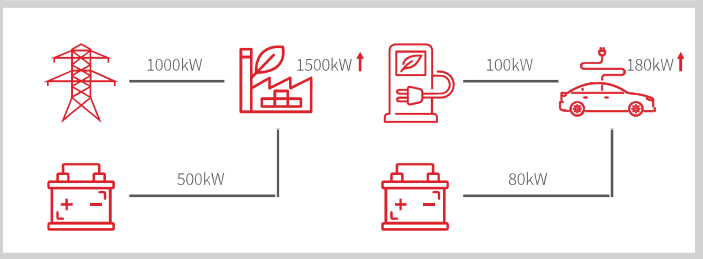
Peak Shaving

Charge at lower price and discharge at higher price to SAVE MONEY



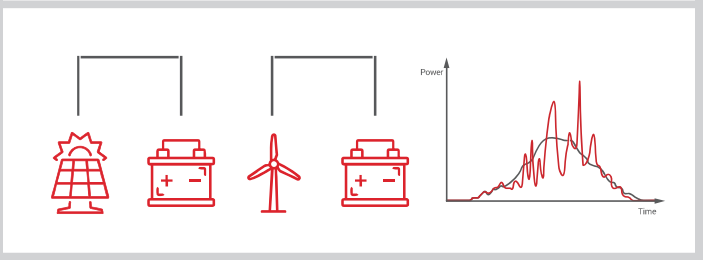
Power Expanding

Discharge to provide EXTRA POWER for load when the state grid can not provide enough power



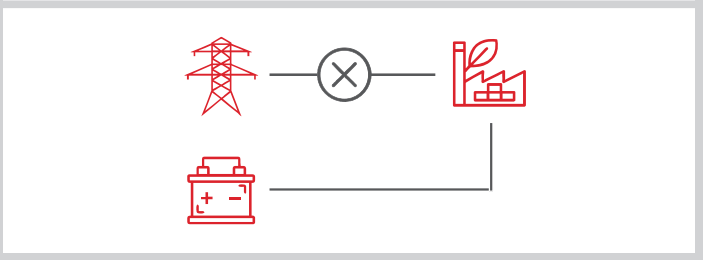
Wind PV Consumption

CHARGE when the load can not consumpt all the energy generated by Wind or PV, and discharge at night. SMOOTH the output of wind and PV



