



RCTerra Class 1.0

233-100-02D

COMMERCIAL AND INDUSTRIAL ENERGY STORAGE SYSTEM



high efficiency



energy store and trade



manage energy sources and tariffs



increase self-sufficiency

RELIABLE POWER SUPPLY

- 233 kWh outdoor-rated cabinet storage system
- Backup power for grid outages

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

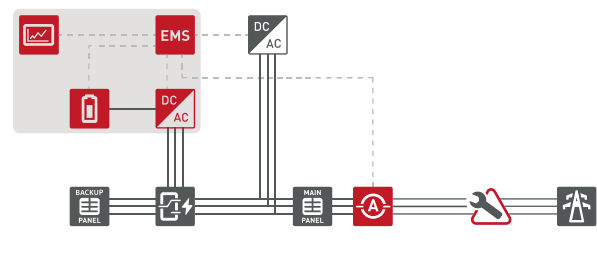
- Off-grid Operation
- Self-consumption
- T.O.U(Time of use)
- Peak shaving
- Third-party Power Dispatching
- Backup Power Supply

HIGH EFFICIENCY

- Highly efficient PCS
- Smart energy monitoring cloud platform for remote monitoring and control
- Intelligent charging and reduction of peak loads
- High degree of performance

EASY OPERATION

- Modular, scalable design for precise project sizing
- Multi-parallel system supported



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, Non-condensing
Operating Temperature Range	-13°F ~ 113°F
Storage Temperature Range	-22°F ~ 122°F (recommended 32°F ~ 86°F)
Operating Altitude	≤2000m
Dimensions(mm)	W1600×H2200×D1300
Corrosion-proof Grade of Cabinet	C4
Weight	Approximately 7055 lbs
IP Rating	IP54(Battery room IP55)
Noise Level	≤70dB
Communication Protocol	Modbus TCP/RTU, CAN
AC Line Frequency	60 Hz
Auxiliary Power Supply	External powered
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 Concept	Liquid-cooling
Cycle Lifetime of Cell	≥6000cls (70%SOH,25±2°C)

PCS

DC Operating Voltage Range	700~1000 Vdc
Max. DC Current	198 A
Rated AC Power	125 kW
Rated AC Current	150 A
Rated AC Voltage	480 Vac, 3P+N+PE
Power Factor Adjustable Range	-1 ~ +1
Peak Efficiency	>98.6%
Long-term Overload Capacity	110%
Cooling Concept	Liquid-cooling

SAFETY FEATURE

Flammable/explosive Gas Detection, Flammable/explosive Gas Exhaust, Smoke Detection, Temperature Detection, Aerosol Fire Suppression, Siren and Strobe Alarm, Dry Pipe and Sprinkle, Emergency Stop Button

STANDARDS

UL 1973, UL 9540A , UL 60730-1 Annex H, NFPA 69, UL 9540, UL 1741CRD, UN38.3