# STORAGE SYSTEMS RETHOUGHT.



**WWW.RCT-POWER.US** 

CALL US FOR A FREE CONSULTATION. 888-99-RCTUS (888-99-72887)



#### **POWER STORAGE**

#### 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)	30000
Max DC Input Voltage(V)	600
Start-up Voltage(V)	150
MPPT Voltage Range(V)	120-550
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	
	15000
Rated AC Input/Output Active Power(W)	15000
Max AC Input/Output Apparent Power (VA)	15000
Peak Power (off-grid) (W)	22500, 10s
Rated AC Input/Output Current(A)	62,5
Max AC Input/Output Current(A)	62,5
Max Continuous AC Passthrough (grid to load) (A)	200
Rated Input/Output Voltage/Range(V)	120/240, 208 0.85Un-1.1Un
Grid Connection Form	2L+N+PE
Rated Input/Output Grid Frequency/Range	60Hz/55Hz-65Hz
Power Factor Adjustment Range	0.8 leading-0.8 lagging
Total Current Harmonic Distortion THDi	<3% (of nominal power)
DC Injection Current	<0.5%ln
Backup Transfer Time	<10ms
Stackable	Up to 6 in parallel
EFFICIENCY	
	07.000
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
Thermal Protection	Yes
DC Terminal Insulation Impedance Monitoring	Yes
DC Component Monitoring	Yes
Ground Fault Detection — NEC 690.5	
	Yes
Grid Monitoring	Yes
Anti-islanding Protection	Yes
Earth Fault Detection	Yes
PV DC Disconnect Switch — NEC 240.15	Yes
Residual Current (RCD) Detection	Yes
PV Rapid Shutdown Control — NEC 690.12	Yes
PV Arc Fault Detection — NEC 690.11	Yes
Surge Protection Level	Type II(DC), Type II(AC)
INTERFACE	
Communication Interface	WIFI, RS485, CAN, Ethernet
	The first roof or the Editorial
GENERAL DATA	
Operating Temperature	-13 °F ~ 140 °F
Permissible Ambient Humidity	0-100%
Permissible Altitude	2000m
Noise	≤ 45 dB (A) (1 m)
Ingress Protection (IP) Rating	IP65 / NEMA 3R
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II(DC), OVC III(AC)
Dimensions (HxWxD)	2.79' x 1.77' x 0.99'
Weight (lb)	132 lb
CERTIFICATIONS	
OLNTII IOATIONO	LH 1741 0010/0010 LH 1000 JEEE15 47, 0010 E00 15 CL
Certifications and Listings	UL1741-2010/2018, UL1998, IEEE1547a 2018, FCC 15 Class B,
	UL1741SB, UL1741 CRD, CA Rule 21, HECO Rule 14H
WARRANTY	DAT#
Warranty	10 Years RCT
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#### **POWER STORAGE US 15.0**

## HYBRID INVERTER FOR RESIDENTIAL AND COMMERCIAL PV SYSTEMS



#### HIGH PERFORMANCE

- Dynamic power adjustment (1- 100%)
- Forecast based battery charging
- 200% DC/AC ratio for higher yields
- 3 MPPTs, Max.30A input per MPPT
- 150% peak backup power for 10s
- Up to 15kw backup power with or without PV

#### UNIQUE FLEXIBILITY

- Possible input voltage range between 120 V and 520 V
- Up to 2 high voltage batteries per inverter
- 120/240V and 208V voltage supported
- Microgrid and generator function supported
- DC or AC Coupling application scenarios supported
- Optional built-in SunSpec Certified RSD transmitter
- 200A AC passthrough current for whole home backup

#### **USER FRIENDLY**

- Multicolor LED light path display
- Comfortable remote monitoring via App and Cloud
- Flexible configuration, Plug and play installation
- NEMA 3R design suitable for Indoor & Outdoor Installation