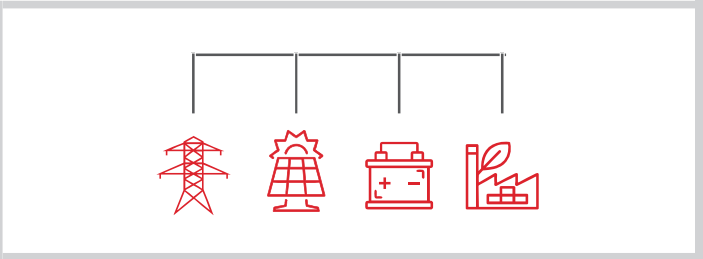
Backup Power

Discharge at grid fault, work as uninterrupted power supply



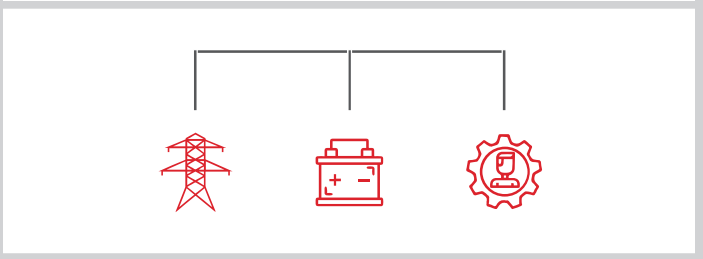
Microgrid

Compose OFF-GRID system with PV or Wind



Demand Response

Obey the scheduling from the grid



## Success Cases

### ANAX TEXNIKI

Green Energy Park

100kW/233kWh

📍 Tripoli, Greece



📍 Tripoli, Greece

Wuxi, Jiangsu

### Schneider Electric

Schneider Electric (Wuxi) Green  
Smart Manufacturing Innovation Park

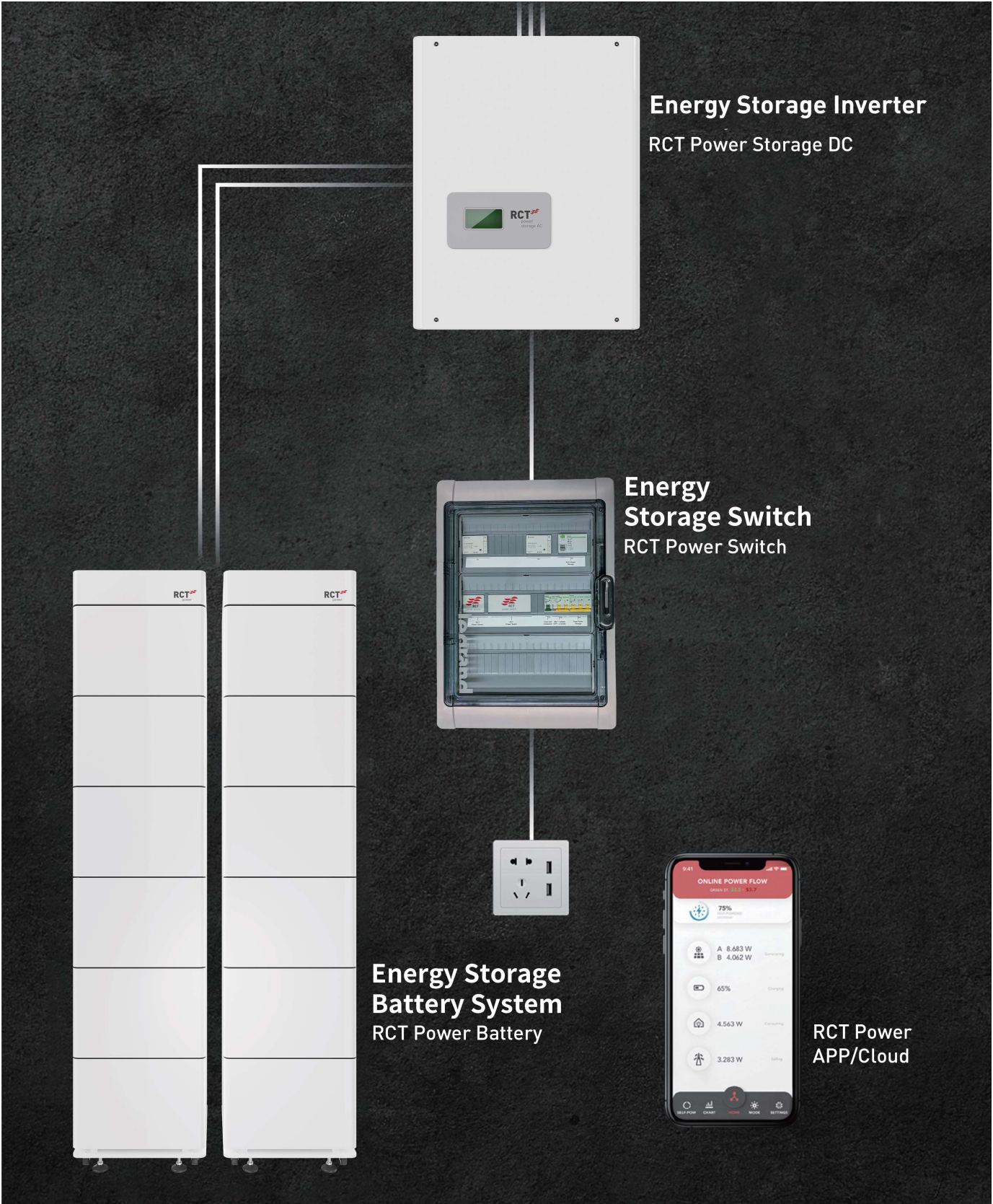
600kW / 1800kWh

📍 Wuxi, Jiangsu



## Product Selection Table

Datasheet	CESS 200	CESS 200 PowerStone	CESS 1000	CESS 1500
Nominal capacity	233kWh	233kWh	932kWh	1491kWh
Rated power	100kW	125kW	500kW	748kW
AC output voltage	400Vac	400Vac	380Vac	690Vac
Efficiency	>0.99 (Rated power)	>0.99 (Rated power)	>0.99 (Rated power)	>0.99 (Rated power)
THDi	<3%	<3%	<3%	<3%
Cell technology	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>
Temperature control	Liquid cooled	Liquid cooled	Liquid cooled	Liquid cooled
Dimensions (L x W x H)	1600 X 1300 X 2200mm	1340 X 1100 X 2300mm	2991 X 2438 X 2591mm	2991 X 2438 X 2896mm
Weight	~3.3T	~2.7T	~11.5T	~16.6T
Installation Area	5m <sup>2</sup>	3.82m <sup>2</sup>	14m <sup>2</sup>	14m <sup>2</sup>
Ingress protection	IP54	IP54	IP54	IP54
Human-Machine Interaction	APP、Web、3D Touch Panel	APP、Web、3D	APP、Web、3D Touch Panel	APP、Web、3D Touch Panel
Communication protocol	Modbus / TCP	Modbus / TCP	Modbus / TCP	Modbus / TCP
Operating temperature range	-25°C~45°C	-25°C~45°C	-25°C~50°C	-25°C~45°C





## POWER STORAGE DC 6.0 SP



### DC-COUPLED HYBRID OUTDOOR INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 2 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

- 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
- Simple design with the RCT Power  
Designer - design tool

### EASY INSTALLATION

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

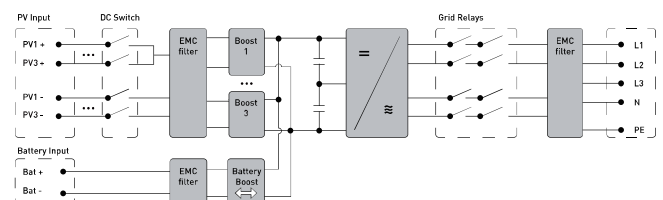
### USER FRIENDLY COMMUNICATION

- 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

### BLOCK DIAGRAM



## POWER STORAGE DC

## 6.0 SP

## DC INPUT

Max. recommended DC power	9300 W
MPPT	3
Input per MPPT	1
Max. DC current per MPPT	14 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	Weidmüller WM4 / quick connection plug

## AC OUTPUT (GRID-MODE)

Gird connection	1 phase
Real AC output power	6000 W
Max. active power	6000 W
Max. apparent power	6000 VA
Max. AC input apparent power from grid	3000 VA
Nominal AC current per phase	26,1 A
Max. AC current per phase	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	6000 VA
Rated AC voltage	230 V, L/N/PE
Max. AC output current	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

