

Energy Storage System



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Energía Confiable Siempre



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BESS



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BESS

Hybrid Commercial and Industrial ESS

Distributed Air Cooling BESS System

Client End

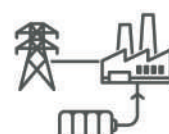


Overview

Tide Power string energy storage system can provide customers with peak-to-valley arbitrage mode and backup power guarantee, as well as dynamic capacity expansion. **Power Rent** string energy storage system can be applied to household energy storage, large industrial and commercial, 5G base stations, micro-grids, virtual power plants and other livelihood areas, helping customers to reduce electricity costs, provide emergency protection, and promote green energy to benefit all people.



Self-consumption

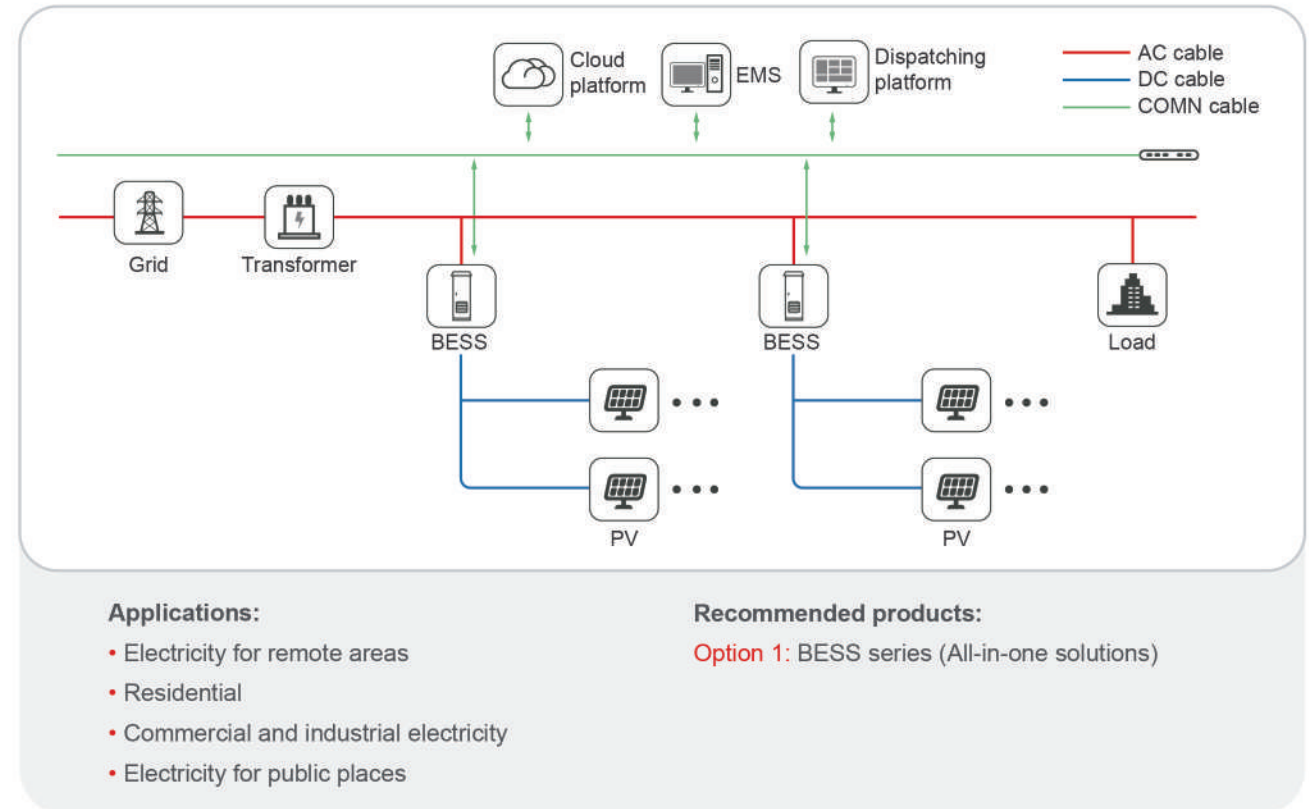


Time-of-use optimisation

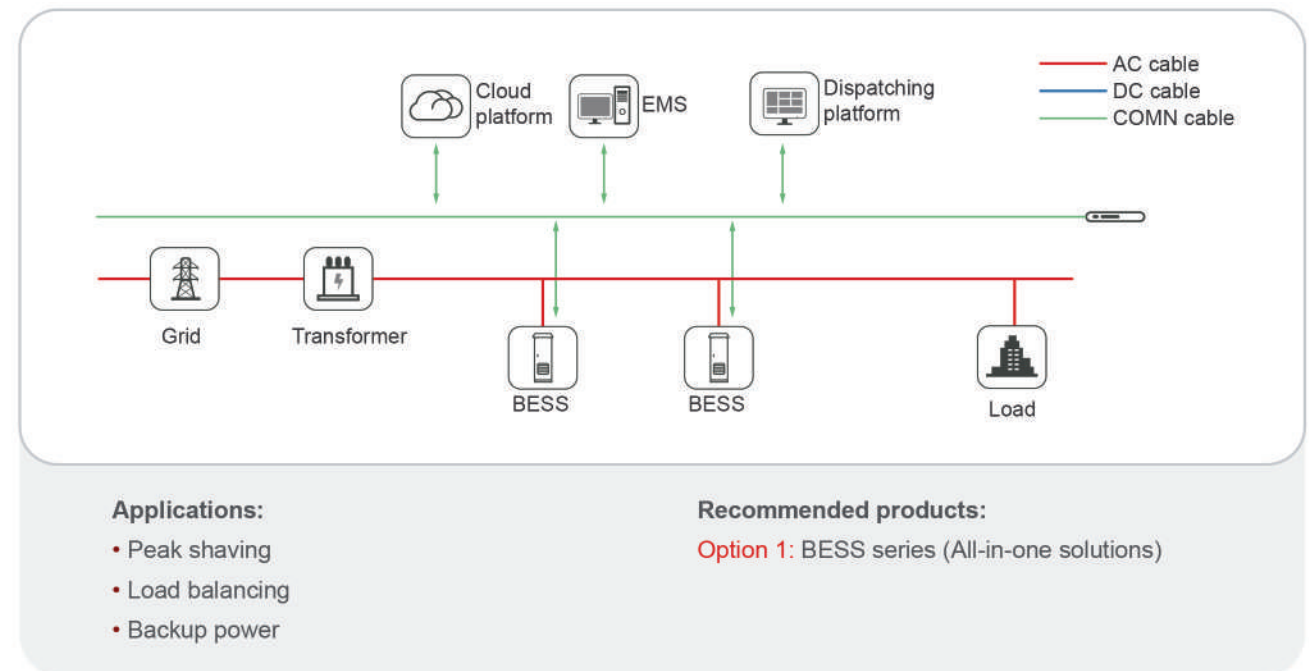


Reduce electricity costs

Solar Energy Storage



Energy Storage Power Station



Generation – side end



Overview

Energy storage plants play an important role on the generation side by providing a buffer between electricity generation and consumption. They allow excess energy to be stored when demand is low and released when demand is high, which can help improve the efficiency and reliability of power generation. It can also help mitigate the impact of intermittent renewable energy sources such as wind and solar. By storing excess energy generated during periods of high production, energy storage power plants can help ensure a consistent supply of electricity when these sources are not producing.



