Renepoly
-Quality and Services Define US.

**Connect with Renepoly for Quick, Efficient Responses**

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RENEPOLY


# Devoted Innovator of Smart Microgrid Solutions

## Renepoly Technology


# CONTENTS


# Company Profile

Renepoly is a distinguished high-tech company specializing in specializing in providing microgrid solutions and manufacturing intelligent microgrid controller and energy storage systems.

Our mission is to drive efficient sustainable energy development through the deployment of microgrids.

Through innovation, we strive to make renewable energy more accessible and smarter, contributing to a cleaner, more sustainable future.

# Business Lines

**Engineering**
Engineering of ESS cabinet & container, smart EMS and microgrid system.

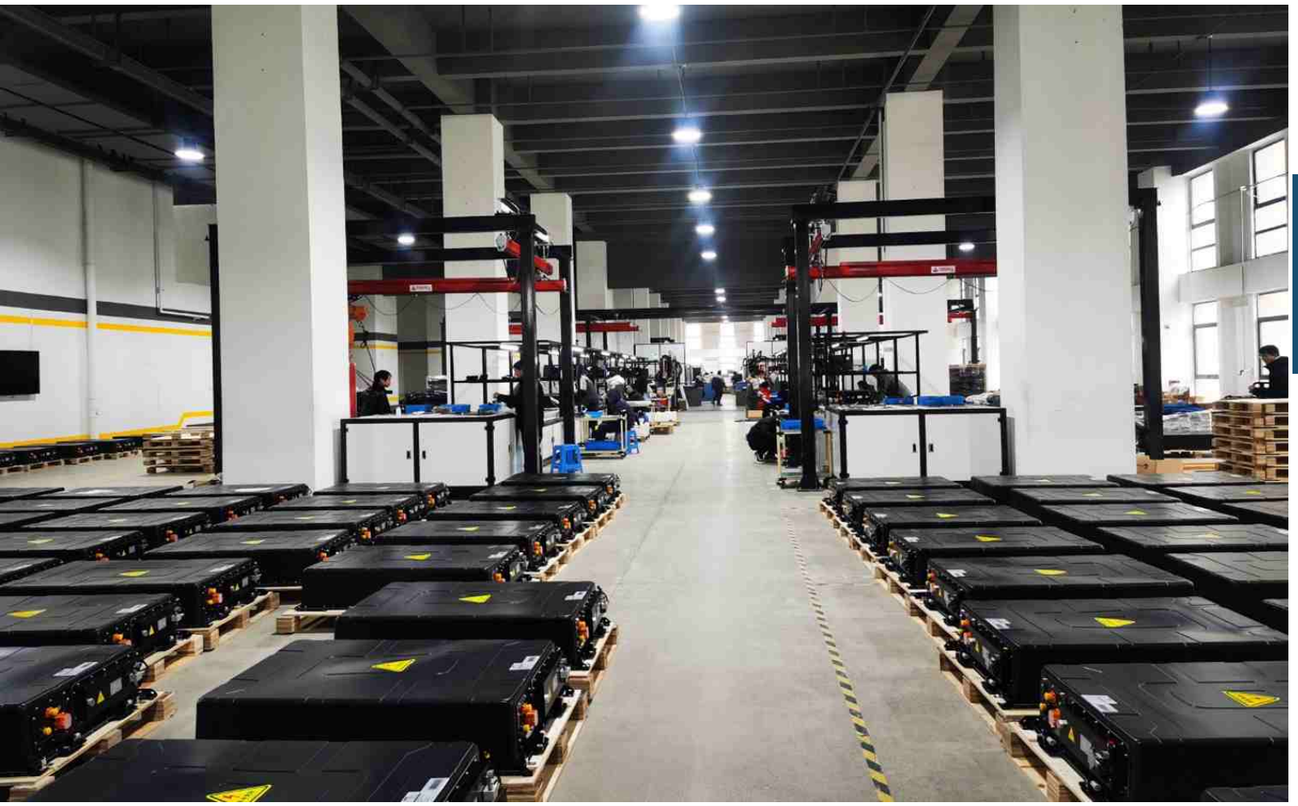
**Manufacturing**
Manufacturing the products of ESS cabinet & container and smart EMS controller.

**Construction**
Construction and delivery of ESS and microgrid projects.

**O & M**
Operation and maintenance of ESS and microgrid projects.

**Consultancy**
Technical and project management consultancy to ESS and microgrid projects.

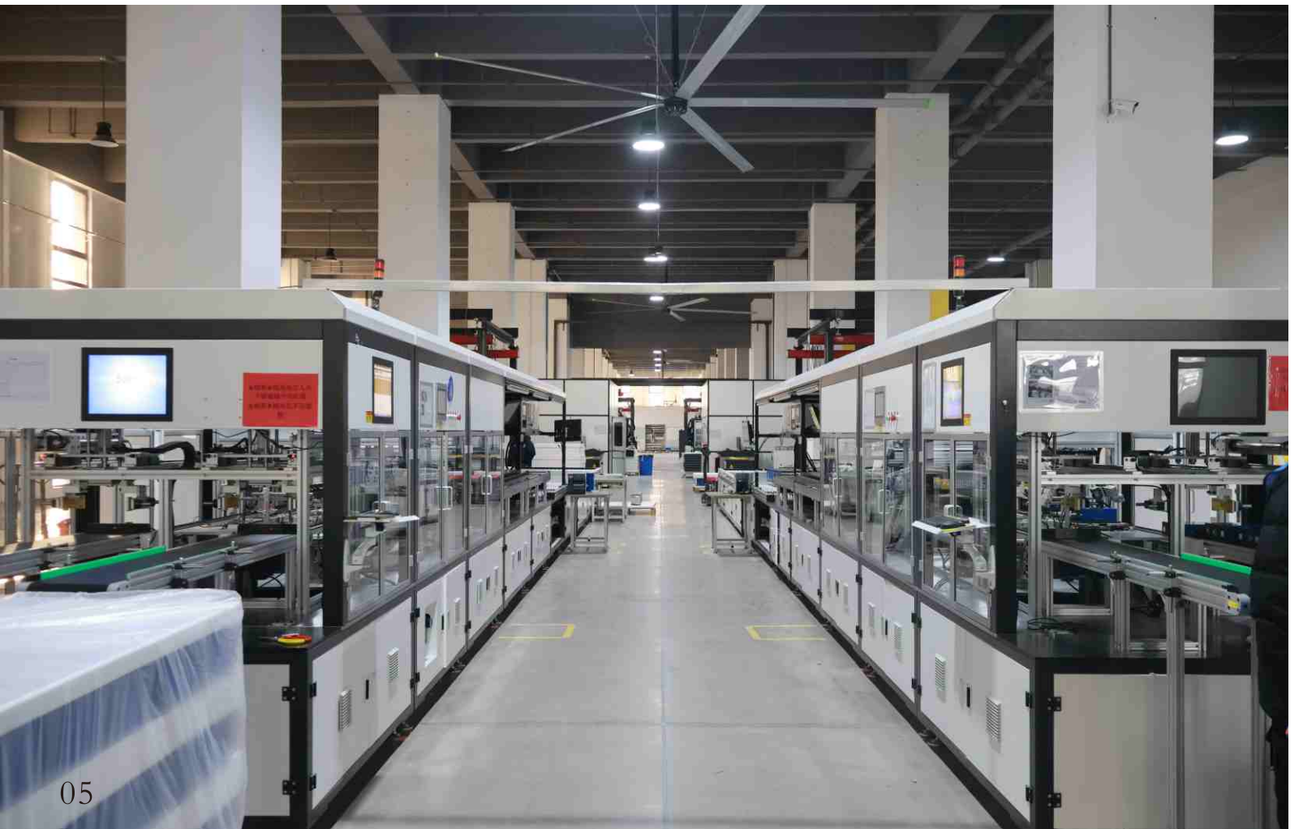
**Analysis**
Feasibility study and investment analysis to ESS and microgrid projects.