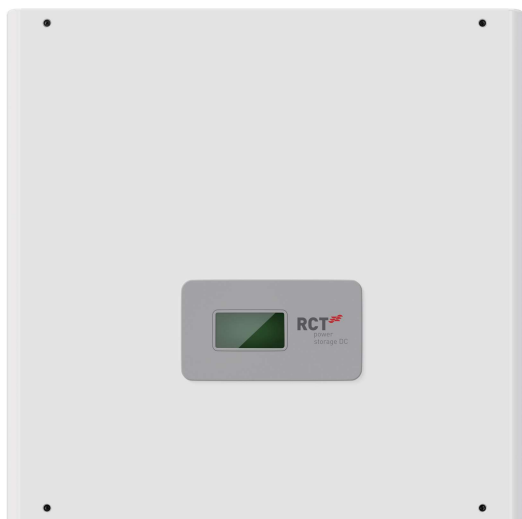
## SAFETY / STANDARDS

Safety	IEC 62109 or AS/NZS 62109
Grid support regulation	AS/NZS 4777.2
EMC	IEC 61000
Safety- Storage System	IEC 62619, ANS/NZS 62368, IEC 61000

## WARRANTY

Warranty	10 years
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\* Backup power output via RCT Power Switch Box



## POWER STORAGE DC 4.0 | 6.0

### DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 2 roof  
orientations



quick and easy  
installation



everything needed  
from one source

### HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- Transformerless topology
- Very high efficiency
- Input for high voltage battery
- Suitable for dynamic power adjustment
- Intelligent energy storage management with forecast based charging

### UNIQUE FLEXIBILITY

- 3-phase feed-in
- 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
- Simple design with the RCT Power Designer - design tool

### EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT Power APP solution
- No Internet access required for setup

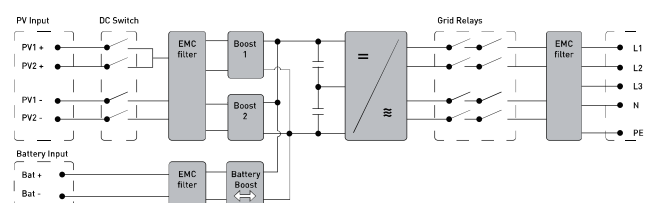
### USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Multi-function communication board for connection of various devices
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

### INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- IP42 protection: Suitable for indoor installation

### BLOCK DIAGRAM





## POWER STORAGE DC

## 4.0

## 6.0

## DC INPUT

Max. recommended DC power (South / East-West) <sup>1)</sup>	5,4 kW / 6 kW	8,1 kW / 9 kW
MPPT	2 (paralleling possible)	
Input per MPPT	1	
Maximum DC current per MPPT	12 A (24 A in parallel mode)	
Max. Short circuit current PV input (Iscmax)	18 A (36 A in parallel mode)	
Rated DC voltage	700 V	
DC start up voltage / power	150 V / 40 W	
DC voltage range	140 V ... 1000 V	
MPP voltage range	265 V ... 800 V	
Maximum Voltage DC	1000 V	
Connector type	Weidmüller PV-Stick (MC4 compatible)	

## BATTERY INPUT

DC Voltage Range	120 V ... 600 V	
Maximum charge / Discharge current	20 A / 20 A	
Maximum charge / Discharge power	9220 W / 4000 W	9220 W / 6000 W
Connector-type	Weidmüller PV-Stick (MC4 compatible)	

## AC OUTPUT (GRID-MODE)

Real AC output power	4000 W	6000 W
Maximum active power	4000 W	6000 W
Maximum apparent power	6300 VA	6300 VA
Nominal AC current per phase	5,8 A	8,7 A
Maximum AC current per phase	9,1 A	9,1 A
Rated frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ... 65 Hz	
Max. switch-on current	9,1 A, 0,1ms	
Max. fault current (RMS)	285 mA	
Rated AC voltage	230V / 400 V (L1, L2, L3, N, PE)	
AC voltage range	180 V ... 290 V	
Total harmonic distortion (THD)	< 2% at rated power	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap...0,8 ind)	
Anti-islanding operation	yes	
Earth fault protection	RCD	
DC current injection	< 0,5% In	
Required phases, grid connections	3 (L1, L2, L3, N, PE)	
Number of feed-in phases	3	
Grid voltage monitoring	3-phase	
Type of AC connection	spring clamps	

## PERFORMANCE

Stand-by consumption	< 4,0 W	
Maximum efficiency (PV2AC)	98,16 %	98,16 %
European efficiency (PV2AC)	97,60 %	97,70 %
Average efficiency PV2AC <sup>2)</sup>		96,30 %
Average efficiency PV2Bat <sup>2)</sup>		96,60 %
Average efficiency Bat2AC <sup>2)</sup>		95,40 %
Average delay time / settling time	0,1s / 0,4s	
Topology	transformerless	

## OTHERS

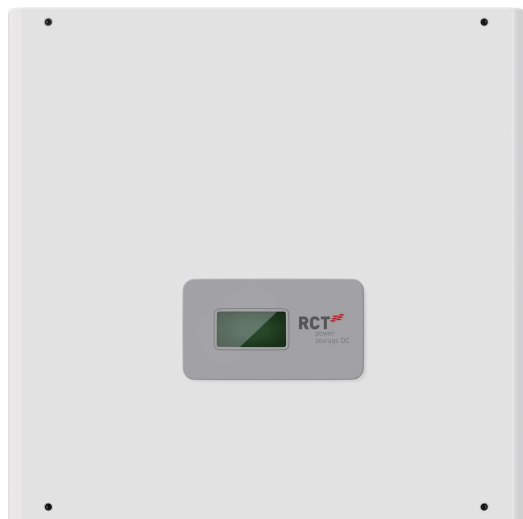
PV - DC - switch	multifunctional dry contact	
DC overvoltage category	II	
AC overvoltage category	III	
Data interface	WLAN, LAN, RS485, multifunctional dry contact, 4 x digital in, 2 x digital in/out	
Display	LCD dot matrix 128 x 64 with backlight	
Cooling	convection	
IP degree of protection	IP 42	
Max. operating altitude	2000 m	
Max. relative humidity	5 - 85 % (non condensing)	
Typical noise	< 35 dB	
Operating temperature range	-25°C ... 60°C (40°C at full load)	
Dimensions (height x width x depth)	570 x 585 x 200 mm	
Weight	30 kg	