Load shifting

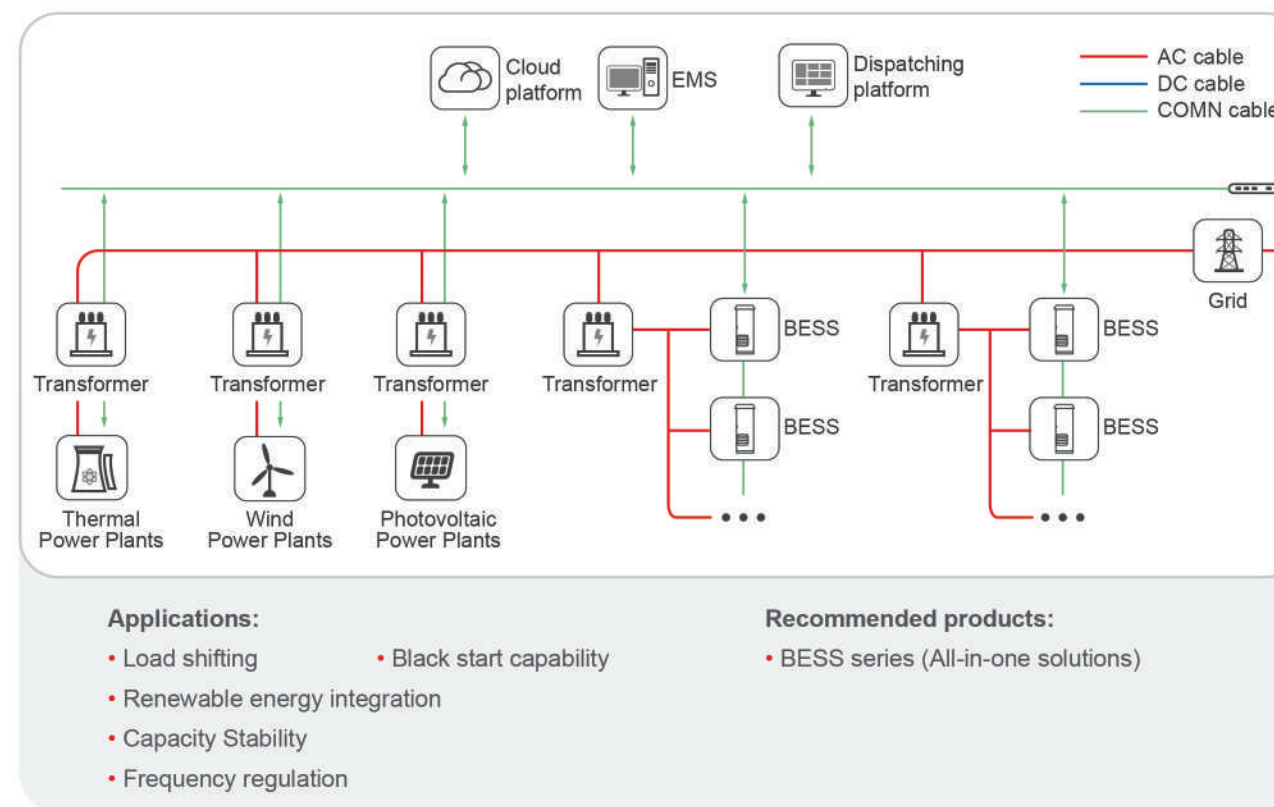


Renewable
energy integration

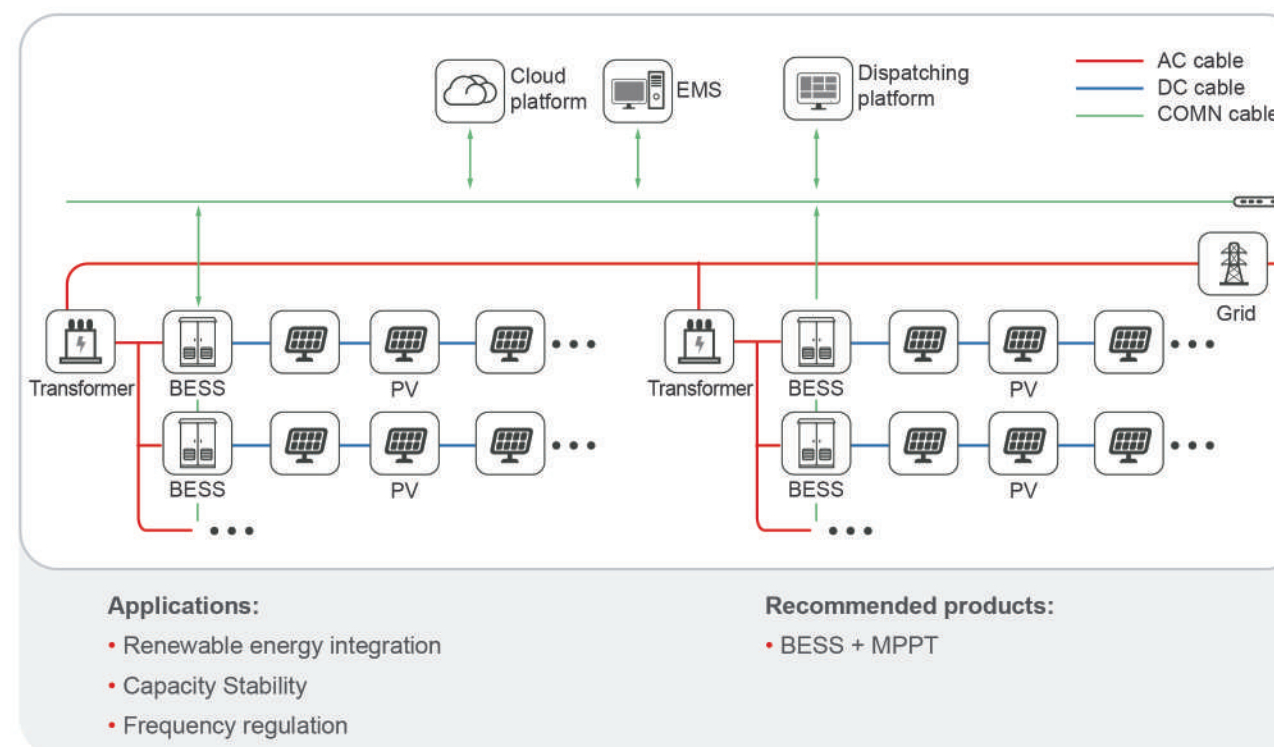


Capacity stability

Generation- Side Energy Storage



Integrated PV Energy Storage Station



TRANSMISSION & DISTRIBUTION END



Overview

A grid-scale energy storage plant plays a crucial role in improving the reliability and stability of the electricity grid. These power plants store excess energy during periods of low demand and release it during periods of high demand, helping to balance supply and demand on the grid. This can help reduce the need for expensive and less efficient peaking power plants, which are typically used only during periods of high demand.