# Competence

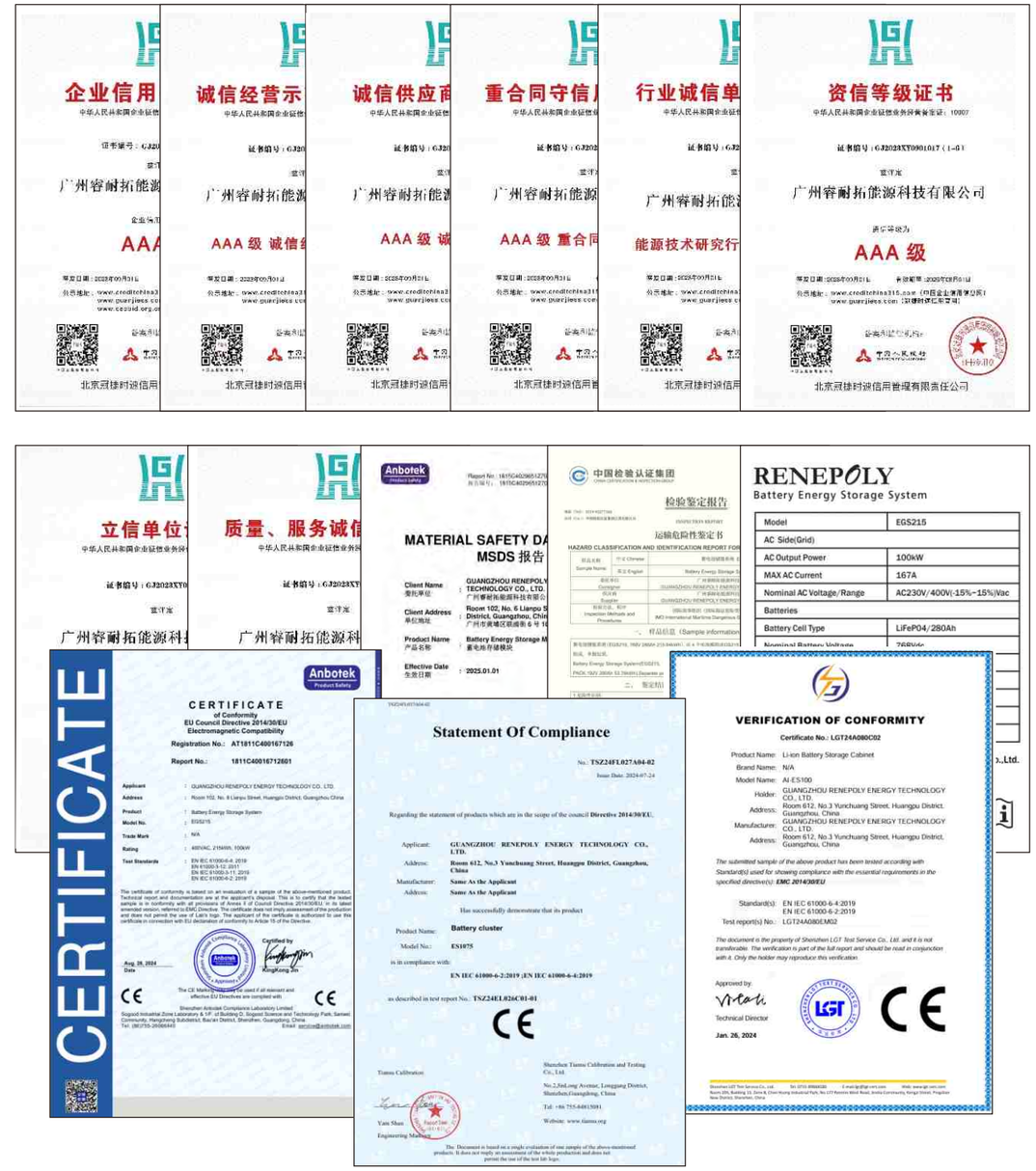
| 25+ | 10000m² | 40+ | 150+ |
|---|---|---|---|
| Serviced Countries | Factory Size | Running Projects | Expert Workers |

- Smart Microgrid Laboratory with BESS, EV Charger, Generator, Grid and EMS
- 10000sqm battery pack and Microgrid Controller factory and with high-quality production
- R&D and technical team for innovative smart microgrid technologies
- Responsive Services from experienced overseas local operations team



# Certificates

Complete ISO, CE, UN and various credibility certificates to ensure our exports go smoothly

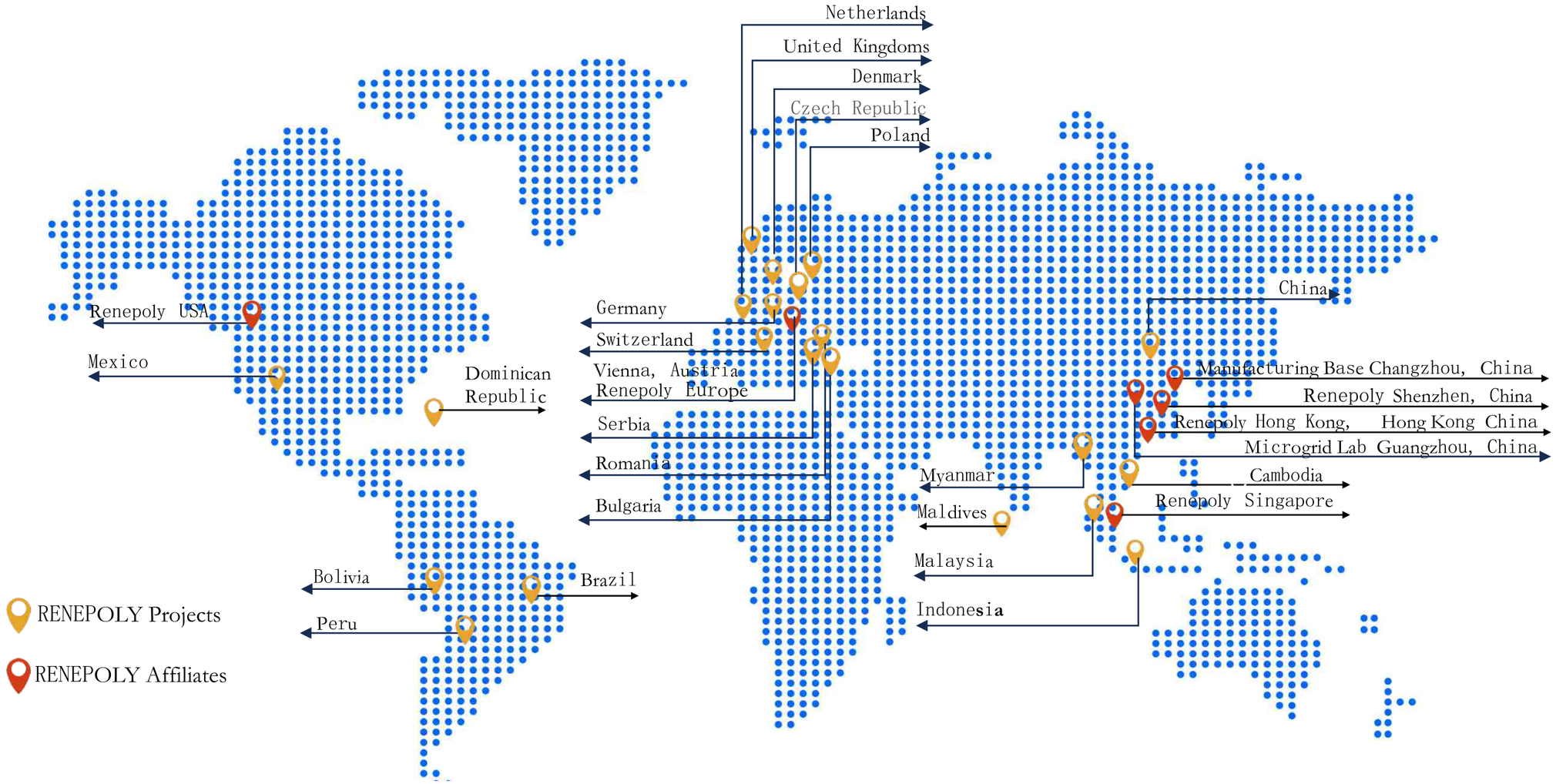

## Company ISO Certificates

CE UL UN38.3 MSDS EN50549

# Service Network

RENEPOLY service network covers more than 20 countries and regions around the world, such as China, Germany, the United Kingdom, the United States, Mexico, Maldives, Indonesia and so on.

It also has a number of technical service centres in China, the United States, Austria, Singapore, Hong Kong and so on.



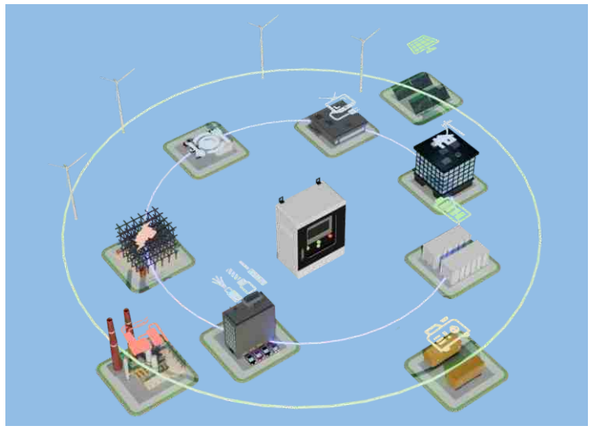

Headquarters and Microgrid Lab
Guangzhou Renepoly Energy Technology Co., Ltd.

Manufacturing Base
Jiangsu Renepoly Energy Technology Co., Ltd.

Renepoly Hong Kong
Renepoly Technology Co., Ltd.

Renepoly Europe
Renepoly Technology GmbH.

Renepoly Shenzhen, China
Shenzhen Renepoly Technology Co., Ltd








# Products & Services

## 01 Microgrid Services

- Turnkey Solutions Services
- EMS Customization Services
- Microgrid and Energy Storage Technical Services
- Microgrid and Energy Storage Aftersales Services

## 02 Smart Microgrid Solution

- Remote Area Off-grid Solutions
- EV Charging Station Solutions
- Industrial&Commerical Solutions
- Residential Community Solutions
- Power Substation Solutions
- Power Stations Solutions

## 03 Energy Management System

- Microgrid Controllers
- Controller Software
- Renepoly Cloud
- Renepoly App

## 04 Energy Storage Products

- BESS Cabinet
- BESS Container

# Turnkey Solution Services

### Analysis

Technoeconomic Feasibility study and financial analysis to ESS and microgrid projects (by Renepoly Simulation Software).

### Proposal

Proposal with basic system design: Bess, renewable energy devices technical parameters, EMS working logics.

### Engineering

Engineering Design of microgrid system by integrating standard BESS and EMS.

### Manufacturing

Supply Chain quality control and quality assurance and testing of working logics before the shipment.

### Construction

Onsite installation supervision and system testing and commissioning.

### O & M

Operation and maintenance of BESS and microgrid projects.

# EMS Customization Services


### Service Scope:

- Data collection, monitoring, processing & analysis
- Operation control function
- Event alarm function & Graphic display
- Data forwarding function
- SOC maintenance control
- Smooth and stable control
- Planned operation mode
- On-grid and off-grid switching control
- Demand management control function
- System protection function
- Auxiliary black start function
- Demand analysis and prediction
- Solar generation prediction based on historical data and weather conditions
- Operation & working logics customization

# Microgrid and Energy Storage Technical Services

### Service Scope:

- Project Feasibility Study
- Technical and economic evaluation of projects
- Business and financial modelling
- Project Engineering Design
- EMS Logics Design
- Supply Chain QC and QA
- System factory testing and commissioning
- Project Management
- System Training
- Site testing and acceptance
- Product Warranty Service
- Technical Modifications
- Remote Operation and Maintenance Services
- Intelligent Monitoring Service



# Microgrid and Energy Storage Aftersales Services

### Service Figures:

**Response Service:**

Response within 4 hours, resolution within 24 hours.