#### PREMIUM DESIGN

- German technology
- Flexible and sophisticated design
- Durable housing

#### **EXPANDABLE SOLUTION**

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

POWER STORAGE DC	US 8.0	US 8.0 PRO
DC INPUT		
Max, recommended DC power	12000 W	
MPPT	3	
Input per MPPT		
Maximum DC current per MPPT	14 A	
Rated DC voltage	360	
DC start up voltage	125 V	
MPP voltage range	120 V ~ 500 V	
Maximum Voltage DC	520 V	
Connector type	Quick Contact MC1-Evo 2	
BATTERY INPUT		
DC Voltage Range	120 V ~ 520 V	
Maximum charge / Discharge current	25 A	
Maximum charge / Discharge power	11550 W / 8000 W	
Connector-type	Wiring box	
AC OUTPUT (GRID-MODE)		
Real AC output power	8000 W	
Nominal AC current	34 A	
Frequency range	58 Hz to 62 Hz	
Grounding fault protection current	30 mA, 60 mA, 150 mA	
Rated AC voltage	240 Vac	
AC voltage range	211 V ~ 264 V	
Total harmonic distortion	< 3%	
Reactive power factor	Adjustable range 0.80 cap0.80 ind	
Anti-islanding operation	YES RCD	
Earth fault protection  Type of AC connection	Wiring box	
ž.	Willing box	
AC OUTPUT (BACK-UP MODE)  Maximum output power	8000 W*	
Rated AC voltage	120 / 240ZVac (Split Phase)	
Nominal AC current	34 A	
Nominal AC output frequency	60 Hz	
Total harmonic distortion	< 5 %	
Type of AC connection	Wiring box	
PERFORMANCE	-	
Stand-by consumption	< 4 W	
Maximum efficiency (PV-Grid)	97.94 %	
Maximum efficiency (Battery-Grid)	97.48 %	
CEC efficiency	97.5 %	
Topology	Transformerless	
OTHERS		
Dark Start Function	Yes	
PV Disconnect switch	Integrated in wiring box	
Data interface	BAT/CAN, WLAN, LAN, RS485	
Display	LED Light	
Cooling	Convection	
Max. operating altitude	6500 ft	
Max. relative humidity	5 - 95 % (non condensing)	
Typical noise	< 35 dB	
Operating temperature	-13 °F ~ 140 °F	NITAMA T OD
Enclosure type Size Power Inverter (HVMVP)	NEMA Type 1	NEMA Type 3R
Size Power Inverter (HxWxD) Size Power Switch (HxWxD)	2.79' x 1.90' x 0.67' 2.79' x 1.05' x 0.67'	
Weight Power Inverter	75 lb	
Weight Power Switch	45 lb	
CAFETY (OTANDADDO	1010	

### SAFETY / STANDARDS

Safety	UL1741, CSA-C22.2 No. 107.1-16	AFCI	UL1699B (TYPE 1)
Grouding fault protection	UL1741 CRD	Grid support regulation	UL1741 SB, IEEE1547, California Rule 21
Software approval	UL1998	Storage system	UL9540
Anti-islanding protection	IFFF1547, IFFF1547.1	FMC	FCC part 15 Class B

 $<sup>\</sup>star$  Need to use 3 $\sim$ 6 pcs power battery stacks





## POWER STORAGE DC US 8.0 | 8.0 PRO

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









#### HIGH EFFICIENCY

- Intelligent energy storage management
- 3 independent MPP-trackers, switchable to parallel mode
- Transformerless topology
- Fanless cooling
- Dynamic power adjustment (1- 100%)
- Forecast based battery charging
- Back-up power supply

#### **UNIQUE FLEXIBILITY**

- Possible input voltage range between 120 V and 520 V
- Up to 2 high voltage batteries per inverter
- Modular and space saving design

#### **EASY INSTALLATION**

- Plug and play installation
- Quick commissioning with wizard via RCT Power App
- Integrated auto-transformer
- Separate Power Switch installation possible

