



RCT POWER CESS 200

COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM



PV-module connection



back-up power



manage energy sources and tariffs



increase self-sufficiency

RELIABLE POWER SUPPLY

- 233 kWh outdoor-rated cabinet storage system
- Backup power for grid outages
- Solar integration, storing excess solar power

SAFE TECHNOLOGY

- Multi-level protection
- Lithium iron phosphate (LFP) chemistry provides highest level of safety, thermal stability and reliability
- Preinstalled liquid cooled RCT Power Battery modules
- Integrated multi-level battery management system (BMS) assures optimized and well-balanced power storage

SMART ENERGY MANAGEMENT

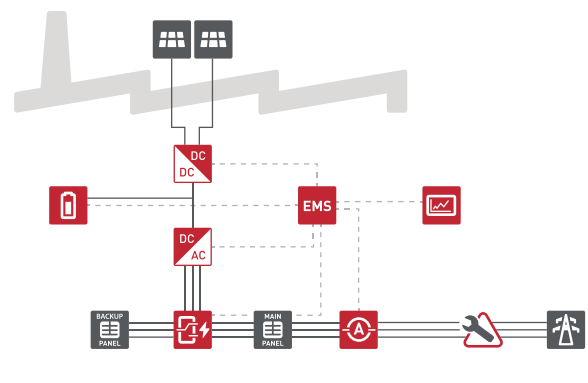
- Software RCT RPMS
- Self-consumption
- Back-up power
- Peak shaving
- Micro-grids
- Demand management
- Demand response
- PV-storage integration

HIGH EFFICIENCY

- Highly efficient AC/DC inverter
- Smart energy monitoring cloud platform for remote monitoring and control
- Intelligent charging and reduction of peak loads
- High degree of performance
- Automatic back-up power switching within 50ms

EASY OPERATION

- Modular, scalable design for precise project sizing
- Unlimited number of cabinets in parallel
- Optional DC/DC converter for PV-module connection



GENERAL

Nominal Capacity	233 kWh
Usable Capacity(95% DOD)	221.35 kWh
Maximum Charge/Discharge Rate	0.5C
Self-Discharge Rate	≤3.5% (Per Month)
Relative Operating Humidity	0%-95% RH, No-condensation
Operating Temperature Range	-25°C-45°C
Storage Temperature Range	-20°C-50°C
Operating Altitude	≤2000m
Dimensions (mm)	W1600×H2200×D1300
Corrosion-proof Grade/Salt Spray Resistance	C4
Weight	Approximately 3200 kg
Max. Number Of ESS used in parallel(On-grid)	12
Max. Number Of ESS used in parallel(Off-grid)	5
IP Rating	IP54 (Battery room IP55)
Noise Level	≤70dB
Communication Protocol	Modbus TCP/RTU, CAN
Black-start Function(Dark start)	Yes
AC Line Frequency	50/60Hz
Auxiliary Power Supply	Outside Power Supply
BMS	Integrated
EMS	Integrated

BATTERY

Battery Rack Quantity	1
Battery Pack Quantity Per Rack	5
Battery Pack Structure	1P52S
Battery Capacity per Pack	46.592 kWh
Battery Type	LiFePO ₄
DC-side Rated Voltage	832 Vdc
DC-side Operating Voltage Range	715-928 Vdc
Cooling Method	Liquid-cooling
Cycle Lifetime	≥6000cls (80%SOH,25±2°C)

PCS

DC Operating Voltage Range	650-950 Vdc
Max. DC Current	160 A
Rated AC Power	100 kW
Rated AC Current	144 A
Rated AC Voltage	400 Vac, 3P+N+PE
Power Factor Adjustable Range	-1 - 1
Peak Efficiency	>98.5%
Long-term Overload Capacity	110%
Cooling Method	Air-cooling

DC/DC CONVERTER (Optional)

Max. Number of MPPTs	2
Max. String Voltage	950 Vdc
Min. String Voltage	200 Vdc
Max. Input Current per MPPT	80 A
MPPTS Voltage Range	180 Vdc-900 Vdc
Rated Power	2×50=100 kW
Peak Efficiency	>99%

STS (Optional)

Rated Power	200 kW
Rated Voltage	400 Vac
Rated Frequency	50/60 Hz
Long-term Overload Capacity	110%

SAFETY FEATURE

Flammable/explosive Gas Detection	UN 38.3、IEC 62619、IEC 63056、EN 62477
Flammable/explosive Gas Exhaust	IEC 60730、EN 62933、EN 61000
Smoke Detection、Temperature Detection	
Aerosol Fire Suppression、Siren and Strobe Alarm	
Dry Pipe and Sprinkle、Emergency Stop Button	

STANDARDS