**On-Site Service:**

Renepoly engineers will arrive on-site within 72-96 hours to resolve problems.

**Global Operations and Maintenance Service:**

- Performance Monitoring
- Fault Diagnosis and Repair
- Emergency Response
- Performance Optimization
- Data Analysis and Reporting
- Lifecycle Management

# Microgrid System

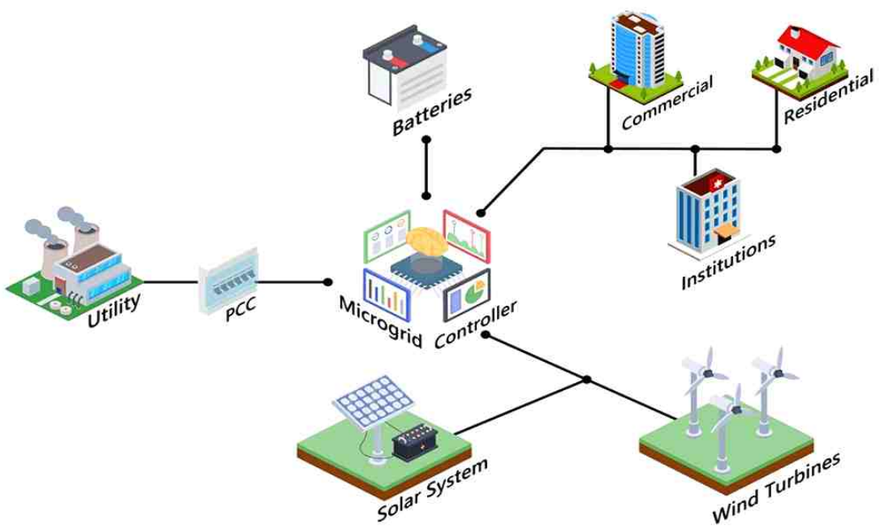
An integrated system including renewable energy generation system(solar /wind/biomass/etc.), BESS, control system (EMS) and Measuring system .

Fuctions of regulation of load shifting, peak shaving and voltage, frequency and power factor of the grid.

Intelligent management and automatic control of the whole system.

### Key Components:

- Solar System
- Wind System
- Generators
- Energy Storage System
- Microgrid Controller
- Energy Management System




# Microgrid Application

**Key Functionalities:**
Load Shifting/Arbitrage, Peak Shaving, Frequency/Voltage /Power Factor Regulation, Active Power/Reactive Power Regulation, Seamless Switching STS, Injection Protection, etc.

Remote Area Off-grid Solutions


EV Charging Station Solutions

Industrial & Commercial Facilities Solutions

Residential Community Solutions

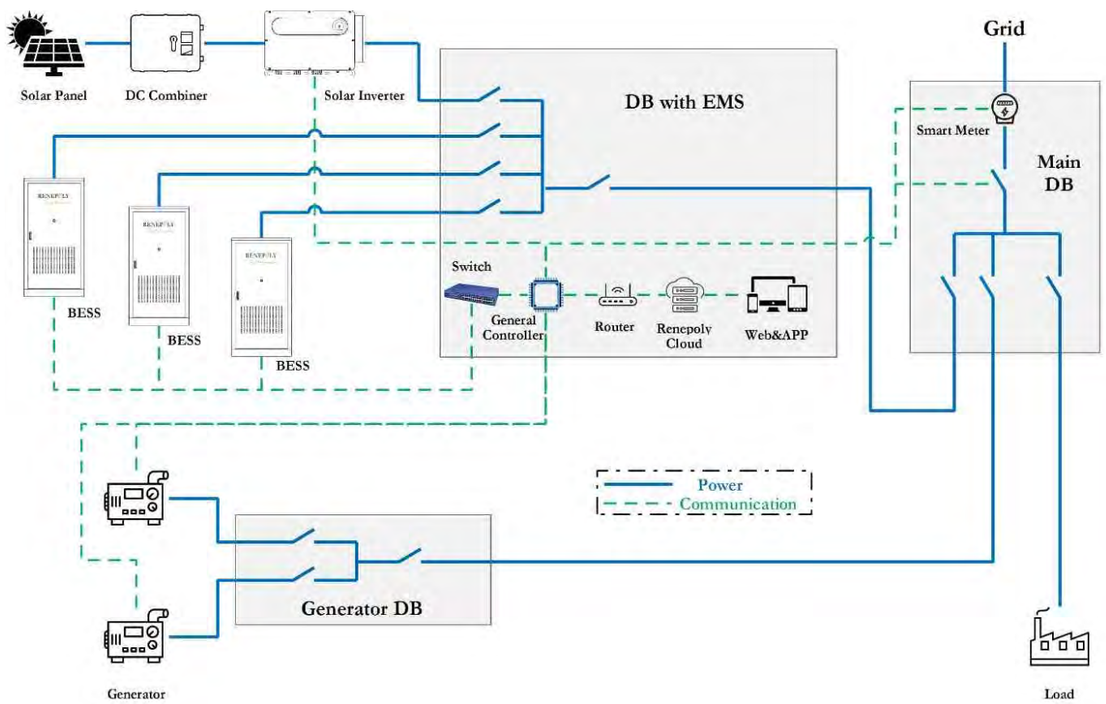
Frequency Regulation Solutions

Power Station Solutions

# Microgrid System Functions

### Key Functionalities:

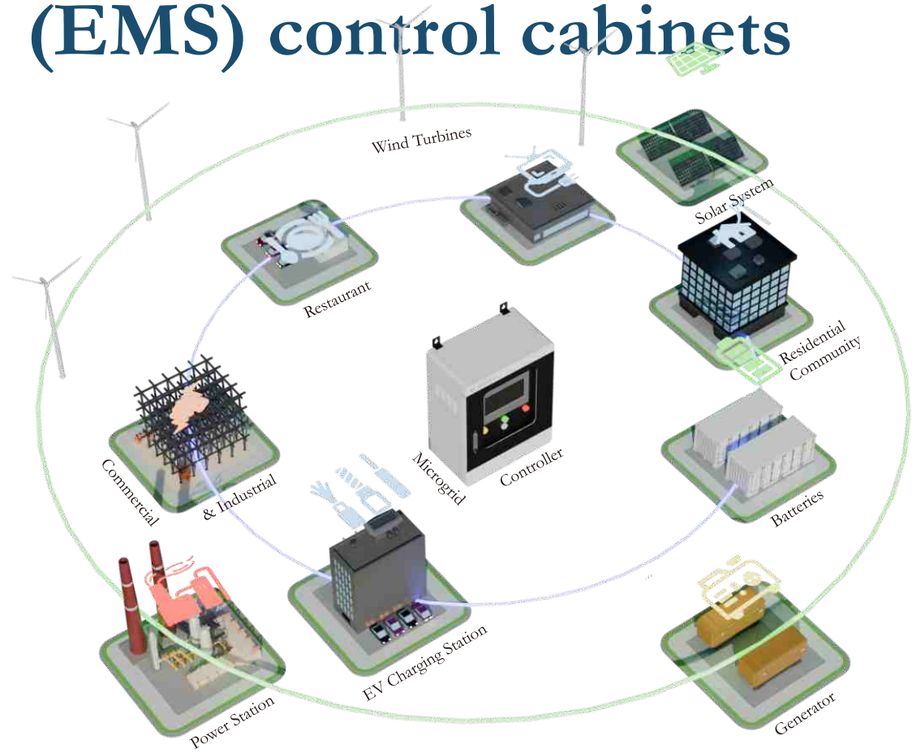
- Load Shifting
- Peak Shaving
- Frequency Regulation
- Voltage Regulation
- Power Factor Regulation
- Active/Reactive Power Regulation
- Seamless Switching between
- Grid-tied and Off-grid
- Anti-reverse Control