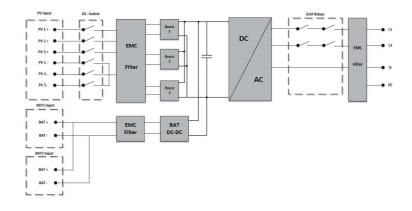
#### **USER FRIENDLY COMMUNICATION**

- Multicolor LED light path display
- Comfortable remote monitoring via App and Cloud
- Multifunction relay for connecting consumers

#### PREMIUM DESIGN

- German technology
- Flexible and sophisticated design
- Durable aluminium housing

#### **BLOCK DIAGRAM**



10 years

Warranty





#### 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
- Lightweight components
- 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

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

## MODULAR HIGH VOLTAGE OUTDOOR BATTERY FOR PV STORAGE SYSTEMS







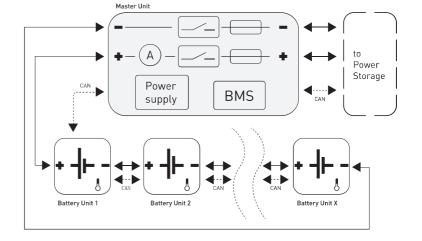
#### FLEXIBLE AND UPGRADEABLE

- 2 6 battery stacks
- Usable capacity scalable in incrementes 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

#### **BLOCK DIAGRAM**



Warranty

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 V173 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					
GENERAL						
Battery technology	LiFePO <sub>4</sub>					
Dimensions (height x width x depth)	1.97'x1.12'x1.12'	2.72'x1.12'x1.12'	3.48'x1.12'x1.12'	4.23'x1.12'x1.12´	4.99'x1.12'x1.12´	
Weight (single module 52.9 lb)	119.0 lb	172.0 lb	224.9 lb	277.8 lb	330.7 lb	
Number of battery units	2	3	4	5	6	
IP degree of protection	IP42					
Type of installation	floor stand / indoor					
Operating temperature range	5°F ~ 122 °F					
Connector type	Quick Contact MC4 - Evo 2					
SAFETY / STANDARDS						
Safety class	ĺ					
Certificates	UN 38-3, UL1973, UL60730-1, UL9540A					
EMC	FCC Part 15B					
Safety	UL1973, UL60730-1, UL9540A					
WARRANTY						



10 years

### **RCT RESS APP**

With the powerful RCT RESS App you can manage and control all functions of your storage system. Installation, maintenance and control are made easy. The App is a flexible tool and includes comprehensive data visualisation and various configuration options.







#### HIGH EFFICIENCY

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

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

## MODULAR HIGH VOLTAGE INDOOR BATTERY FOR PV STORAGE SYSTEMS







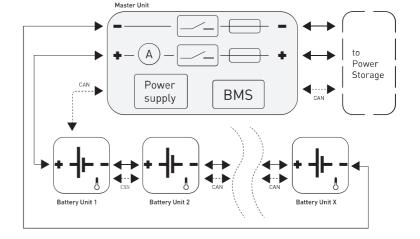
#### FLEXIBLE AND UPGRADEABLE

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

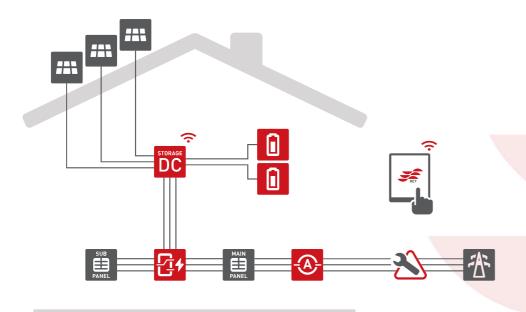
#### SUSTAINABLE

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

#### **BLOCK DIAGRAM**











## NEM3.0 READY: SELF-CONSUMPTION FIRST.

NEM3.0 is changing the residential solar industry. Batteries are becoming an integral part of every solar system. More flexible battery capacities are needed to maximize self-consumption.