## SAFETY / STANDARDS

Safety class	I	
Overload behaviour	working point adjustment	
Certificates	CE, VDE-AR-N4105:2018-11, EN 50549	
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3	
Safety	EN/IEC62109-1, EN/IEC62109-2	
Warranty	10 years	

1) Depending on orientation, inclination and location of installation.

2) Average efficiencies in combination with a RCT Power Battery 11.5 and UmpppNenn



## POWER STORAGE DC 8.0 | 10.0

### DC-COUPLED HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



high efficiency



up to 2 roof  
orientations



quick and easy  
installation



everything needed  
from one source

### HIGH EFFICIENCY

- Two independent MPP-trackers, switchable to parallel mode
- European efficiency > 98 %
- 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

- 3-phase feed-in
- 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
- Simple design with the RCT Power Designer - design tool

### EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT Power APP solution
- No Internet access required for setup

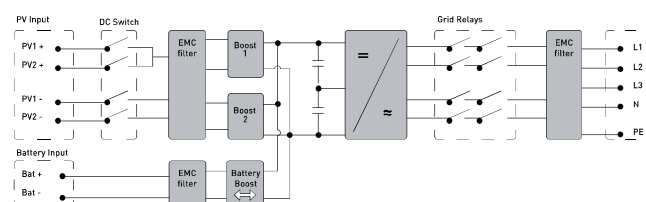
### USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Multi-function communication board for connection of various devices
- Suitable for wallbox chargers, heating elements, heat pumps and energy management systems

### INNOVATIVE DESIGN

- Silent, maintenance free cooling
- Durable aluminium housing
- With 32 kg a lightweight in its category
- IP42 protection: Suitable for indoor installation

### BLOCK DIAGRAM



## POWER STORAGE DC

## 8.0

## 10.0

## DC INPUT

Max. recommended DC power (South / East-West) <sup>1)</sup>	10,8 kW / 12 kW	13,5 kW / 15 kW
MPPT	2 (paralleling possible)	
Input per MPPT	1	
Maximum DC current per MPPT	14 A (28 A in parallel mode)	
Max. Short circuit current PV input (Iscmax)	18 A (36 A in parallel mode)	
Rated DC voltage	700 V	
DC start up voltage / power	150 V / 40 W	
DC voltage range	140 V ... 1000 V	
MPP voltage range	380 V ... 800 V	
Maximum Voltage DC	1000 V	
Connector type	Weidmüller PV-Stick(MC4 compatible)	

## BATTERY INPUT

DC Voltage Range	120 V ... 600 V
Maximum charge / Discharge current	25 A / 25 A
Connector-type	Weidmüller PV-Stick(MC4 compatible)

## AC OUTPUT (GRID-MODE)

Real AC output power	8000 W	9900 W
Maximum active power	8000 W	9900 W
Maximum apparent power	10500 VA	10500 VA
Nominal AC current per phase	11,6 A	14,5 A
Maximum AC current per phase	15,2 A	15,2 A
Rated frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ... 65 Hz	
Max. switch-on current	15,2 A, 0,1ms	
Max. fault current (RMS)	285 mA	
Rated AC voltage	230V / 400 V (L1, L2, L3, N, PE)	
AC voltage range	180 V ... 290 V	
Total harmonic distortion (THD)	< 2% at rated power	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap...0,8 ind )	
Earth fault protection	RCD	
DC current injection	< 0,5% In	
Required phases, grid connections	3 (L1, L2, L3, N, PE)	
Number of feed-in phases	3	
Type of AC connection	spring clamps	

## PERFORMANCE

Stand-by consumption with discharged battery storage <sup>2)</sup>	6,0 W	
Maximum efficiency (PV2AC)	98,60 %	98,60 %
European efficiency (PV2AC)	98,33 %	98,35 %
Average efficiency PV2AC <sup>3)</sup>	97,78 %	97,89 %
Average efficiency PV2Bat <sup>3)</sup>	98,00 %	98,00 %
Average efficiency AC2Bat <sup>3)</sup>	97,33 %	97,44 %
Average efficiency Bat2AC <sup>3)</sup>	97,36 %	97,48 %
Average delay time / settling time	0,1s / 0,4s	
Topology	transformerless	

## OTHERS

PV - DC - switch	integrated
DC- / AC- overvoltage category	II / III
Data interface	WLAN, LAN, RS485, multifunctional dry contact, 4 x digital in, 2 x digital in/out
Display	LCD dot matrix 128 x 64 with backlight
Cooling	convection
IP degree of protection	IP 42
Max. operating altitude	2000 m
Max. relative humidity	5 - 85 % (non condensing)
Typical noise	< 35 dB
Operating temperature range	-25°C ... 60°C (40°C at full load)
Dimensions (height x width x depth)	570 x 585 x 200 mm
Weight	32 kg

## SAFETY / STANDARDS

Safety class	I
Overload behaviour	working point adjustment
Certificates	CE, VDE-AR-N4105:2018-11, EN 50549
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3
Safety	EN/IEC62109-1, EN/IEC62109-2
Warranty	10 years

1) Depending on orientation, inclination and location of installation.

