RCT power

2015
Founded

40 GWh
Annual Capacity

POWERING UP YOUR BUSINESS

COMMERCIAL & INDUSTRIAL ENERGY STORAGE SYSTEM SOLUTIONS

RCTerra Class 2.0

125kW/261kWh

w-maintenance

back-up power

manage energy ources and tarifs

increase self-sufficiency

HIGH EFFICIENT POWER SUPPLY

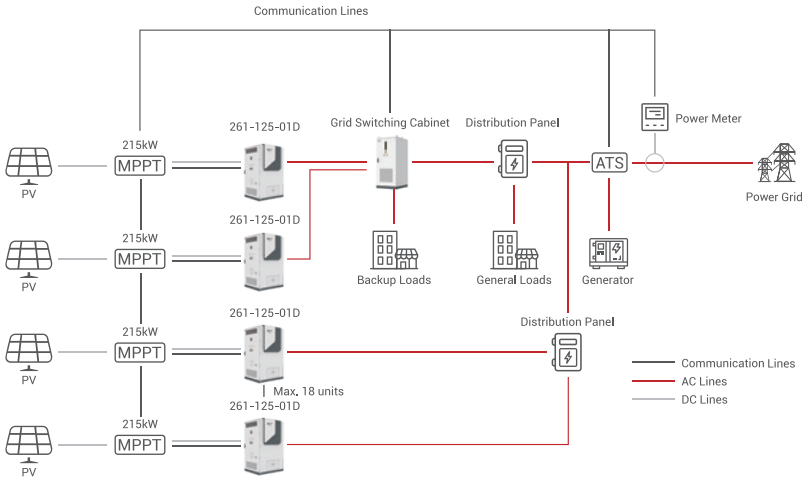
- 261 kWh commercial and industrial energy storage system equipped with 314 Ah battery cells
  Modular, High-efficiency PCS
- Smart Energy Cloud Platform
- Multi-unit parallel support for the flexible capacity
  The Grid Switching Cabinet is compatible

SAFETY TECHNOLOGY

- Five-Tier Protection System: Cell-level Protection, Pack-level Shutdown, Rack-level Disconnect, PCS Isolation, Container-level Electrical Disconnect
- Lithium iron phosphate (LFP) chemistry provides highest level of safety, thermal stability and reliability
- A three-stage fire system ensures safety. continuous cell-level monitoring for early detection, automatic aerosol suppression at the source, and integrated water sprinklers for full compartment protection
- Integrated multi-level battery management system(BMS) assures optimized and well-balanced power storage

APPLICATION SCENARIOS

- Self-consumption
- Backup Power
- Peak Shaving
- PV-ESS Microgrid
- Demand Control
- Third-party Power Dispatching



RCTerra Pro 2.0

	1044-500-01D	783-375-01D

GENERAL

Nominal Energy	1044 kWh	783 kWh
Usable Energy (95% DOD)	991.80 kWh	743.85 kWh
Maximum Charge/Discharge Rate	0.5 P	
Relative Operating Humidity	0%-95% RH, Non-condensing	
Operating Temperature Range	-30°C-50°C(>45°C derating)	
Storage Temperature Range	-35°C-55°C(Recommended 0°C to 30°C)	
Operating Altitude	≤3000 m (>2000 m derating)	
Dimension [mm]*	W2991 × D2438 × H2591	
Corrosion-proof Grade of Cabinet	C4 (C5 Optional)	
Weight	Approximately 10.9T	Approximately 9T
IP Rating	IP54	
Noise Level	≤70 dB	
Communication Protocol	Modbus TCP	
Off-grid Operation	Yes	
BMS	Integrated	
EMS	Integrated	

DC SIDE

Battery Pack Quantity	5×4	5×3
Battery Pack Structure	1P52S	
Battery Energy per Pack	52.25 kWh	
Battery Type	$LiFePO_4$	
DC-side Rated Voltage	832 Vdc	
DC-side Operating Voltage Range	689-930.8 Vdc	
Cooling Method of Pack	Liquid-cooling	
Cycle Lifetime of Battery Cell	≥8000 cls (70%SOH, 25±2°C)	

AC SIDE

Rated AC Power	500 kW	375 kW
Rated AC Current	721 A	541 A
Rated AC Voltage	400 Vac (3P+N+PE)	
AC Line Frequency	50 / 60 Hz	
Long-term Overload Capacity	110%	
Power Factor Adjustable Range	-1-+1	

SAFETY FEATURES

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

STANDARDS

IEC 62619, IEC 63056 (62477-1 & 62619 Cover), IEC 60730-1 Annex H, EN 62477-1, EN 62040-1, EN 61000-6-2/-4 (EMC), EN 62933-5-2, VDE-AR-E 2510-50, UN 38.3

*Note:

1. The foundation dimension of the cabinet is **2991mm×2438mm.** If we consider the decorative trim , the maximum dimension is **W3061mm×D2438mm×H2672mm.**
2. Please contact out sales if you want to know of other relevant certifications.
3. The decorative trim of this product is an optional configuration, the standard product do not have it.

