

ENERSOURCE

ESS PROJECT CASES

MODULAR OPTICAL STORAGE EQUIPMENT AND SOLUTION PROVIDER



Commercial & Industrial
Energy Storage Solutions



Modular
Energy Storage Solutions



Optical storage and charging
integrated solution

South Africa Farm Irrigation Project



**Location**
South Africa

**Capacity**
100kW/215kWh+PV100kW

**Date**
2/2024

Brief Introduction
Integrated Photovoltaic Storage Diesel Power Supply System: This system accumulates clean energy by charging efficient photovoltaic panels during the daytime. Given the volatility of grid power, a diesel generator is integrated as a solid backup power source to ensure instant and seamless switchover to diesel power generation mode in the event of frequent grid outages. This design is tailored for on-farm irrigation equipment and other critical loads to achieve uninterrupted power supply and guarantee continuity and efficiency of agricultural production."

South Africa Farm Solar Storage Diesel Project



**Location**
South Africa

**Capacity**
100kW/215kWh+PV100kW

**Date**
1/2024

Brief Introduction
Integrated Photovoltaic Storage and Diesel System: The system efficiently utilizes photovoltaic power generation for charging and energy storage during sunny days to meet the challenge of frequent grid outages. The built-in advanced diesel engine serves as a reliable backup power source to ensure seamless switching and continuous supply of power when the PV power supply is insufficient or when the grid is interrupted, guaranteeing the continuity and stability of energy supply.

Philippine Islands Off-Grid Project



 **Location**
Philippine

 **Capacity**
100kW/215kWh+PV100kW

 **Date**
2/2023

Brief Introduction

The use of 100kW photovoltaic modules, together with 215kWh outdoor integrated energy storage battery cabinets and the necessary diesel engine as a back-up power source, realizes a hybrid on-grid and off-grid energy supply for the island. The project aims to improve the stability of the island's power supply, reduce energy costs, and minimize environmental pollution.

Malaysia Tower Crane Project



 **Location**
Malaysia

 **Capacity**
250kW+215kWh

 **Date**
9/2024

Brief Introduction

- (1) Grid power supply mode: The grid power provides continuous and uninterrupted AC power to the load after PCS and charges the battery at the same time.
- (2) Battery discharge mode: In case of no or insufficient utility power, the battery provides AC power to the load through the PCS. When utility power is restored, the system automatically switches back to utility power mode without any manual intervention. There is no interval between battery discharge and utility power mode switching, and the load will not be interrupted during the switching period.

Rakeedhoo Island Solar Storage Project



 **Location**
Rakeedhoo Island, Maldives

 **Capacity**
PCS200kW+430kWh

 **Date**
2/2023

 **Brief Introduction**
The island's electricity is supplied by a combination of diesel, photovoltaic, and energy storage, requiring seamless on- and off-grid switching.

South Africa On & Off-Grid, ESS+PV+ DG Project



 **Location**
South Africa, factory

 **Capacity**
50TS(DC50)(100kWh)

 **Date**
9/2024

 **Brief Introduction**
(1) Charging by PV and diesel backup.
(2) With STS, ups type power supply for factory, automatic switching between on-grid and off-grid.

Germany Container Peak Shaving Project



 **Location**
An industrial area in Germany

 **Capacity**
500kWPCS; PV AC coupling

 **Date**
06/2024

 **Brief Introduction**
Solution Description Releasing energy storage power during peak hours reduces the burden on the grid, while charging during low hours balances the supply and demand on the grid, optimizes the efficiency of energy use, and reduces the cost of electricity. Make full use of the abundant local photovoltaic resources, through the energy storage system to store excess power during the time of sufficient light, to achieve the maximum use of green energy.

South Africa On & Off-Grid, ESS+PV+DG Project



 **Location**
South Africa, factory

 **Capacity**
100TS(DC200)(215kWh)

 **Date**
9/2024

 **Brief Introduction**
(1) Charging by PV and diesel backup.
(2) With STS, ups type power supply for factory, automatic switching between on-grid and off-grid.

Middle East 2MW-4.6MWh Container Project



 **Location**
Middle East

 **Capacity**
2MWPCS; PV AC coupling

 **Date**
12/2024

 **Brief Introduction**
Solution Description Releasing energy storage power during peak hours reduces the burden on the grid, while charging during low hours balances the supply and demand on the grid, optimizes the efficiency of energy use, and reduces the cost of electricity. Make full use of the abundant local photovoltaic resources, through the energy storage system to store excess power during the time of sufficient light, to achieve the maximum use of green energy.