2) Average efficiencies in combination with a RCT Power Battery 11.5 and UmppNenn

3) Measurement results according to efficiency guidelines for RCT Power Storage 6.0 with RCT Power Battery 11.5





## POWER STORAGE AC 4.0 | 6.0

### AC-COUPLED BATTERY INVERTER FOR THE EXPANSION OF PV SYSTEMS WITH PV STORAGE SYSTEMS



high efficiency



up to 2 roof  
orientations



quick and easy  
installation



everything needed  
from one source

### HIGH EFFICIENCY

- Transformerless topology
- Maximum self-consumption by battery management based on PV- and load forecast
- High voltage battery input

### UNIQUE FLEXIBILITY

Optimised for retrofitting battery storage to existing PV-plants

- 3-phase output
- for 2 - 6 RCT Power Battery stacks
- Maximum battery current 20 A
- Maximum charge and discharge power up to 6 kW

### EASY INSTALLATION

- DC and AC connection with plug & play
- Integrated RCT Power APP solution
- No Internet access required for setup

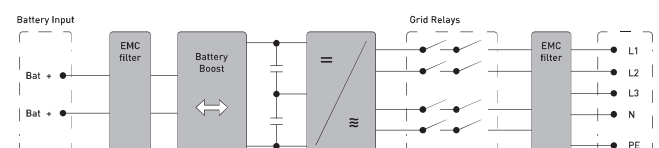
### USER FRIENDLY COMMUNICATION

- Multi-information LCD-display
- LAN and WLAN
- RCT Power Portal for user-friendly system monitoring
- Multi-function communication board for connection of various devices
- Suitable for Wallbox chargers, heating elements, heat pumps and energy management systems

### INNOVATIVE DESIGN

- Silent and maintenance free cooling
- Durable aluminium housing
- IP65 protection: Suitable for indoor and outdoor

### BLOCK DIAGRAM



## POWER STORAGE AC

## 4.0

## 6.0

## BATTERY INPUT

DC Voltage Range	120 V ... 600 V	
Maximum charge / Discharge current	20 A / 20 A	
Maximum charge / Discharge power	4000 W	6000 W
Connector-type	Weidmüller PV-Stick(MC4 compatible)	

## AC OUTPUT (GRID-MODE)

Real AC output power	4000 W	6000 W
Maximum active power	4000 W	6000 W
Maximum apparent power	6300 VA	6300 VA
Nominal AC current per phase	5,8 A	8,7 A
Maximum AC current per phase	9,1 A	9,1 A
Rated frequency	50 Hz / 60 Hz	
Frequency range	45 Hz ... 65 Hz	
Max. switch-on current	13 A, 0,1ms	
Max. fault current (RMS)	285 mA	
Rated AC voltage	230V / 400 V (L1, L2, L3, N, PE)	
AC voltage range	180 V ... 290 V	
Total harmonic distortion (THD)	< 2% at rated power	
Reactive power factor (cos phi)	1 (adjustable range 0,8 cap...0,8 ind )	
Anti-islanding operation	yes	
Earth fault protection	RCD	
DC current injection	< 0,5% I <sub>n</sub>	
Required phases, grid connections	3 (L1, L2, L3, N, PE)	
Number of feed-in phases	3	
Grid voltage monitoring	3-phase	
Type of AC connection	spring clamps	

## PERFORMANCE

Stand-by consumption	< 4,0 W
Maximum efficiency (battery - grid)	96,62 %
European efficiency (grid - battery)	96,41 %
Topology	transformerless

## OTHERS

DC overvoltage category	II
AC overvoltage category	III
Data interface	WLAN, LAN, RS485, multifunctional dry contact, 4 x digital in, 2 x digital in/out
Display	LCD dot matrix 128 x 64 with backlight
Cooling	convection
IP degree of protection	IP 65
Max. operating altitude	2000 m
Max. relative humidity	4- 100 % (non condensing)
Typical noise	< 35 dB
Operating temperature range	-25°C ... 60°C (40°C at full load)
Type of installation	wall mounting
Dimensions (height x width x depth)	570 x 440 x 200 mm
Weight	22 kg

## SAFETY / STANDARDS

Safety class	I
Overload behaviour	working point adjustment
Certificates	CE, VDE-AR-N4105:2018-11, EN 50549
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3
Safety	EN/IEC62109-1, EN/IEC62109-2
Warranty	10 years



## POWER BATTERY 3.8 | 5.7 | 7.6 | 9.6 | 11.5

### MODULAR HIGH VOLTAGE BATTERY FOR PV STORAGE SYSTEMS



### HIGH EFFICIENCY

- LiFePO<sub>4</sub> technology
- 25 A charge & discharge capability
- High voltage, high efficiency,  
low stress operation
- Modern and space-saving design

### EASY INSTALLATION

- Modular concept and simple wiring for  
easy transport and installation
- All components are lighter than 25 kg
- Master battery management system
- Plug & play

### MONITORING VIA APP

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

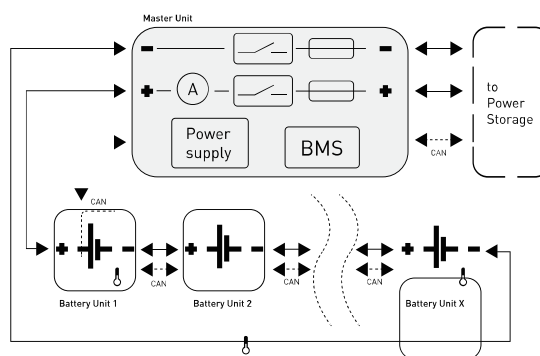
### FLEXIBLE AND UPGRADEABLE

- 2 - 6 battery stacks
- Usable capacity scalable in increments of 1.7 kWh
- Upgradeable
- Suitable for back-up systems