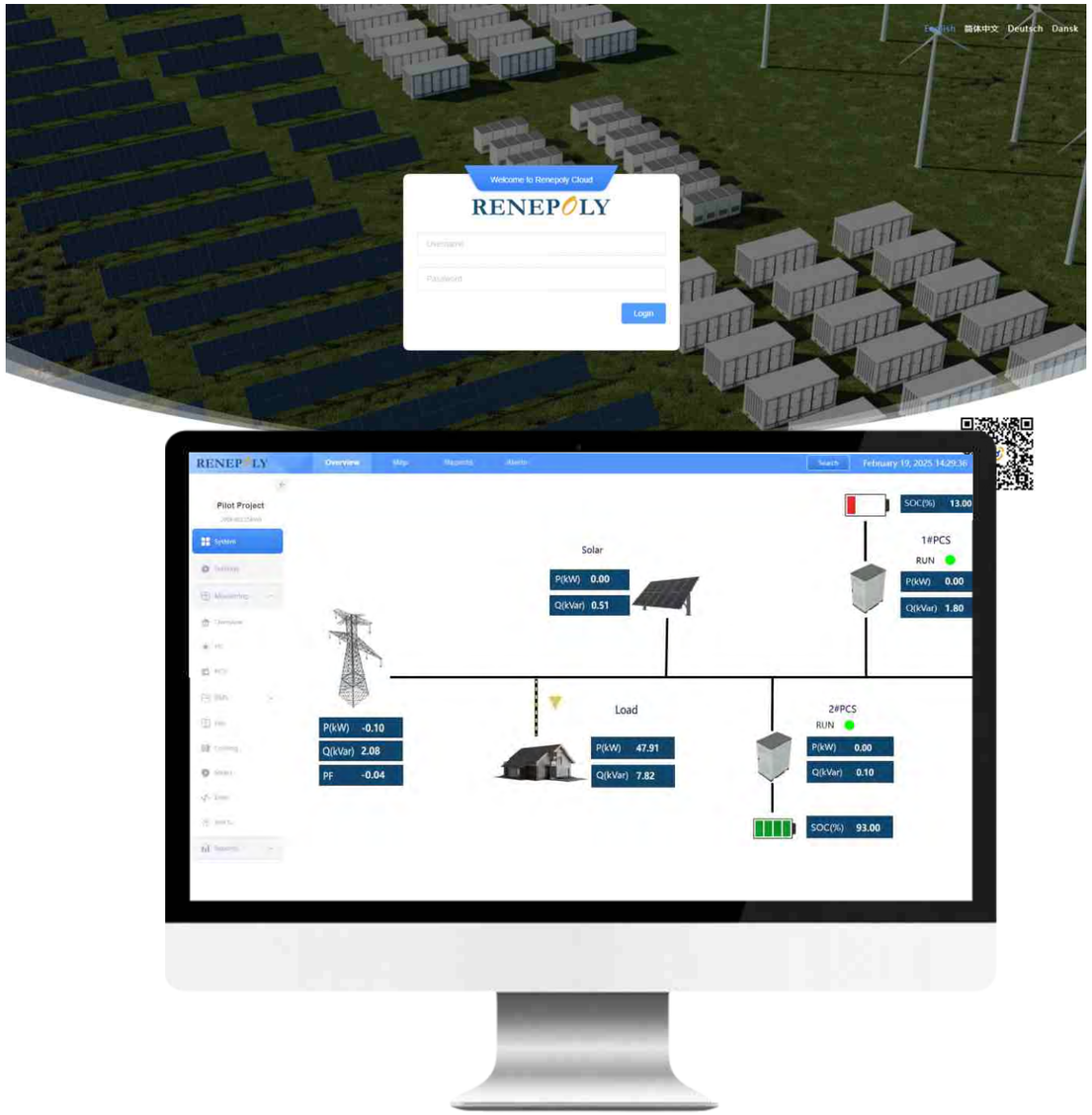

# Energy Management System (EMS) control cabinets




Local Screen
Controller Software
Renepoly Cloud
Renepoly App

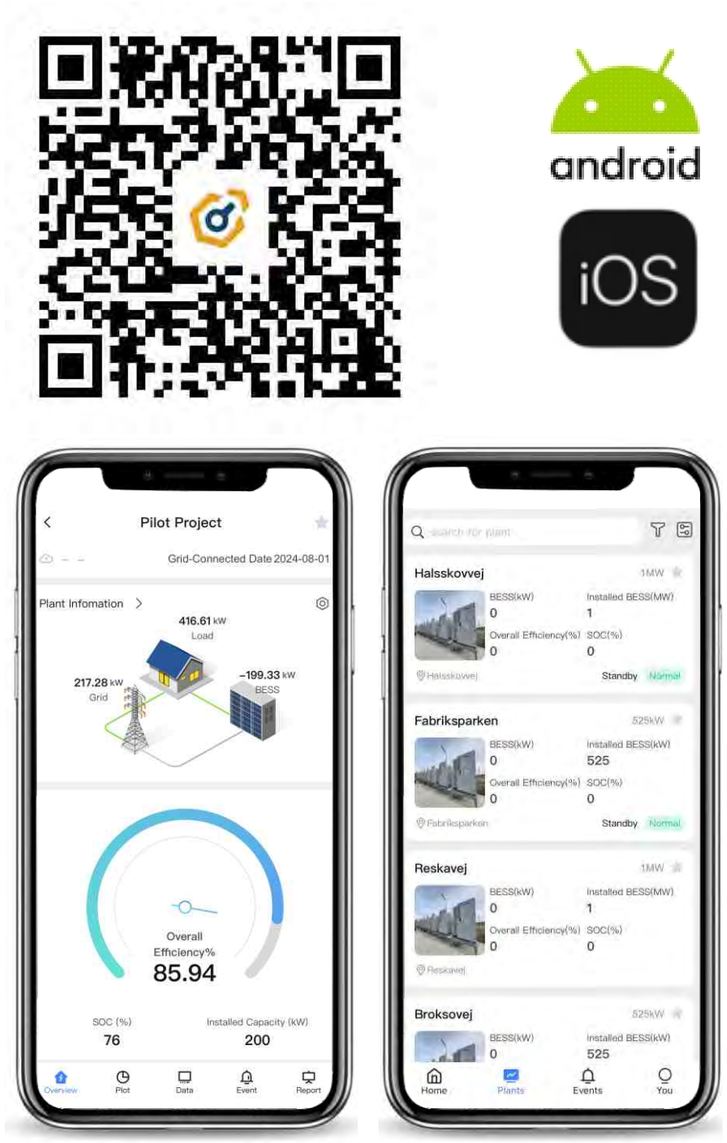
- ReneCloud is an energy management system and cloud platform developed specifically for microgrids.
- Its hardware includes EMS local controller, EMS local display and control terminal, and 4G router device.
- Its software includes microgrid management program deployed locally on EMS local controller, EMS cloud platform deployed on remote server, and mobile APP.
- The full set of Renepoly EMS products ensures the normal operation of microgrid system and meets the real-time monitoring of microgrid by operation and maintenance personnel anytime and anywhere.

# EMS Cloud Platform




Advanced monitoring and control via ReneCloud

# EMS Mobile APP




Fast and flexible management via ReneApp

# BESS MODULAR CABINET

## EGS120 (50kW/120kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PCS, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | |
|---|---|
| **AC Side (Grid Tied Scenario)** | |
| AC Output Power | 50kW |
| Max. AC Current | 72.2A |
| Nominal AC Voltage / Range | 3/N/PE, 220 V / 380 V, 230 V / 400 V |
| Nominal Grid Frequency/Range | 50Hz/60Hz |
| Harmonic(THD) | <3% (at Nominal Power ) |
| Power Factor at Nominal Power | >0.99(-0.8 ~ 0.8) |
| Cooling Concept of PCS Chamber | Air Cooling |
| Seamless Switching from Grid to BESS In Case of Power Outage | Optional |
| **AC Side (Microgrid Scenairo)** | |
| Nominal AC Voltage | 3/N/PE, 220 V / 380 V, 230 V / 400 V |
| Harmonic (THD) | < 2% (Resistance Load) |
| Nominal Frequency/Range | 50Hz/60Hz |
| Max. AC Power | 55kW |
| **PV Side** | |
| Solar PV MPPT | 100kW |
| Solar PV Max. DC Voltage | 1000V |
| Solar PV Norminal DC Voltage | 600V |
| MPPT Voltage Range | 150-850V |
| Max. Input Current | 4x40A |
| Max. Input Short-circuit Current | 4x60A |
| MPPT No. | 4/8 |
| **Generator Side** | |
| Max. Input Power | 50kW |
| Norminal Input Current | 72.2A |
| Norminal Input Voltage | 3/N/PE, 220 V / 380 V, 230 V / 400 V |
| Nominal Frequency/Range | 50Hz/60Hz |
| **Battery Side** | |
| Nominal Battery Voltage | 384VDC |
| Battery Type | LiFePO4 3.2V/314Ah |
| Battery Pack Configuration | 1P40S/40.192kWh |
| Battery System Configuration | 1P120S |
| Capacity | 120.576kWh |
| Battery Voltage Range | 336-432VDC |
| Max Charging/Discharging Current | 157A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Liquid Cooling |
| **General Parameters** | |
| Dimension W*D*H | 1350*1415*1700mm |
| Charge/Discharge Rate | 0.5C |
| Depth of Discharge | 80% |
| Life Cycle | 6000 @80% SOH/25℃/0.5P |
| Degree of Protection | IP55 |
| System Efficiency | ~90% (Without Auxiliary Equipment Energy Consumption) |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -20 ~ 55 ℃ |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) |
| Weight | ~1500kg |
| SPD | DC TYPE Ⅱ/AC TYPE Ⅱ |
| Lifting Options | Fork/Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS |
| Battery Rack | CE, UN38.3, MSDS |
| Power Conversion System | G99, VDE-AR-N 4105/VDE V 0124, EN 50549-1/EN 50549-10, VDE 0126/UTE C 15/VFR:2019, NTS 631/RD 1699/RD 244/UNE 206006/UNE 206007-1, CEI 0-21, C10/11, NRS 097-2-1, TOR, EIFS 2018.2, IEC 62116, IEC 61727, IEC 60068, IEC 61683, EN 50530, MEA, PEA,PORTARIA Nº 140, DE 21 DE MARÇO DE 2022, IEC/EN 62109-1/-2, IEC/EN 61000-6-2/-4, EN 55011 |
| Whole Unit | CE, UN38.3, MSDS |