Peak shaving

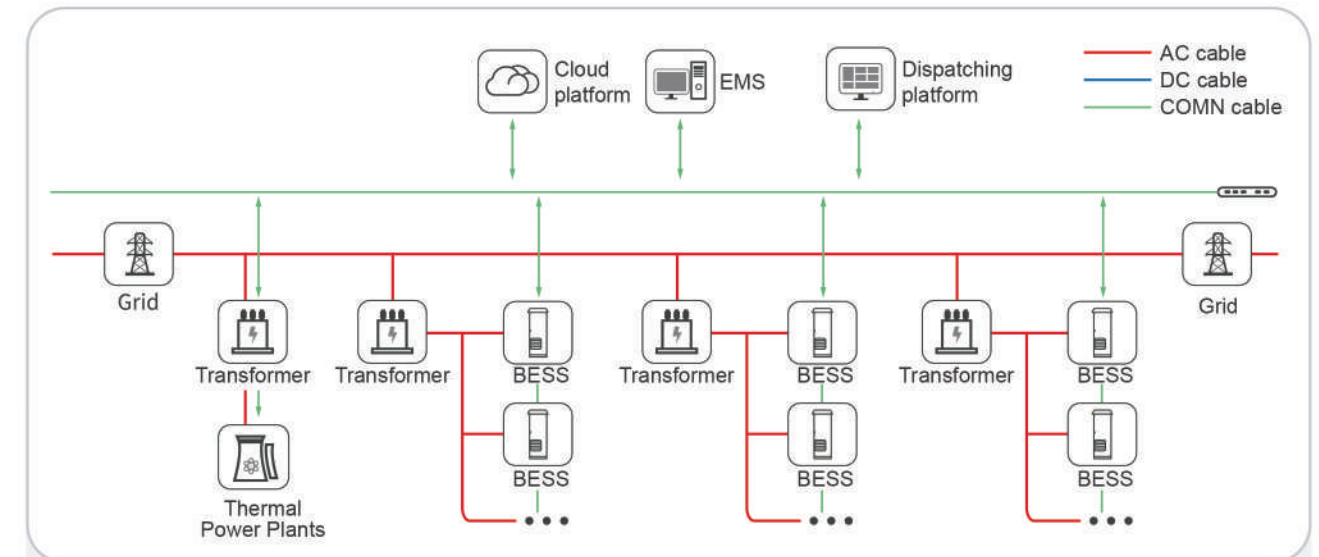


Black start capability



Ancillary services

Power Station ESS Solutions



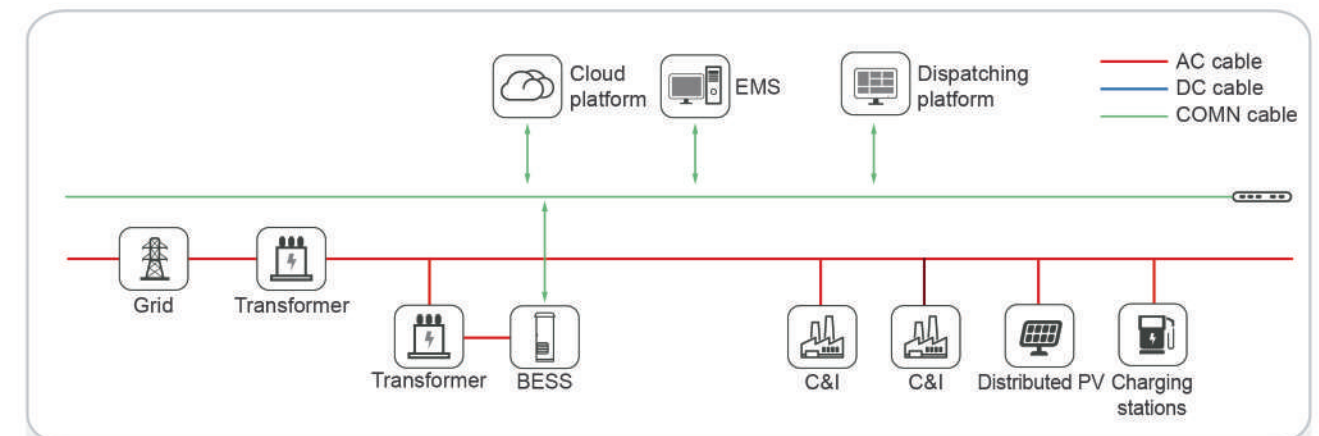
Applications:

- Peak shaving
- Frequency regulation
- Black start capability
- Ancillary services

Recommended products:

- BESS series (All-in-one solutions)

Grid Station Area ESS Solutions



Applications:

- Peak shaving
- Renewable energy integration
- Frequency regulation
- Black start capability
- Ancillary services