### SUSTAINABLE

- Lithium-iron-phosphate cell chemistry
- 10 years time value guarantee

### BLOCK DIAGRAM



### POWER BATTERY

3.8

5.7

7.6

9.6

11.5

#### ELECTRICAL PARAMETERS

Nominal capacity	3,84 kWh	5,76 kWh	7,68 kWh	9,60 kWh	11,52 kWh
Usable capacity (90% DoD)	3,46 kWh	5,18 kWh	6,91 kWh	8,64 kWh	10,37 kWh
Cycle Life (at 80% remaining capacity)	5000				
Voltage range	120 V...173 V	180 V ... 260 V	240 V ... 346 V	300 V ... 432 V	360 V ... 520 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
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#### GENERAL

Battery technology	LiFePO <sub>4</sub>				
Dimensions (height x width x depth)	600x340x340 mm	830x340x340 mm	1060x340x340 mm	1290x340x340 mm	1520x340x340 mm
Weight (single module 24kg)	54 kg	78 kg	102 kg	126 kg	150 kg
Number of battery units	2	3	4	5	6
IP degree of protection	IP42				
Type of installation	floor stand / indoor				
Operating temperature range	-15°C ... +45°C				
Connector type	Quick Connector				

#### SAFETY / STANDARDS

Safety class	I
Certificates	CE, UN 38-3, EN/IEC 62619, UN 38-3, UL1973, UL60730-1, UL9540A, EN/IEC 62040-1
EMC	EN61000-6-2, EN61000-6-3, EN61000-3-2, FCC Part 15B
Safety	UL1973, UL60730-1, UL9540A





## POWER BATTERY 5.0 | 7.5 | 10.0 | 12.5 | 15.0

### MODULAR HIGH VOLTAGE BATTERY FOR PV STORAGE SYSTEMS



### HIGH EFFICIENCY

- LiFePO<sub>4</sub> technology
- 25 A charge & discharge capability
- High voltage, high efficiency,  
low stress operation
- Modern and space-saving design

### EASY INSTALLATION

- Modular concept and simple wiring for  
easy transport and installation
- All components are lighter than 25.2 kg
- Master battery management system
- Plug & play

### MONITORING VIA APP

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

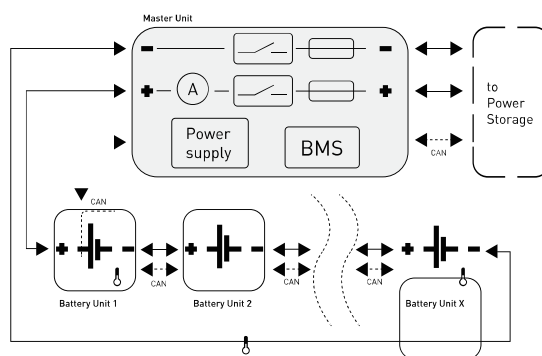
### FLEXIBLE AND UPGRADEABLE

- 2 - 6 battery stacks
- 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 protection: Suitable for outdoor installation

### BLOCK DIAGRAM



RESS

Power Battery 5.0 | 7.5 | 10 .0 | 12 .5 | 15 .0

POWER BATTERY

5.07.510.012.515.0

ELECTRICAL PARAMETERS

Nominal capacity	5.0 kWh	7.5 kWh	10.0 kWh	12.5 kWh	15.0 kWh
Usable capacity (90% DoD)	4.5 kWh	6.75 kWh	9.0 kWh	11.25 kWh	13.5 kWh
Cycle Life (at 80% remaining capacity)	6000				
Voltage range	145V...166V	218V...248V	291V...331V	364V...414V	436V...497V
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

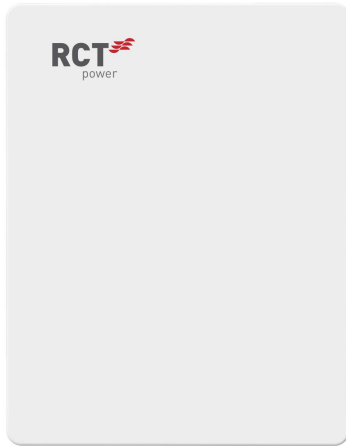
Power Storage interface	CAN
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GENERAL

Battery technology	LiFePO <sub>4</sub>				
Dimensions (height x width x depth)	598x345x345 mm	828x345x345 mm	1058x345x345 mm	1288x345x345 mm	1518x345x345 mm
Weight (single module 25.2kg)	56.4 kg	81.6 kg	106.8 kg	132 kg	157.2 kg
Number of battery units	2	3	4	5	6
IP degree of protection	IP65				
Type of installation	floor stand / outdoor				
Operating temperature range	-18°C ... +55°C				
Connector type	Quick Connector				