# BESS MODULAR CABINET

## EGS215 (100kW/215kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PCS, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | |
|---|---|
| **AC Side (Grid Tied Scenario)** | |
| AC Output Power | 100kW @ 45°C |
| Max. AC Current | 167A |
| Nominal AC Voltage / Range | 400V/230V (-10% ~ 15%) |
| Nominal Grid Frequency/Range | 50Hz/60Hz |
| Harmonic(THD) | <3% (at Nominal Power ) |
| Power Factor at Nominal Power/Adjustable | -1 ~ 1 |
| Cooling Concept of PCS Chamber | Air Cooling |
| Seamless Switching from Grid to BESS In Case of Power Outage | Optional |
| **AC Side (Microgrid Scenairo)** | |
| Nominal AC Voltage | 400V/230V |
| Harmonic (THD) | < 2% (Resistance Load) |
| Nominal Frequency/Range | 50Hz/45Hz ~ 55Hz 60Hz/55Hz ~ 65Hz |
| Max. AC Power | 115kW |
| **Batteries** | |
| Nominal Battery Voltage | 768VDC |
| Battery Type | LiFePO4 3.2V/280Ah |
| Battery Pack Configuration | 1P60S/53.76kWh |
| Battery System Configuration | 1P240S |
| Capacity | 215.04kWh |
| Battery Voltage Range | 672-864VDC |
| Max Charging/Discharging Current | 140A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Liquid Cooling |
| **General Parameters** | |
| Dimension W*D*H | 1050*1600*2050mm |
| Charge/Discharge Rate | 0.5C |
| Depth of Discharge | 95% |
| Life Cycle | 6000 |
| Degree of Protection | IP55 |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) |
| Cooling Liquid | 50% Ethylene glycol+50% Water |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C4 (C5 Optional) |
| Weight | ~2500kg |
| SPD | DC TYPE II /AC TYPE II |
| Lifting Options | Fork/Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS |
| Battery Rack | CE, UN38.3, MSDS |
| Power Conversion System | CE（IEC61000 IEC62619 IEC62109）EN50549-1,EN50549-2, IEC61727&62116, NRS097, VDE4105, VDE4110, VDE4120, C10/11, G99, PN50549, EIFS2018:02, CEI021/16, NTS632:2019,MEA,PEA,UNE,RD EN 50549 with deviations of grid protection settings for Greece&Sweden&Denmark(DK&DK2)&Netherland&Czech&Hungary&Romania |
| Whole Unit | CE, UN38.3, MSDS |

# BESS MODULAR CABINET

## EGS257 (125kW/257kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PCS, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | US version | European version |
|---|---|---|
| **AC Side (Grid Tied Scenario)** | | |
| Nominal AC Voltage / Range | 277/480 V | 230V/400V |
| Nominal Grid Frequency/Range | 60Hz | 50/60Hz |
| AC Output Power | 125kW @ 45°C | |
| Harmonic(THD) | <3% (at Nominal Power ) | |
| Power Factor at Nominal Power/Adjustable | -1 ~ 1 | |
| Cooling Concept of PCS Chamber | Air Cooling | |
| Seamless Switching from Grid to BESS In Case of Power Outage | Optional | |
| **AC Side (Microgrid Scenairo)** | | |
| Nominal AC Voltage | 277/480 V | 230V/400V |
| Nominal Frequency/Range | 60Hz/55Hz ~ 65Hz | 50/60Hz |
| Max. AC Power | 135kW | 137.5kW |
| Harmonic (THD) | < 2% (Resistance Load) | |
| **Batteries** | | |
| Nominal Battery Voltage | 819.2VDC | |
| Battery Type | LiFePO4 3.2V/314Ah | |
| Battery Pack Configuration | 1P64S/64.3024kWh | |
| Battery System Configuration | 1P256S | |
| Capacity | 257.2288kWh | |
| Battery Voltage Range | 716.8-921.6VDC | |
| Max Output Power | 135kw | |
| Battery Disconnect | Integrated | |
| Cooling concept of battery chamber | Liquid Cooling | |
| **General Parameters** | | |
| Dimension W*D*H | 1050*1600*2050mm | |
| Charge/Discharge Rate | 0.5C | |
| Depth of Discharge | 95% | |
| Life Cycle | 6000 | |
| Degree of Protection | IP55 | |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) | |
| Cooling Liquid | 50% Ethylene glycol+50% Water | |
| Fire Protection System | Aerosol | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | |
| Allowed Relative Humidity | 0 ~ 95% | |
| Working Altitude | <2000m | |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) | |
| Weight | ~3200kg | |
| SPD | DC TYPE II/AC TYPE II | |
| Lifting Options | Fork/Crane | |
| Scalability | Yes, Units Can Be Connected In Parallel | |
| **Monitoring** | | |
| Display | 7 Inches Touchscreen | |
| Communication | RS485/Ethernet | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | |
| Remote Control System | Renepoly Cloud | |
| **Certifications** | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | |
| Battery Pack | CE, UL, UN38.3, MSDS | |
| Battery Rack | CE, UL, UN38.3, MSDS | |
| Power Conversion System | IEEE 1547, UL 1741 SB | |
| Whole Unit | CE, UN38.3, MSDS, UL 9540, UL 9540A, UL1973, FCC PART 15 B, UL 60730, IEEE 1547, UL 1741 SB | |

# BESS MODULAR CABINET

## ES215 (215kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | |
|---|---|
| **Batteries** | |
| Nominal Battery Voltage | 768VDC |
| Battery Type | LiFePO4 3.2V/280Ah |
| Battery Pack Configuration | 1P60S/53.76kWh |
| Battery System Configuration | 1P240S |
| Capacity | 215.04kWh |
| Battery Voltage Range | 672-864VDC |
| Max Charging/Discharging Current | 140A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Liquid Cooling |
| **General Parameters** | |
| Dimension W*D*H | 1050*1600*2050mm |
| Charge/Discharge Rate | 0.5C |
| Depth of Discharge | 95% |
| Life Cycle | 6000 |
| Degree of Protection | IP55 |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) |
| Cooling Liquid | 50% Ethylene glycol+50% Water |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C4 (C5 Optional) |
| Weight | ~2500kg |
| SPD | DC TYPE Ⅱ/AC TYPE Ⅱ |
| Lifting Options | Fork/Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS |
| Battery Rack | CE, UN38.3, MSDS |
| Power Conversion System | CE（IEC61000 IEC62619 IEC62109）EN50549-1,EN50549-2, IEC61727&62116, NRS097, VDE4105, VDE4110, VDE4120, C10/11, G99, PN50549, EIFS2018:02, CEI021/16, NTS632:2019, MEA,PEA,UNE,RD EN 50549 with deviations of grid protection settings for Greece&Sweden&Denmark(DK&DK2)&Netherland& Czech&Hungary&Romania |
| Whole Unit | CE, UN38.3, MSDS |

# BESS MODULAR CABINET

## ES237 (237.12kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud


RENEPOLY

| Technical Parameters | |
|---|---|
| **Batteries** | |
| Nominal Battery Voltage | 832VDC |
| Battery Type | LiFePO4 3.2V/285Ah |
| Battery Pack Configuration | 1P52S/47.424kWh |
| Battery System Configuration | 1P260S |
| Capacity | 237.12kWh |
| Battery Voltage Range | 728-936VDC |
| Max Charging/Discharging Current | 140A/285A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Liquid Cooling |
| **General Parameters** | |
| Dimension W*D*H | 980*1300*2350mm |
| Charge/Discharge Rate | 0.5C/1C |
| Depth of Discharge | 95% |
| Life Cycle | 4000-6000 |
| Degree of Protection | IP54 |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) |
| Cooling Liquid | 50% Ethylene glycol+50% Water |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C4 |
| Weight | ~2600kg |
| SPD | DC TYPEII/AC TYPEII |
| Lifting Options | Fork/Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS, UL |
| Battery Rack | CE, UN38.3, MSDS, UL |
| Whole Unit | CE, UN38.3, MSDS, UL |

# BESS MODULAR CABINET

## ES379 (379kWh)

- **Category:**
  Liquid Cooling BESS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud


| Technical Parameters | |
|---|---|
| **Batteries** | |
| Nominal Battery Voltage | 1331.2VDC |
| Battery Type | LiFePO4 3.2V/285Ah |
| Battery Pack Configuration | 1P52S/47.424kWh |
| Battery System Configuration | 1P416S |
| Capacity | 379.392kWh |
| Battery Voltage Range | 1164.8-1497.6VDC |
| Max Charging/Discharging Current | 140A/280A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Liquid Cooling |
| **General Parameters** | |
| Dimension W*D*H | 1300*1300*2280mm |
| Charge/Discharge Rate | 0.5C/1C |
| Depth of Discharge | 95% |
| Life Cycle | 4000 |
| Degree of Protection | IP54 |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) |
| Cooling Liquid | 50% Ethylene glycol+50% Water |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C5 |
| Weight | ~3700kg |
| SPD | DC TYPEII/AC TYPEII |
| Lifting Options | Fork/Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS, UL |
| Battery Rack | CE, UN38.3, MSDS, UL |
| Whole Unit | CE, UN38.3, MSDS, UL |