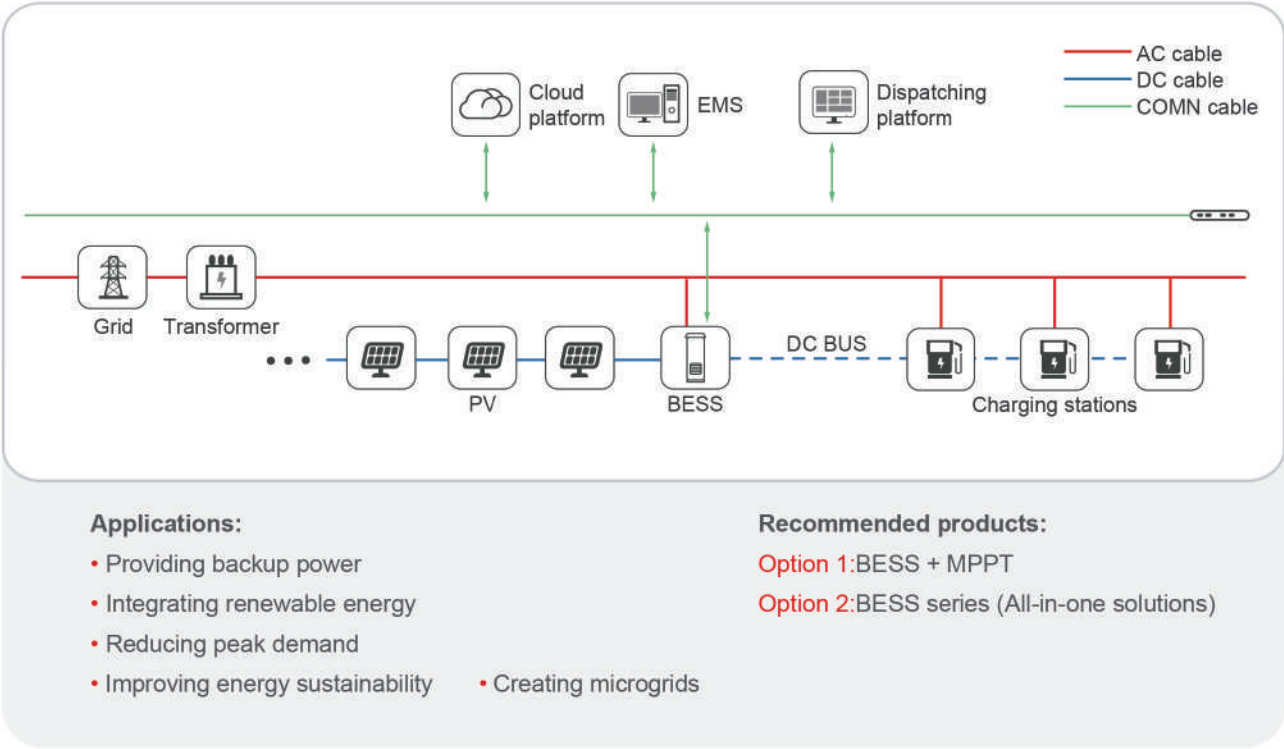
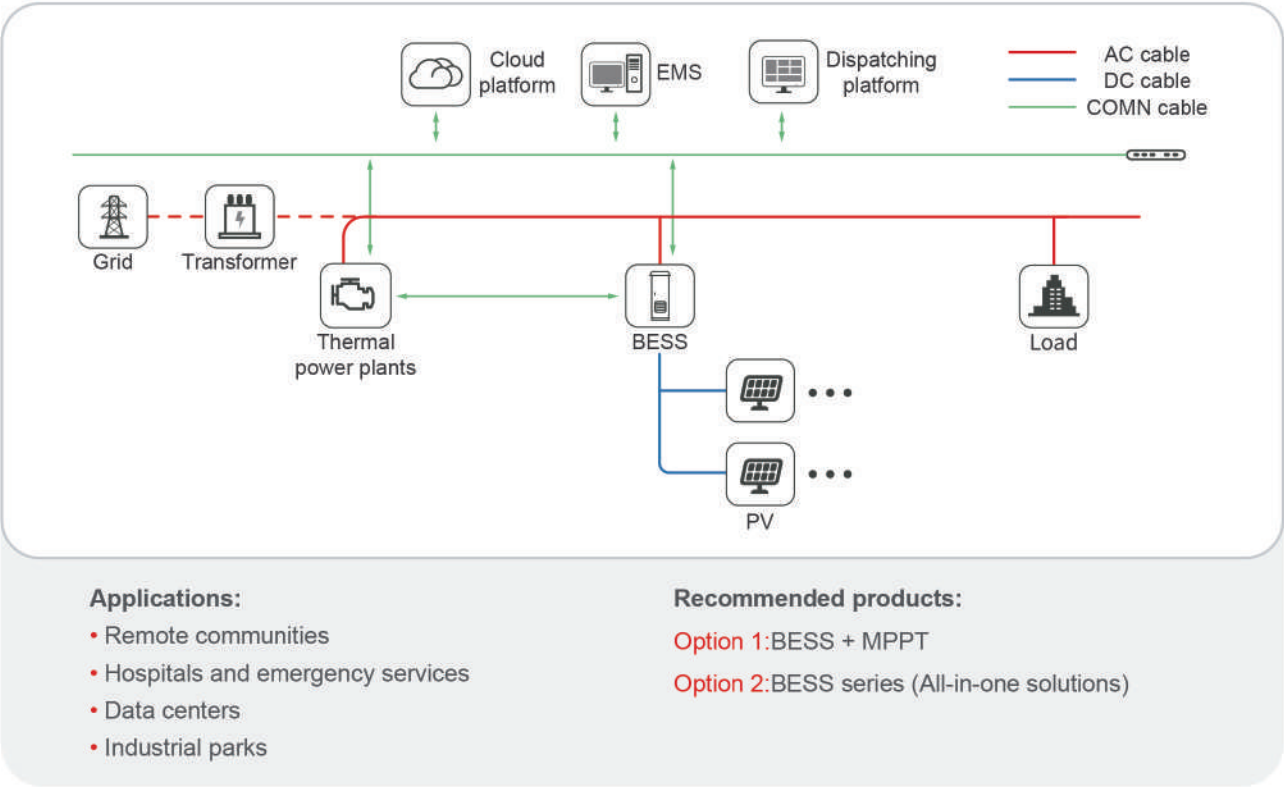
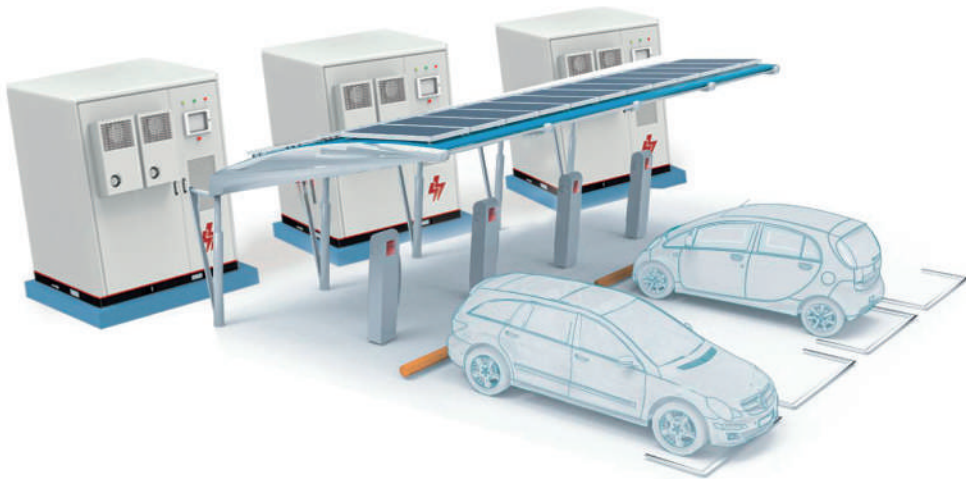
Recommended products:

- BESS + transformer

Microgrid EDD



Solar Energy BESS Charging Station



Demonstrations



BESS

Hybrid Commercial and Industrial ESS

Features

- All-in-one design with a high degree of integration.
- Modular design with optional modules of different sizes.
- Support for grid-connected and off-grid operation
- MPPT Solar controller available as an option
- IP54 class fire and explosion-proof housing
- Patented air duct design, intelligent air cooling, 3-5°C temperature difference of the battery core



Applications



Demonstrations

5-20kW

Household roof photovoltaic



50kW-6MW

Industrial roof photovoltaic



1-20MW

Water surface photovoltaic



10-20MW

Mountain land photovoltaic



Solar Components

Roofs, factories, Mountain land, Bay surface, desert

Features

- Monolithic power of 600-720W solar power components, power conversion efficiency of 23.2%, construction covers 50kW-500MW quality assurance for 12 years, more than 30 years of life.
- Compared to the original capacity, the continuous output after 30 years will not be less than 90.3%. Designed various installation components and conducted mechanical analysis.
- Variety of foreign construction project ability.
- Cooperate with TIDE BESS , the realization of comprehensive application of various occasions.

System Certificates



Attenuation and PV curves