RCT Power provides flexible DC coupled, all-in-one solutions that offer low payback time for new solar installations under NEM3.0. The hybrid inverter with battery connection distributes the generated solar power

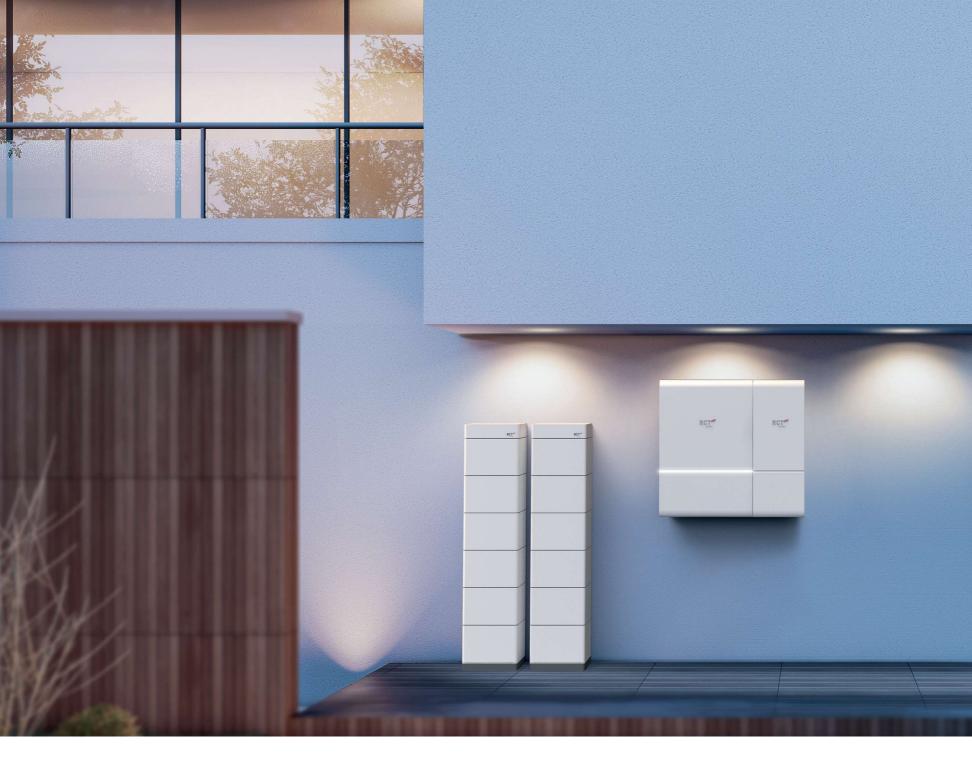
intelligently, optimises yield and conserves your battery. Programmable outputs ensure that excess power is not fed into the grid but is purposefully directed towards your heat pump, your electric car or other devices.

The intelligent charging strategy optimises and balances the generation and consumption of electricity in the overall system. It will benefit individual households as well as the public power grid.



Efficiency matters: If you consider a high efficiency rate when purchasing your power storage, you will not only save money, but also actively contribute to climate protection.RCT Power's unique high-efficiency DC technology has received international awards for several years.





## SOLAR ENERGY WHENEVER YOU NEED IT.

The intelligent RCT Power Storage System ensures that solar power can be used when the sky is cloudy, at night, or during power outages. During the day, when the sun is shining, your photovoltaic system usually produces more energy than your household uses, and the RCT Power Storage System stores this valuable solar energy locally. You use it when you need it, including at night and on days with very little or no sunshine. Your solar self-consumption increases significantly.

You use solar energy more sustainably and become less dependent on external power suppliers.

A perfect feeling: The integrated Power Switch provides energy for important consumers during a power outage. This back-up power feature increases your independence and supplies your home with power from the battery.