SAFETY / STANDARDS

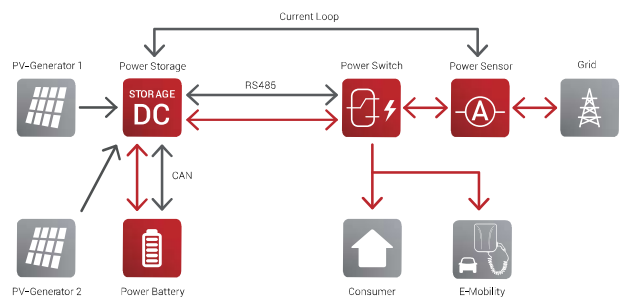
Safety class	I
Certificates	CE, UN 38-3, EN/IEC 62619, EN/IEC 62040-1, IEC 60730-1, EN/IEC 62477, IEC 63056
EMC	EN/IEC 61000-6-1, EN/IEC 61000-6-3
Safety	EN/IEC 62619, IEC 63056, EN/IEC 62477, EN/IEC 62040-1, IEC 60730-1



## POWER SWITCH FOR STORAGE DC 6.0 SP

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

### SYSTEM OVERVIEW



### BACKUP POWER SUPPLY

- Provision of backup grid
- 1-phase supply
- Automatic switching in case of power failure
- Switch-on delay less than 3 seconds
- Battery and PV system can be used as energy source

### EFFICIENT

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

### EASY INSTALLATION

- Compact and lightweight housing
- Wall mounting
- Upgradeable

**POWER SWITCH****BOX-SP****AC OUT (ON GRID)**

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

**AC OUT (BACK UP)**

Load connection	1-phase
Rated voltage	230 V
AC frequency	50 Hz
Max apparent power	6000 VA
Max output current	26,1 A
Switch over time	< 3 S

**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	8 kg

**SAFETY / STANDARDS**

IP-class	IP65
Standards	AS/NZS 61439-1/2/3, IEC/EN 61439-1/2/3

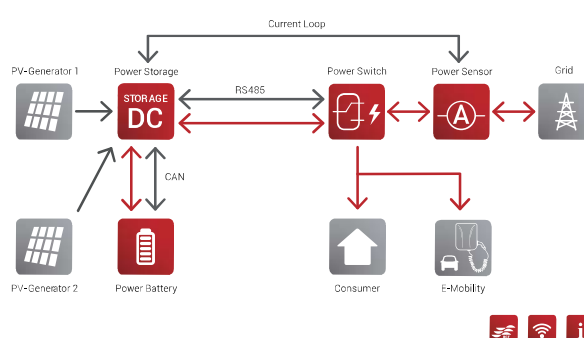




## POWER SWITCH FOR STORAGE DC 4.0 | 6.0 | 8.0 | 10.0

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

### SYSTEM OVERVIEW



### BACKUP POWER SUPPLY

- Provision of backup grid
- 3-phase supply
- Separated output for not backedup loads

### EFFICIENT

- Up to 6 kVA in single or 3-phase mode for Storage DC 4.0 and 6.0
- Up to 3 x 3,3 kVA in 3-phase backup mode for Storage DC 8.0 and 10.0
- Fast switching

### EASY INSTALLATION

- Compact and lightweight housing
- Power Sensor included
- Wall mounting
- Upgradeable

## POWER SWITCH

63/25

63/25-3

### POWER DATA

Nominal voltage	230/400 VAC	
Nominal frequency	50 Hz	
Max. prospective short circuit current	10 kA	
Max. grid-side fuse	63 A	
Max. thermal throughput power (3AC) PNOM	30 kW (Ta = 25°) / 20 kW (Ta = 40°)	
Losses in standby-mode	app. 18 W	
Additional operating losses at 25/50/100% of PNOM	app. 2/4/8 W	
Allowed Battery inverters	RCT Power Storage DC 4.0 / 6.0 / 8.0 / 10.0	
Disconnection from the grid	4-pole	3-pole
Permitted grid form	TN-C-S/TN-S/TT	TN-C-S/TN-S
Fuse connection RCT Power Storage	MCCB-3C25	
Terminals Meter/Load/Backup load	spring clamps up to 16mm <sup>2</sup>	

### OTHERS

Operating temperature range	-5°C ... +40 °C
Relative humidity	5 ... 95 %
Mounting method	wall mounting
Dimensions (height x width x depth)	446 x 622 x 161 mm
Weight app.	15 kg

### SAFETY / STANDARDS

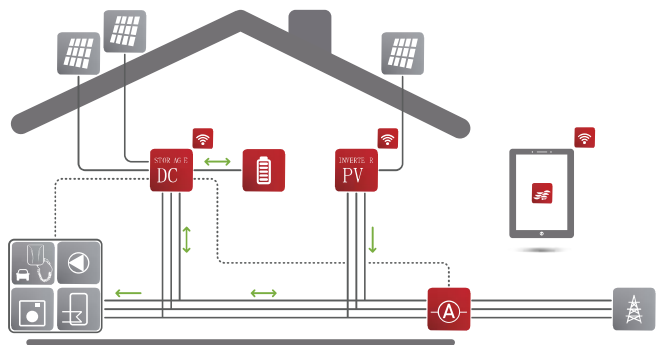
Safety class	II
IP-class	65
Standards	IEC/EN61439-1 (DE: VDE 0660-600-1)
	IEC/EN61439-2 (DE: VDE 0660-600-2)
	IEC/EN61439-3 (DE: VDE 0660-600-3)
Warranty	2 years

### POWER SENSOR 50 | 100

#### MEASUREMENT OF CONSUMPTION FOR RCT POWER STORAGE SYSTEMS

#### EASY AND ACCURATE

- Very high accuracy in the determination of the household consumption
- Minimum power consumption due to best response times
- User-friendly installation



#### POWER SENSOR

50

100

##### GENERAL

Maximum current	3 x 50 A	3 x 100 A
Accuracy	1,5%	
Dimensions evaluation unit (H x W x D)	91 x 72 x 44 mm	
Dimensions current sensors (H x W x D)	41 x 26 x 26 mm	67 x 51 x 41 mm
Current sensor cable length	1 m	
Max. cable diameter current sensor	10 mm	24 mm
IP-degree of protection	IP20	
Type of installation	DIN rail mounting / split core	
Operating temperature range	+5°C ... +40°C	

##### INTERFACE

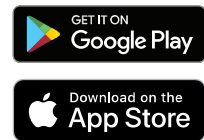
Power storage interface	current loop
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#### WHY A RCT POWER SENSOR?