RCTerra Pro 2.0

500kW/1044kWh

easy to expand

energy store and trade

manage energy sources and tarifs

increase self-sufficiency

HIGH EFFICIENT POWER SUPPLY

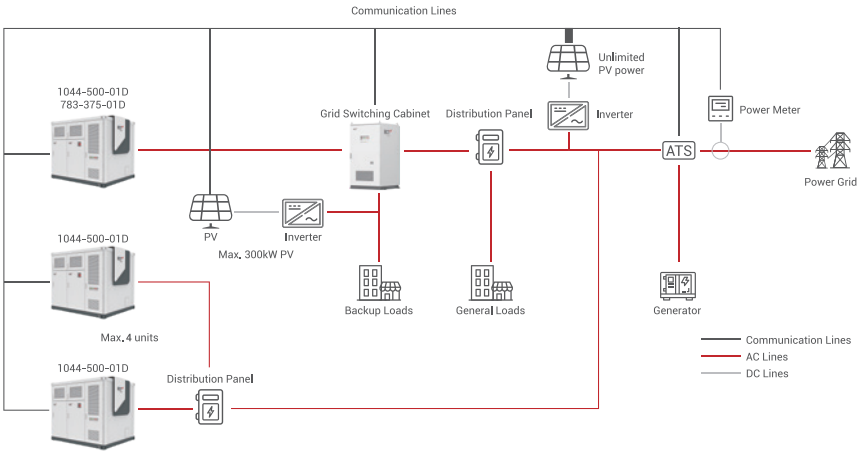
- 1044 kWh commercial and industrial energy storage system equipped with 314 Ah battery cells
- Modular, High-efficiency PCS
- Smart Energy Cloud Platform
- Flexible Battery Rack Configuration, 4 Battery Racks or 3 Battery Racks

SAFETY TECHNOLOGY

- Five-Tier Protection System: Cell-level Protection, Pack-level Shutdown, Rack-level Disconnect, PCS Isolation, Container-level Electrical Disconnect
- Lithium iron phosphate (LFP) chemistry provides highest level of safety, thermal stability and reliability
- A three-stage fire system ensures safety. continuous cell-level monitoring for early detection, automatic aerosol suppression at the source, and integrated water sprinklers for full compartment protection
- Integrated multi-level battery management system(BMS) assures optimized and well-balanced power storage

APPLICATION SCENARIOS

- Self-consumption
- Backup Power
- Peak Shaving
- PV-ESS Microgrid
- Demand Control
- Demand Response



RCTerra Class 2.0 CESS 261

GENERAL

Nominal Energy	261 kWh
Usable Energy (95% DOD)	247.95 kWh
Maximum Charge/Discharge Rate	0.5 P
Relative Operating Humidity	0%-95% RH, Non-condensing
Operating Temperature Range	-30°C-50°C(>45°C derating)
Storage Temperature Range	-35°C-55°C(Recommended 0°C to 30°C)
Operating Altitude	≤3000 m (>2000 m derating)
Dimension (mm)*	W1130 × D1385 × H2328
Corrosion-proof Grade of Cabinet	C4 (C3, C5 Optional)
Weight	Approximately 2700 kg
IP Rating	IP54
Noise Level	≤70 dB (63dB Optional)
Communication Protocol	Modbus TCP
Off-grid Operation	Yes
BMS	Integrated
EMS	Integrated

DC SIDE

Battery Pack Quantity	5
Battery Pack Structure	1P52S
Battery Energy per Pack	52.25 kWh
Battery Type	$LiFePO_4$
DC-side Rated Voltage	832 Vdc
DC-side Operating Voltage Range	689-930.8 Vdc
Cooling Method of Pack	Liquid-cooling
Cycle Lifetime of Battery Cell	≥8000 cls (70%SOH, 25±2°C)

AC SIDE

Rated AC Power	125 kW
Rated AC Current	180 A
Rated AC Voltage	400 Vac, 3P+N+PE
AC Line Frequency	50/60 Hz
Long-term Overload Capacity	110%
Power Factor Adjustable Range	-1-+1

SAFETY FEATURE

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

STANDARDS

IEC 62619, IEC 63056 (62477-1 & 62619 Cover), IEC 60730-1 Annex H, EN 62477-1, EN 62040-1, EN 61000-6-2/-4 (EMC), EN 62933-5-2, VDE-AR-E 2510-50, UN 38.3

