

## PEES Power Systems

# New energy storage system for data centers



## Overview

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A Battery Energy Storage Systems (BESS) stores (typically) one to two hours of energy in batteries to help stabilize the grid, provide additional backup power and independence from the grid, reduce diesel generator needs, lower energy costs, and take better advantage of renewables. They can make better use of renewables to reduce emissions while maintaining availability. Plus, improvements in lithium-ion batteries have. Energy-efficient AI, battery storage systems, and renewed interest in nuclear have reshaped how data centers generate, consume, and manage energy. In 2025, data centers evolved from passive utility customers to active energy planners, investing in on-site generation, battery storage, and flexible. As well-noted by a recent blog on the topic by STACK Infrastructure, as the data center industry marches toward widespread decarbonization, the future of backup energy storage represents a fairly mixed bag of challenges and opportunities for data center operators. Adoption of artificial intelligence.

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### How Battery Energy Storage Systems (BESS) power data centers

So, let's do a quick rundown on defining what a BESS is, the trends driving adoption for data centers, and how Battery Energy Storage Systems can help power data centers today and in ...

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### How Data Centers Redefined Energy and Power in 2025

In 2025, data centers evolved from passive utility customers to active energy planners, investing in on-site generation, battery storage, and flexible demand to serve AI compute and hit ...



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### 2025-Data-Center-Energy-Storage-Industry-Insights-Report

The data center energy storage landscape is rapidly evolving, shaped by shifting priorities, emerging technologies, and growing AI demands. Industry professionals cite power ...

## New Energy Storage Containerized Solution for Data Centers with ...

This advanced solution aims to revolutionize energy storage within the data center industry, addressing the growing demand for reliable, efficient, and environmentally friendly power ...



## Solving for Data Center Power Needs with Battery Energy Storage

Utility-scale batteries enable data centers to deploy a range of energy strategies, from speeding up interconnection timelines to managing seamless power source transitions and ensuring ...

## From Diesel to Battery Energy Storage - Why Data Centers Are ...

Discover how Battery Energy Storage Systems (BESS) are transforming data centers by replacing diesel generators with cleaner, cost-effective, and resilient backup power solutions.



## Energy Storage in Data Centers Drives Sustainable

## Digital Growth

Energy storage is stepping into the spotlight--not just as an insurance policy, but as a transformative backbone for next-generation data centers. Traditionally, energy storage in data ...



## BESS for AI and Data Centers

Battery energy storage systems (BESS) are emerging as the fastest way for data centers and AI facilities to scale electrical capacity without waiting years for utility upgrades.



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## Battery Energy Storage Systems: A reliable solution for Data Center

Battery Energy Storage Systems (BESS) are emerging as a critical component of modern data center infrastructure. By providing service to your operation's power grid, as well as secondary backup ...

## Notes From the 2024 Data Center Energy Storage Frontier

In a new Data Center Frontier white

paper released last month, Schneider Electric defines what a Battery Energy Storage System (BESS) is, describes trends driving adoption of this technology, and ...



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