



WALMER ENERGY

Comparison of 100kW Energy Storage Container and Diesel Generator





Overview

Can battery energy storage systems replace diesel generators?

Let's now look at another option that's currently available, Battery Energy Storage Systems (BESS), and why it can replace diesel generators, which are estimated to provide over 20 gigawatts of backup power globally in the data center industry today.

Should you choose a diesel generator or a battery storage system?

For Industrial & High-Power Applications – If you need uninterrupted power for factories, hospitals, or heavy machinery, a diesel generator is the better choice. For Residential & Sustainable Solutions – If you prioritize clean energy, a battery storage system is more cost-effective and eco-friendly in the long run.

What are the advantages of a diesel generator?

Advantages of Diesel Generators Reliable Power Supply – DGs offer a steady and high-power output, making them suitable for factories, hospitals, and data centers. Lower Initial Cost – Compared to battery storage system prices, diesel generators generally have a lower upfront investment.

How many kWh is a battery storage system?

Therefore, the battery storage system with a capacity of 37.2 to 49.6 kWh can be proposed. However, to expand the battery lifespan, a state of charge usage is recommended as 0.3, yielding a battery storage system capacity of 124 to 165.3 kWh. For economic consideration, the battery capacity is selected as 128 kWh. Fig. 3.



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