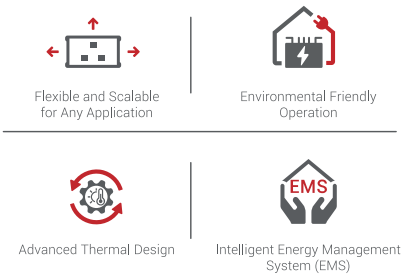
*Note:

1. The foundation dimension of the cabinet is **1130mm×1385mm.** If we consider the decorative trim and the door lock, the maximum dimension is **W1184mm×D1421mm×H2328mm.**
2. Please contact out sales if you want to know of other relevant certifications.
3. The decorative trim of this product is an optional configuration, the standard product do not have it.

RCT power

RCTerra Max 1.0

4073kWh



RELIABLE POWER SUPPLY

- A robust, outdoor 4,073 kWh containerized Energy Storage System
- Preassembled Liquid Cooling Battery Packs
- Offers flexible grid integration

VERSATILE CONFIGURATIONS

- Multiple parallel units meet diverse needs
- High energy density maximizes storage capacity while minimizing the system's footprint
- Ensures high-efficiency operation by minimizing auxiliary power consumption

REDUCED ENVIRONMENTAL IMPACT

- Effectively smooths the output from renewable energy sources
- Simplifies the integration of renewable energy and helps reduce CO_2 emissions from conventional power generation
- Features an advanced, low-noise fan system for quiet operation

PROVEN SAFETY

- The fan system is compliant with the NFPA 69 standard
- The product complies with UL9540 and UL9540A certification standards and has undergone large-scale fire testing
- Includes an emergency gas detection port to ensure operator safety

ADVANCED THERMAL DESIGN

- A smart, dual-mode cooling system (liquid and air conditioning) maintains stable, 24/7 operation for both the battery compartment and the electrical room

INTELLIGENT EMS

- Self-developed RPEMS cloud platform for automous container operation
- An ALL-IN-ONE solution for seamless energy management

RCTerra Max 1.0

CESS 4000

GENERAL

Nominal Energy	4073 kWh	
Maximum Charge/Discharge Rate	0.1-0.5 C	
Operating Temperature Range	-30°C-50°C	
Dimension [mm]*	W6058×H2896×D2438	
Weight	About 38 T	
Corrosion-proof Grade of Cabinet	C4（C5 Optional）	
IP Rating	IP55	
Noise Level	84 dBA (50Hz) 86 dBA (60Hz)	
Auxiliary Load Voltage	380-415V, 50-60Hz, 3P4W	480V 60Hz, 3P4W
Cycles Life	≥8000cls (70%SOH, 25±2°C)	

DC SIDE

Battery Rack Quantity	10
Battery Pack Quantity per Rack	8
Battery Pack Structure	1P52S
Battery Cell Capacity	306 Ah
Battery Capacity per Pack	50.918 kWh
Battery Type	$LiFePO_4$
Nominal Voltage (DC)	1331.2 Vdc
Optional Voltage Range (DC)	1164-1500 Vdc
Cooling Type	Liquid Cooling

SAFETY FEATURES

Fire alarm control panel, smoke detector, hydrogen detector, and explosion-proof exhaust fan complying with NFPA 69

STANDARDS

EN 62477-1, IEC 62040-1, EN 61000-6-2/-4, EN 55011, CISPR 11, IEC 62933-5-2, IEC 62933-5-1/-2-1, IEC 61439-1/-2, UL 9540, UL 9540A, NFPA 69, UN 38.3

*Note:

Please contact out sales if you want to know of other relevant certifications

RCT power


Benken (SG), Switzerland
1 MW / 1.86 MWh


Sydney, Australia
0.5 MW / 1.17 MWh


Chad · Africa
2.5 MW / 7.83 MWh


Ontario · USA
125 kW / 233 kWh


Gorinchem · Netherlands
0.5 MW / 1.17 MWh


Suzhou · China
2.99 MW / 5.96 MWh


Shanghai · China
1 MW / 1.86 MWh


Guangdong · China
500 kW / 932 kWh

Partnership & Global Support

RCT Power is committed to delivering sustainable, high-quality, andbankable energy storage solutions. Leveraging 10+ years of energystorage expertise to bring 2019-proven utility-scale stability directly to C&I, far surpassing residential-based newcomers.
Our dedicatedglobal support team is ready to assist you from project design andcommissioning through to long-term operation.
With offices acrossfour continents and 24/7 technical support, we partner with you toachieve energy independence and maximize ROI.

www.rct-power.com