# BESS CONTAINER

## ES1075 (500kW/1075kWh)

- **Category:**
  Air Cooling BESS Container
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PCS, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | |
|---|---|
| **AC Side (Grid Tied Scenario)** | |
| AC Output Power | 500kW |
| Max. AC Current | 800A |
| Nominal AC Voltage / Range | 400V/230V (-10% ~ 15%) |
| Nominal Grid Frequency/Range | 50Hz/60Hz |
| Harmonic(THD) | <3% (at Nominal Power) |
| Power Factor at Nominal Power/Adjustable | -1 ~ 1 |
| Cooling Concept of PCS Chamber | Air Cooling |
| Seamless Switching from Grid to BESS In Case of Power Outage | Optional |
| **AC Side (Microgrid Scenairo)** | |
| Nominal AC Voltage | 400V/230V |
| Harmonic (THD) | < 2% (Resistance Load) |
| Nominal Frequency/Range | 50Hz/45Hz ~ 55Hz 60Hz/55Hz ~ 65Hz |
| Max. AC Power | 550kW |
| **Batteries** | |
| Nominal Battery Voltage | 768VDC |
| Battery Type | LiFePO4 3.2V/280Ah |
| Battery Pack Configuration | 1P20S/17.92kWh |
| Battery System Configuration | 5P240S |
| Capacity | 1075.2kWh |
| Battery Voltage Range | 672-864VDC |
| Max Charging/Discharging Current | 700A |
| Battery Disconnect | Integrated |
| Cooling concept of battery chamber | Air Cooling |
| **General Parameters** | |
| Dimension W*D*H | 6058*2438*2591mm |
| Charge/Discharge Rate | 0.5C |
| Depth of Discharge | 80% |
| Life Cycle | 6000 |
| Degree of Protection | IP54 |
| System Efficiency | ~90% (Without Auxiliary Equipment Energy Consumption) |
| Fire Protection System | Aerosol |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) |
| Allowed Relative Humidity | 0 ~ 95% |
| Working Altitude | <2000m |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) |
| Weight | ~16000kg |
| SPD | DC TYPEⅡ/AC TYPEⅡ |
| Lifting Options | Crane |
| Scalability | Yes, Units Can Be Connected In Parallel |
| **Monitoring** | |
| Display | 7 Inches Touchscreen |
| Communication | RS485/Ethernet |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP |
| Remote Control System | Renepoly Cloud |
| **Certifications** | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG |
| Battery Pack | CE, UN38.3, MSDS |
| Battery Rack | CE, UN38.3, MSDS |
| Power Conversion System | CE (IEC61000 IEC62619 IEC62109) EN50549-1,EN50549-2, IEC61727&62116, NRS097, VDE4105, VDE4110, VDE4120, C10/11, G99, PN50549, EIFS2018:02, CEI021/16, NTS632:2019, MEA,PEA,UNE,RD EN 50549 with deviations of grid protection settings for Greece&Sweden&Denmark(DK&DK2)&Netherland&Czech&Hungary&Romania |

# BESS CONTAINER

## ES2150 / ES2508-1

- **Category:**
  Liquid Cooling BESS Container
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PCS, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud






| Technical Parameters | ES2150 | ES2508-1 |
|---|---|---|
| **AC Side (Grid Tied Scenario)** | | |
| AC Output Power | 1000kW | 1250kW |
| Max. AC Current | 1600A | 1270A |
| Nominal AC Voltage / Range | 400V/230V (-10% ~ 15%) | 550V |
| Nominal Grid Frequency/Range | 50Hz/ 60Hz | |
| Harmonic(THD) | <3% (at Nominal Power ) | |
| Power Factor at Nominal Power/Adjustable | -1 ~ 1 | |
| Cooling Concept of PCS Chamber | Air Cooling | |
| Seamless Switching from Grid to BESS In Case of Power Outage | Optional | |
| **AC Side (Microgrid Scenairo)** | | |
| Nominal AC Voltage | 400V/230V | 550V |
| Harmonic (THD) | < 2% (Resistance Load) | |
| Nominal Frequency/Range | 50Hz/45Hz ~ 55Hz | 60Hz/55Hz ~ 65Hz |
| Max. AC Power | 1100kW | 200% 1s、 150% 60s@ Duty Cycle 300s |
| **Batteries** | | |
| Nominal Battery Voltage | 768VDC | 998.4VDC |
| Battery Type | LiFePO4 3.2V/280Ah | LiFePO4 3.2V/314Ah |
| Battery Pack Configuration | 1P48S/43.008kWh | 1P104S/104.4992kWh |
| Battery System Configuration | 10P240S | 8P312S |
| Capacity | 2150.4kWh | 2507.9808kWh |
| Battery Voltage Range | 672-864VDC | 873.6-1123.2VDC |
| Max Charging/Discharging Current | 1400A | 1256A |
| Battery Disconnect | Integrated | |
| Cooling concept of battery chamber | Liquid Cooling | |
| **General Parameters** | | |
| Dimension W*D*H | 6058*2438*2591mm | |
| Charge/Discharge Rate | 0.5C | |
| Depth of Discharge | 95% | |
| Life Cycle | 6000 | |
| Degree of Protection | IP54 | |
| System Efficiency | ~90%(Without Auxiliary Equipment Energy Consumption) | |
| Fire Protection System | Aerosol | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | |
| Allowed Relative Humidity | 0 ~ 95% | |
| Working Altitude | <2000m | |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) | |
| Weight | ~25000kg | ~30000kg |
| SPD | DC TYPEⅡ/AC TYPEⅡ | |
| Lifting Options | Crane | |
| Scalability | Yes, Units Can Be Connected In Parallel | |
| **Monitoring** | | |
| Display | 7 Inches Touchscreen | |
| Communication | RS485/Ethernet | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | |
| Remote Control System | Renepoly Cloud | |
| **Certifications** | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | |
| Battery Pack | CE, UN38.3, MSDS | |
| Battery Rack | CE, UN38.3, MSDS | |
| Power Conversion System | CE（IEC61000 IEC62619 IEC62109）EN50549-1, EN50549-2, IEC61727&62116, NRS097, VDE4105, VDE4110, VDE4120, C10/11, G99, PN50549, EIFS2018:02, CEI021/16, NTS632:2019, MEA,PEA, UNE,RD EN 50549 with deviations of grid protection settings for Greece&Sweden&Denmark(DK&DK2) &Netherland&Czech&Hungary&Romania | UI1741, IEEE 1547 |

# BESS CONTAINER

## ES2090 / ES2508-2 /ES2926/ES3344

- **Category:**
  Liquid Cooling BESS Container
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud


| Technical Parameters | ES2090 | ES2508-2 | ES2926 | ES3344 |
|---|---|---|---|---|
| **Batteries** | | | | |
| Nominal Battery Voltage | 1331.2VDC | | | |
| Battery Type | LiFePO4 3.2V/314Ah | | | |
| Battery Pack Configuration | 1P104S/104.4992kWh | | | |
| Battery System Configuration | 5P416S | 6P416S | 7P416S | 8P416S |
| Capacity | 2089.984kWh | 2507.9808kWh | 2925.9776kWh | 3343.9744kWh |
| Max Charging/Discharging Current | 785A(0.5C) | 942A(0.5C) | 1099A(0.5C) | 1256A(0.5C) |
| Battery Voltage Range | 1164.8~1497.6VDC | | | |
| Battery Disconnect | Integrated | | | |
| Cooling concept of battery chamber | Liquid Cooling | | | |
| **General Parameters** | | | | |
| Dimension W*D*H | 6058*2438*2896mm | | | |
| Charge/Discharge Rate | 0.5C | | | |
| Depth of Discharge | 95% | | | |
| Life Cycle | 6000 | | | |
| Degree of Protection | IP55 | | | |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) | | | |
| Cooling Liquid | 50% Ethylene glycol+50% Water | | | |
| Fire Protection System | Aerosol | | | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | | | |
| Allowed Relative Humidity | 0 ~ 95% | | | |
| Working Altitude | <2000m | | | |
| Enclosure Corrosion Resistance Level | | | | |
| Weight | ~22Tons | ~25 Tons | ~28 Tons | ~31 Tons |
| SPD | DC TYPEII/AC TYPEII | | | |
| Lifting Options | Crane | | | |
| Scalability | Yes, Units Can Be Connected In Parallel | | | |
| **Monitoring** | | | | |
| Communication | RS485/Ethernet | | | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | | | |
| Remote Control System | Renepoly Cloud | | | |
| **Certifications** | | | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | | | |
| Battery Pack | CE, UN38.3, MSDS | | | |
| Battery Rack | CE, UN38.3, MSDS | | | |

# BESS CONTAINER

## ES3762 / ES4180 /ES4598/ES5016

- **Category:**
  Liquid Cooling BESS Container
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, PDU, FFS, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud


| Technical Parameters | ES3762 | ES4180 | ES4598 | ES5016 |
|---|---|---|---|---|
| **Batteries** | | | | |
| Nominal Battery Voltage | 1331.2VDC | | | |
| Battery Type | LiFePO4 3.2V/314Ah | | | |
| Battery Pack Configuration | 1P104S/104.4992kWh | | | |
| Battery System Configuration | 9P416S | 10P416S | 11P416S | 12P416S |
| Capacity | 3761.9712kWh | 4179.968kWh | 4597.9648kWh | 5015.9616kWh |
| Max Charging/Discharging Current | 1413A(0.5C) | 1570A(0.5C) | 1727A(0.5C) | 1884A(0.5C) |
| Battery Voltage Range | 1164.8~1497.6VDC | | | |
| Battery Disconnect | Integrated | | | |
| Cooling concept of battery chamber | Liquid Cooling | | | |
| **General Parameters** | | | | |
| Dimension W*D*H | 6058*2438*2896mm | | | |
| Charge/Discharge Rate | 0.5C | | | |
| Depth of Discharge | 95% | | | |
| Life Cycle | 6000 | | | |
| Degree of Protection | IP55 | | | |
| System Efficiency | ~91% (Without Auxiliary Equipment Energy Consumption) | | | |
| Cooling Liquid | 50% Ethylene glycol+50% Water | | | |
| Fire Protection System | Aerosol | | | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | | | |
| Allowed Relative Humidity | 0 ~ 95% | | | |
| Working Altitude | <2000m | | | |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) | | | |
| Weight | ~34 Tons | ~37 Tons | ~40Tons | ~43 Tons |
| SPD | DC TYPⅡ/AC TYPⅡ | | | |
| Lifting Options | Crane | | | |
| Scalability | Yes, Units Can Be Connected In Parallel | | | |
| **Monitoring** | | | | |
| Communication | RS485/Ethernet | | | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | | | |
| Remote Control System | Renepoly Cloud | | | |
| **Certifications** | | | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | | | |
| Battery Pack | CE, UN38.3, MSDS | | | |
| Battery Rack | CE, UN38.3, MSDS | | | |

