

# RCT Power CESS Liquid-cooled C&I Energy Storage Solutions



## **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 / Industrial Park



**CESS 1000** 



**CESS 1500** 

#### **EV Storage and Charging Station / Guesthouse**





CESS 200 CESS 200

## **RCT POWER CESS 200**

# COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

- PV module connection, PV-storage integration
- Highly efficient STS, automatic backup power for grid outages
- Modular and flexible options for fine items
- All-in-one solution incl. direct solar electricity storage



BATTERY			CONVERTER (OPTIONAL)	IEC	
Nominal capacity Battery technology Charge / discharge rate Battery pack structure Cooling BMS Rated DC voltage DC voltage range	233 kWh LiFePO₄ 0.5 P 1P52S Liquid Cooling Integrated 832 Vdc 715 ~ 928 Vdc		Max. number of MPPTs Max. string voltage Max. input current per MPPT Rated power	2 900 Vdc 80 A 100 kW	
INVERTER	IEC	UL	BACKUP POWER (OPTIONAL)	IEC	
DC Operating voltage range Rated AC power Rated AC current AC rated voltage AC line frequency Peak efficiency	650 - 950 Vdc 100 kW 144 A 400 Vac 50 / 60 Hz 98.50%	700 - 950 Vdc 125 kW 150 A 480 Vac 60 Hz 98.60%	Rated power Rated voltage Rated Frequency Long-term overload capacity	200 kW 400Vac 50 / 60 Hz 110%	
ENERGY MANAGEMENT SYSTEM	М				
EMS	Integrated	Integrated			
COMMUNICATION					
Communication protocol Touch panel Cloud / APP		Modbus TCP/RTU, CAN 15,6" industrial standard Yes			
OPERATION					
Relative operating humidity Operating temperature range Operating altitude	0 ~ 95% RH, no-condensation -20 °C +45 °C ≤ 2000m				
DIMENSIONS (TOTAL)					
Dimensions(W x H x D) Weight		1600 x 2200 x 1300 mm Approximately 3200 kg			
SAFTEY / STANDARDS					
Protection Corrosion-proof grade	IP54 / NEMA 3R C4				
Safety	· ·		e. Aerosol Fire Extinguish f. Siren and Strobe Alarm g. Emergency Stop Button h. Dry Pipe and Sprinkle		
Certification	UN 38.3, IEC 6261	UN 38.3, IEC 62619, IEC 63056, EN 62477, IEC 60730, EN 62933, EN 61000 NFPA 69, UL 1973, UL 60730, UL 9540A, UL 9540			

## **RCT POWER CESS 1000 SERIES**

# COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

- Modular battery racks and PCS for flexible combination
- Support parallel connection and block-building construction
- Multi-level electrical safety and six-dimensional fire protection systems



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BATTERY						
Nominal capacity		932 kWh				
Battery technology		LiFePO <sub>4</sub>				
Charge / discharge rate		0.5 P				
Battery pack structure		1P52S				
Cooling		Liquid Cooling				
BMS	-	Integrated				
Rated DC voltage	832 Vdc					
DC voltage range	715 ~ 928 Vdc	715 ~ 928 Vdc				
INVERTER	IEC	UL				
DC Operating voltage range	680 - 1000 Vdc	700 - 1000 Vdc				
Rated AC power	$4 \times 125 \text{ kW} = 500 \text{ kW}$	$4 \times 125 \text{ kW} = 500 \text{ kW}$				
Rated AC current	4 x 180 A = 720 A	4 x 150 A = 600 A				
AC rated voltage	400 Vac	480 Vac				
AC line frequency	50 / 60 Hz	60 Hz				
Peak efficiency	98.60%	98.60%				
ENERGY MANAGEMENT SYSTI	EM					
EMS	Integrated	Integrated				
COMMUNICATION						
Communication protocol	Modbus TCP/RTU, CAN	Modbus TCP/RTU, CAN				
Touch panel	15,6" industrial standard	· ·				
Cloud / APP	Yes					
OPERATION						
Relative operating humidity	0 ~ 95% RH, no-condensation	0 ~ 95% BH no-condensation				
Operating temperature range	-20°C +45°C	•				
Operating altitude	≤ 2000m					
DIMENSIONS (TOTAL)	2 2000111					
	2991 x 2591 x 2438 mm					
Dimensions(W x H x D) Weight	Approximately 11600 kg					
SAFTEY / STANDARDS	, pp. s.m. acc., 1, ees ng					
Protection	IDE4 / NEMA 2D					
Corrosion-proof grade	IP54 / NEMA 3R C4 / C5					
Corrosion-proor grade	a. Flammable/explosive Gas detection	e. Aerosol Fire Extinguish				
Safety	b. Flammable/explosive Gas exhaust	f. Siren and Strobe Alarm				
	c. Smoke Detection					
		g. Emergency Stop Button				
	d. Temperature Detection h. Dry Pipe and Sprinkle UN 38.3, IEC 62619, IEC 63056, EN 62477, EN 62040, IEC 60730, EN 62933, EN 61000					
Certification		NFPA 69, UL 1973, UL 60730, UL 9540A, UL 9540				

## **RCT POWER CESS 1500**

# COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM

- 1491 kWh outdoor-rated container storage system
- Standard 10ft container storage system, easy transportation
- Highest level of safety, thermal stability and reliability
- High degree of performance, intelligent charging and reduction of peak loads



BATTERY					
Nominal capacity	1491 kWh				
Battery technology	LiFePO <sub>4</sub>				
Charge / discharge rate	0.5 P				
Battery pack structure	1P52S				
Cooling	Liquid Cooling				
BMS	Integrated				
Rated DC voltage	1331 Vdc				
DC voltage range	1144 ~ 1485 Vdc				
INVERTER					
DC Operating voltage range	1060 ~ 1450 Vdc				
Rated DC current	560A				
Rated DC power	748kW				
Rated AC power	822.8kW				
Rated AC current	624A				
AC rated voltage	690 Vac (-15% to 10%)				
AC line frequency	50 / 60 Hz				
Peak efficiency	98.80%				
ENERGY MANAGEMENT SYSTEM					
EMS	Integrated				
COMMUNICATION					
Communication protocol	Modbus TCP/RTU, CAN				
Touch panel	15,6" industrial standard				
Cloud / APP	Yes				
OPERATION					
Relative operating humidity	0 ~ 95% RH, no-condensation				
Operating temperature range	-20°C +45°C				
Operating altitude	≤ 2000m				
DIMENSIONS (TOTAL)					
Dimensions(W x H x D)	2991 x 2896 x 2438 mm (ISO 10ft HQ)				
Weight	Approximately 16600 kg				
SAFTEY / STANDARDS					
Protection	IP54				
Corrosion-proof grade	C4				
-	a. Flammable/explosive Gas detection	e. Aerosol Fire Extinguish			
0-1-1	b. Flammable/explosive Gas exhaust	f. Siren and Strobe Alarm			
Safety	c. Smoke Detection	g. Emergency Stop Button			
	d. Temperature Detection	h. Dry Pipe and Sprinkle			

## MORE RELIABLE GREEN ENERGY BETTER FUTURE LIFE

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