### **RCT POWER BATTERY**

#### **GROWS WITH YOUR NEEDS**

Energy storage for high demands.
Upgradable.

The RCT Power Battery stores your solar energy for use when the sun is not shining, using especially safe and environmentally friendly LiFePO4 battery cells. The modular system can be upgraded and adapted to your needs.





## INTELLIGENT POWER STORAGE FROM ONE SOURCE.



### RCT POWER STORAGE DC US 8.0 | 8.0 PRO

#### **PURE EFFICIENCY**

Power outage protection. Modular design. Easy installation.

Paired with solar panels, it provides clean energy and efficiently charges the RCT Power Battery. The modular design easily integrates into the building environment. A multicolor LED light path indicates current status.

## RESILIENT AT ANY TIME.



Power your home during an outage with stored energy.



Keep your appliances safe and running.



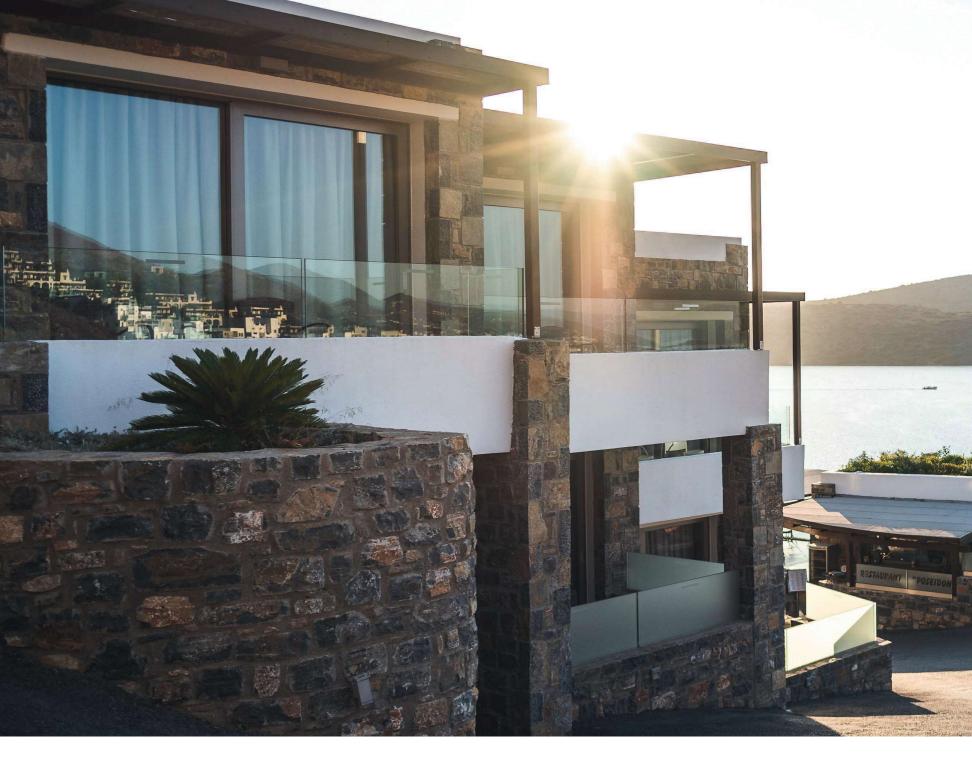
Sustainable clean energy storage with solar power.



#### NOW AVAILABLE IN THE USA.

RCT Power is a technology leader in stationary storage solutions. The brand originated in Konstanz, Germany, and develops both hardware and software in-house. RCT Power US, based in Walnut Creek, California, provides sales and service.





## SOLAR ENERGY IS OUR PASSION. WE STORE IT.

With a modular and efficient RCT Power DC Storage System you store your solar power locally and use it whenever you need it. Rising solar self-consumption.



# INTELLIGENT POWER STORAGE FROM ONE SOURCE.

SUSTAINABLE. FLEXIBLE. EFFICIENT.