# POWER CONVERSION SYSTEN

## PCS210/315/420

- **Category:**
  Air Cooling PCS Cabinet
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  PCS, PDU, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud



| Technical Parameters | PCS210 | PCS315 | PCS420 |
|---|---|---|---|
| **DC Side** | | | |
| Input DC Voltage Range | 615 ~ 950V(3P3W ) /650 ~ 950V(3P4W ) | | |
| Max. DC Current | 342A | 513A | 684A |
| DC Input Interfaces Number | 1 or 2 | 1 or 3 | 1 or 4 |
| **AC Side (grid- tied)** | | | |
| Rated Output Power | 210kW | 315kW | 420kW |
| Maximum Output Power | 231kW | 347kW | 462kW |
| Rated Current | 303A | 454A | 606A |
| Rated Frequency | 50Hz | | |
| Rated Grid Voltage | 400V | | |
| Grid Voltage Range | 320-460V | | |
| Total Current Waveform Distortion Rate | <3%(Rated Power) | | |
| Power Factor Range | -1~1 | | |
| **AC Side (off-grid)** | | | |
| Rated Voltage | 400V | | |
| Frequency | 50Hz | | |
| Voltage Range | ±3% | | |
| Voltage Precision | 1% | | |
| Voltage Distortion Rate | <3% | | |
| **General Parameters** | | | |
| Dimension W*D*H | 624*1150*2300mm | | |
| Maximum Efficiency | 98.2% | | |
| Weight | ~200kg | ~300kg | ~400kg |
| Isolation Transformer | N/A | | N/A |
| Degree of Protection | IP54 | | |
| Allowed Ambient Temperature | -25 ~ 55℃ | | |
| Allowed Relative Humidity | 0 ~ 95% | | |
| Working Altitude | <2000m | | |
| Enclosure Corrosion Resistance Level | C3 (C4/C5 Optional) | | |
| Cooling Method | Air Cooling | | |
| Lifting Options | Fork/Crane | | |
| Scalability | Yes, Units Can Be Connected In Parallel | | |
| **Monitoring** | | | |
| Communication | RS485/Ethernet | | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | | |
| Remote Control System | Renepoly Cloud | | |
| **Certifications** | | | |
| Power Conversion System | CE（IEC61000 IEC62619 IEC62109）EN50549-1,EN50549-2, IEC61727&62116, NRS097, VDE4105, VDE4110, VDE4120, C10/11, G99, PN50549, EIFS2018:02, CEI021/16, NTS632:2019,MEA,PEA,UNE,RD EN 50549 with deviations of grid protection settings for Greece&Sweden&Denmark(DK&DK2)&Netherland&Czech&Hungary&Romania | | |
| Whole Unit | CE | | |

# BATTERY PACK

## PACK14/PACK18

- **Category:**
  Air Cooling Battery Pack
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud

| Technical Parameters | PACK14 | PACK18 |
|---|---|---|
| **Batteries** | | |
| Nominal Battery Voltage | 768VDC | |
| Battery Type | LiFePO4 3.2V/280Ah | |
| Battery Pack Configuration | 1P/16S 14.336kWh | 1P20S/17.92kWh |
| Battery Rack Configuration | 1P240S | |
| Battery Rack Voltage Range | 672-864VDC | |
| Charging/Discharging Current | 140A | |
| Battery Disconnect | Integrated | |
| Cooling concept of battery Pack | Air Cooling | |
| **General Parameters** | | |
| Dimension W*D*H | 476*792*231mm | 466*936*231mm |
| Battery Pack Weight | ~114kg | ~134kg |
| Charge/Discharge Rate | 0.5C | |
| Depth of Discharge | 80% | |
| Life Cycle | 6000 | |
| Degree of Protection | IP54 | |
| System Efficiency | ~90% | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | |
| Allowed Relative Humidity | 0 ~ 95% | |
| Lifting Options | Fork | |
| **Monitoring** | | |
| Communication | RS485/Ethernet | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | |
| Remote Control System | Renepoly Cloud | |
| **Certifications** | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | |
| Battery Pack | CE, UN38.3, MSDS | |
| Battery Rack | CE, UN38.3, MSDS | |

# BATTERY PACK

## PACK43/PACK47/PACK54

- **Category:**
  Liquid Cooling Battery Pack
- **Application:**
  Remote Area, EV Station, Industrial & Commercial, Residential, Frequency Regulation, Power Station
- **Benefits:**
  Enhanced Grid Reliability and Resilience, Cost Savings, Environmental Benefits, Energy Independence, Improved Power Quality, Scalability and Flexibility, Support for Electrification
- **Hardwares:**
  Packs, BMS, HV Box, EMS Controller Set, Enclosed Cabinet
- **Software:** BMS, EMS
- **Cloud Platforms:** Renepoly Cloud

| Technical Parameters | PACK43 | PACK47 | PACK54 |
|---|---|---|---|
| **Batteries** | | | |
| Nominal Battery Voltage | 832VDC | 832VDC | 768VDC |
| Battery Pack Configuration | 1P48S/43.008kWh | 1P52S/46.592kWh | 1P60S/53.76kWh |
| Battery Rack Configuration | 1P240S | 1P260S | 1P240S |
| Battery Rack Voltage Range | 672-864VDC | 728-936VDC | 672-864VDC |
| Battery Type | LiFePO4 3.2V/280Ah | | |
| Charging/Discharging Current | 140A | | |
| Battery Disconnect | Integrated | | |
| Cooling concept of battery Pack | Liquid Cooling | | |
| **General Parameters** | | | |
| Dimension W*D*H | 810*1160*250mm | 810*1160*250mm | 790*1371*250 mm |
| Battery Pack Weight | ~330kg | ~350kg | ~430kg |
| Charge/Discharge Rate | 0.5C | | |
| Depth of Discharge | 95% | | |
| Life Cycle | 8000 | | |
| Degree of Protection | IP65 | | |
| System Efficiency | ~91% | | |
| Cooling Liquid | 50% Ethylene glycol+50% Water | | |
| Allowed Ambient Temperature | -30 ~ 60℃ (>45℃ Derating) | | |
| Allowed Relative Humidity | 0 ~ 95% | | |
| Lifting Options | Fork | | |
| **Monitoring** | | | |
| Communication | RS485/Ethernet | | |
| Communication Protocols | MODBUS-RTU/MODBUS-TCP | | |
| Remote Control System | Renepoly Cloud | | |
| **Certifications** | | | |
| Battery Cell | CE, RoHS, UN38.3, MSDS, UL, ESG | | |
| Battery Pack | CE, UN38.3, MSDS | | |
| Battery Rack | CE, UN38.3, MSDS | | |

# PROJECT CASES

## Microgrid Projects

Netherlands | 465.92 kWh | 0.15 Ton/yr

Project Start Time: 2023-11-11
Project Configuration:
200kW/465.92kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.46592 MWh**
Saving of Energy: **6243.70 MWh**

Romania | 932 kWh | 0.3 Ton/yr

Project Start Time: 2024-07-21
Project Configuration:
400kW/931.84kWh BESS + EMS +
600kW Solar System + STS

BESS Capacity: **0.931 MWh**
Saving of Energy: **6824.10 MWh**

Demark | 7 MWh | 2.31 Ton/yr

Project Start Time: 2024-8-13
Project Configuration:
6300kW/6988.8kWh BESS + EMS

BESS Capacity: **7 MWh**
Saving of Energy: **47446.79 MWh**

Netherlands | 1MWh | 0.33 Ton/yr

Project Start Time: 2024-03-10
Project Configuration:
500kW/1036.8kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **1.0 MWh**
Saving of Energy: **10537.90MWh**

Switzerland | 460 kWh | 0.15 Ton/yr

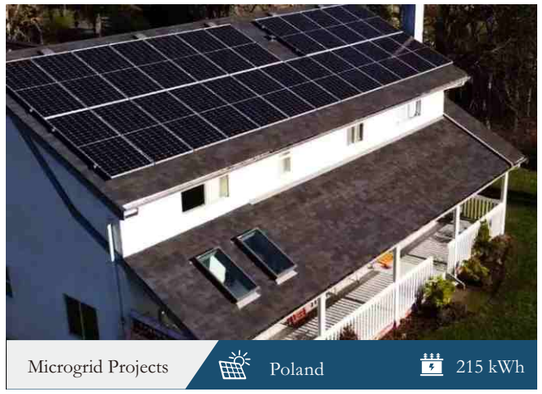
Project Start Time: 2024-10-15
Project Configuration:
200kW/465.92kWh BESS + EMS +
Existing Solar System

BESS Capacity: **0.46 MWh**
Saving of Energy: **2422.32 MWh**

Germany | 2 MWh | 0.7 Ton/yr

Project Start Time: 2024-12-01
Project Configuration:
1000kW/2150kWh BESS + EMS +
Existing Solar System

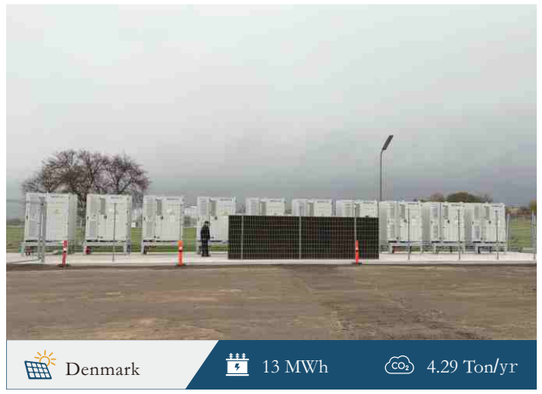
BESS Capacity: **2.0 MWh**
Saving of Energy: **8275.95 MWh**



Microgrid Projects | Poland | 215 kWh

Project Start Time: 2024-12-09
Project Configuration:
100kW/215kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **215 kWh**
Saving of Energy: **1192.62 MWh**



Denmark | 13 MWh | 4.29 Ton/yr

Project Start Time: 2024-10-11
Project Configuration:
11.76MW/13.046MWh BESS + EMS