The RCT Power Storage System features extremely short settling time and minimal dead time. A very fast response time is important, for example, to be able to align with the start-up currents of refrigerators and freezers. They can then be powered from the storage system as simultaneously as possible.

Systems with slower response times lag. As a result, power from the public grid is always used first. In contrast, with the RCT Power Sensor, solar energy stored in the RCT Power Storage units can be accessed in fractions of a second and used efficiently. Ultimately, every watt counts when you generate it yourself rather than drawing it from the public grid.

## 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

# RCT Power GESS Solution

## OEM/ODM Introduction

RCT Power's GESS upholds the OEM/ODM design concept, providing customers with one-stop DC-side design, production and system integration. The professional R&D team of RCT Power, who is well-experienced in grid mechanical design, electrical design, thermal management, system simulation and safety testing, played a leading role in fulfilling the requirements and delivery of many internationally renowned grid energy storage projects. RCT Power is able to provide customized system solutions efficiently, optimally and professionally, and dedicated to providing the best customer service experience.





# GESS Product Display

**01**

Container Design and Integration



**02**

DC Cabinet Design and Production AC Cabinet Design and Production

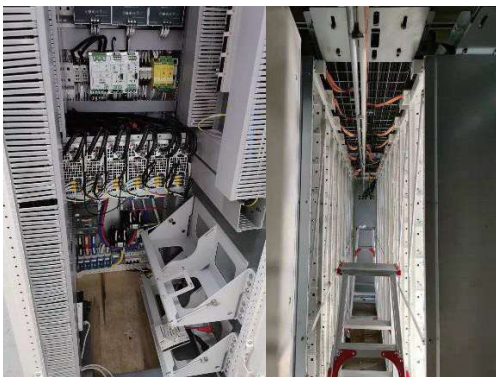


**03**



**04**

Overall Wiring Design and Production



**05**

Thermal Management System Design and Production



**06**

Integrated Fire Suppression System





## Application Cases



📍 **Jiangsu, China**

Superquick Charging Station  
100kW/233kWh



📍 **Jiangsu, China**

Schneider Wuxi Global Lighthouse  
Zero Carbon Green Factory  
0.6MW/1.8MWh



📍 **Texas, USA**

Hill Country 2, BESS  
100MW/100MWh



📍 **Jiangsu, China**

Energy Storage Demonstration Plant  
748kW/1491kWh



### Prague, Czech Republic

15 kW/11.52 kWh



### Konstanz, Germany

50 kW/38.4 kWh



### Suzhou, China

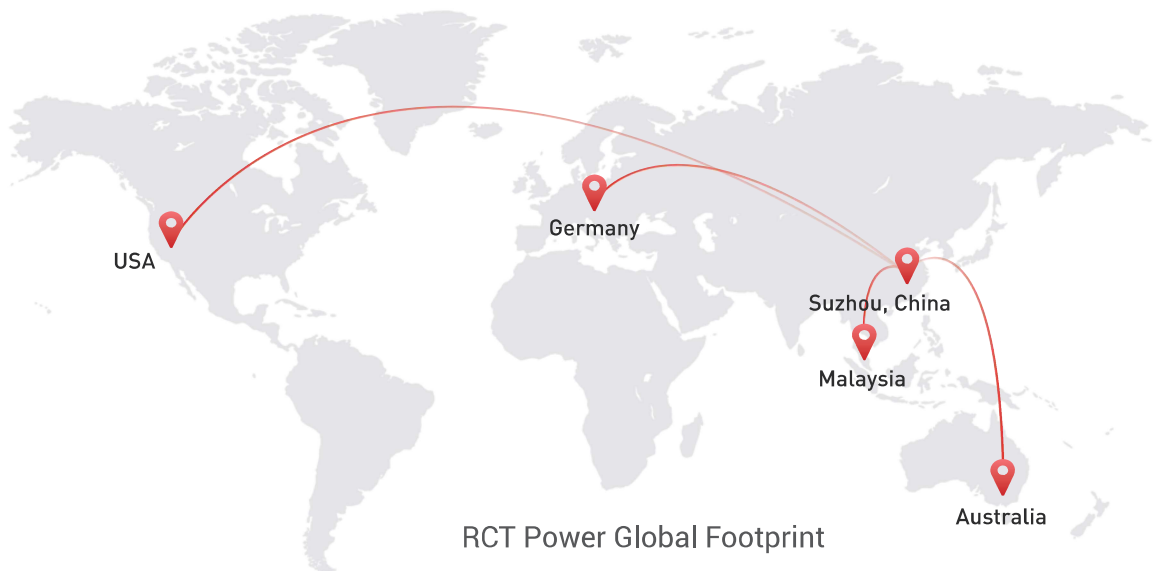
13 kW/11.52 kWh



### Berkeley, USA

12 kW/11.52 kWh





RESS  
Solution



CESS  
Solution



GESS  
Solution



PV-storage-charging  
Solution

**Jiangsu RCT Power Energy Technology Co., Ltd**

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RCT Power  
Official Website



RCT Power  
Wechat Public Account