BESS Capacity: **13 MWh**
Saving of Energy: **69709.21MWh**

# PROJECT CASES

## Microgrid Projects

Indonesia | 6 MWh | 1.98 Ton/yr

Project Start Time: 2024-05-13
Project Configuration:
3000kW/6450kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **6.0 MWh**
Saving of Energy: **53917.15 MWh**

Microgrid Projects | Malaysia | 215 kWh

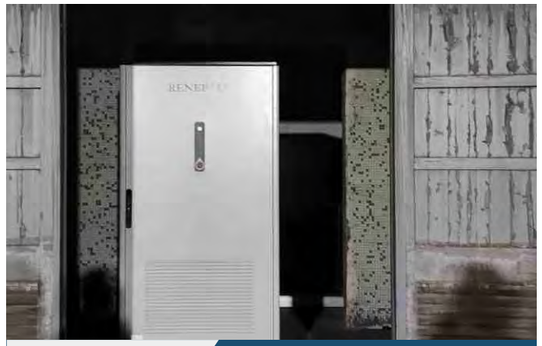
Project Start Time: 2024-11-04
Project Configuration:
100kW/215.04kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.215 MWh**
Saving of Energy: **1029.05 MWh**

Microgrid Projects | China | 60 kWh

Project Start Time: 2024-01-19
Project Configuration:
30kW/60kWh BESS + EMS
+ Solar System + Wind Turbine

BESS Capacity: **0.06 MWh**
Saving of Energy: **796.82 MWh**



Microgrid Projects | China | 215 kWh

Project Start Time: 2023-12-01
Project Configuration:
100kW/215.04kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.215 MWh**
Saving of Energy: **3108 MWh**

United Kingdom | 215 kWh | 0.07 Ton/yr

Project Start Time: 2024-12-01
Project Configuration:
100kW/215.04kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.215 MWh**
Saving of Energy: **893.45 MWh**

Microgrid Projects | Maldives | 1MW

Project Start Time: 2024-12-22
Project Configuration:
1MW Solar System

BESS Capacity: **1.0 MWh**
Saving of Energy: **3651.62MWh**

Microgrid Projects | China | 61 kWh

Project Start Time: 2024-04-14
Project Configuration:
30kW/60kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.061 MWh**
Saving of Energy: **684.2 MWh**

China | 100 kWh | 0.033 Ton/yr

Project Start Time: 2023-05-06
Project Configuration:
50kW/100kWh BESS + EMS + 460kW Solar System
+ 50kW Wind Turbine + 60kW EV Charger

BESS Capacity: **0.1 MWh**
Saving of Energy: **1795.60 MWh**

# PROJECT CASES

## Microgrid Projects

Microgrid Projects | Poland Pilot | 215 kWh

Project Start Time: 2024
Project Configuration:
100kW/215.04kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.215 MWh**
Saving of Energy: **0.00 MWh**

Czech Republic | 3.44 MWh | 1.1 Ton/yr

Project Start Time: 2024-04-14
Project Configuration:
1600kW/3440.64kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **3.44 MWh**
Saving of Energy: **33374.10 MWh**

Microgrid Projects | Myanmar | 215 kWh

Project Start Time: 2024-11-17
Project Configuration:
100kW/215.04kWh BESS + EMS + Existing
Solar System + Existing Diesel Generator

BESS Capacity: **0.215 MWh**
Saving of Energy: **1291.78 MWh**

Microgrid Projects | Denmark | 12.9 MWh

Project Start Time: 2025
Project Configuration:
6000kW/12902.4kWh BESS + EMS

BESS Capacity: **12.9 MWh**
Saving of Energy: **0.00 MWh**

Microgrid Projects | Myanmar | 215 kWh

Project Start Time: 2025-01-02
Project Configuration:
100kW/215.04kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **0.215 MWh**
Saving of Energy: **480.43 MWh**

Microgrid Projects | Czech Republic | 1075kWh

Project Start Time: 2025
Project Configuration:
500kW/1075.2kWh BESS + EMS
+ Existing Solar System

BESS Capacity: **1.075 MWh**
Saving of Energy: **0.00MWh**

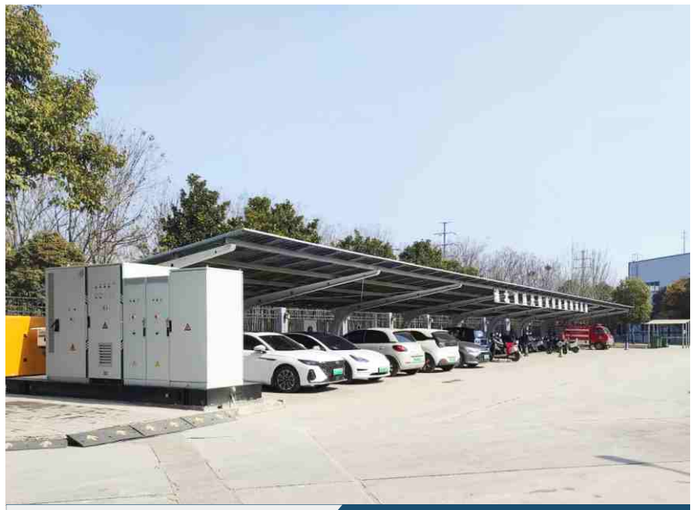
### Renepoly Ensures Smooth 3.4GWh BESS Commissioning in the Philippines

As technical advisor for the 3.4GWh project, supplied by Huawei and facilitated by Guangdong Electric Power Design Institute (GEDI), we guaranteed on-schedule debugging and EMS optimization for Philippines' grid needs.

- **Deep EMS Expertise**
- **Supplier Oversight**
- **Global Project Excellence**

# PROJECT CASES

## EMS Projects



EMS Project | China

Project Start Time: 2025
Project Configuration:
Exsiting BESS + EMS + Existing Solar System + Diesel Generator

BESS Capacity: **0.0 MWh**
Saving of Energy: **0.0 MWh**

EMS Project | China

Project Start Time: 2025-02-21
Project Configuration:
Exsiting BESS + EMS + Existing Solar System + Diesel Generator

BESS Capacity: **0.43 MWh**
Saving of Energy: **1046.28 MWh**

## BESS Projects

China | 20 MWh | 6.6 Ton/yr

Project Start Time: 2022-12-01
Project Configuration:
20MWh Air Cooling BESS

BESS Capacity: **20 MWh**
Saving of Energy: **434105.79 MWh**

China | 60 MWh | 19.8 Ton/yr

Project Start Time: 2024-01-03
Project Configuration:
60MWh Liquid Cooling BESS

BESS Capacity: **60 MWh**
Saving of Energy: **729220.58 MWh**

China | 103 MWh | 34.0 Ton/yr

Project Start Time: 2022-12-05
Project Configuration:
103MWh Liquid Cooling BESS

BESS Capacity: **103 MWh**
Saving of Energy: **2225803.46 MWh**

# PROJECT CASES

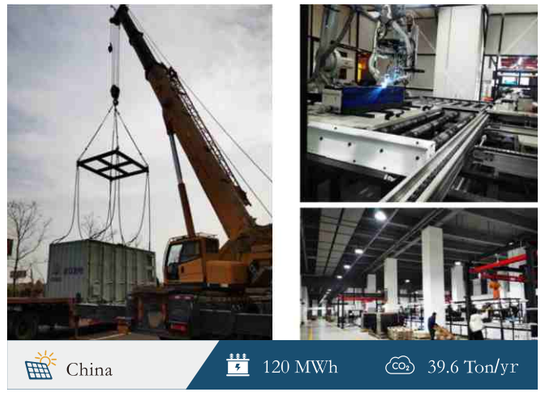
## BESS Projects


Project Start Time: 2022-05-12
Project Configuration:
800MWh(120MWh) Air Cooling BESS

BESS Capacity: **800 MWh**
Saving of Energy: **21312975.83 MWh**


Project Start Time: 2022-12-08
Project Configuration:
80MWh Air Cooling BESS

BESS Capacity: **80 MWh**
Saving of Energy: **1728099.11 MWh**




Project Start Time: 2023-12-18
Project Configuration:
120MWh Liquid Cooling BESS

BESS Capacity: **120MWh**
Saving of Energy: **1512150.23 MWh**

## Service Projects


Project Start Time: 2022-08-22
Project Configuration:
500MWh BESS + EMS
+ 900MW Solar System

BESS Capacity: **500 MWh**
Saving of Energy: **12096948 Mwh**


Project Start Time: 2022-03-09
Project Configuration:
50MW Solar System

BESS Capacity: **0.0 MWh**
Saving of Energy: **0.0 MWh**


Project Start Time: 2025
Project Configuration:
Residential BESS + EMS
+ Existing Solar System

BESS Capacity: **50 MWh**
Saving of Energy: **0.0 MWh**

# PROJECT CASES

## Service Projects

Service Projects | China | 70 MWh

Project Start Time: 2022-07-22
Project Configuration:
70MWh BESS

BESS Capacity: **70 MWh**
Saving of Energy: **1745794 MWh**

Service Projects | China | 50 MWh

Project Start Time: 2022-11-28
Project Configuration:
50MWh BESS + 50MW Solar System

BESS Capacity: **50.0 MWh**
Saving of Energy: **1092282 MWh**

Service Projects | Maldives

Project Start Time: 2024-12-01
Project Configuration:
5MW/5MWh BESS + EMS
+ Solar System + Diesel Generator

BESS Capacity: **5.0MWh**
Saving of Energy: **28363.25 MWh**

Service Projects | China | 150 MW

Project Start Time: 2022-06-12
Project Configuration:
150MW Solar System

BESS Capacity: **0.0 MWh**
Saving of Energy: **0.0 MWh**