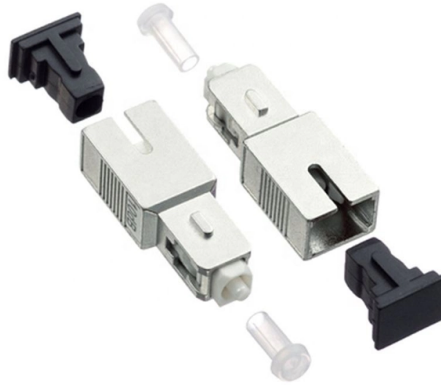


Server AI Power Supply Investment Analysis



Overview

The global AI Server Power Supply Unit (PSU) market is projected to grow from US\$ 1374 million in 2024 to US\$ 6567 million by 2031, at a CAGR of 20. 6% (2025-2031), driven by critical product segments and diverse end-use applications, while evolving U. tariff policies introduce. AI server power supply refers to the specialized power units designed to support artificial intelligence workloads such as deep learning training, high-performance computing (HPC), and real-time inference. These power supplies ensure stable and efficient energy delivery to AI servers, which are. AI Server Power Supply Unit (PSU) by PSU Type (Open Frame, Single Power, Redundant Power Supply Units, Common Redundant Power Supply), by Voltage Type (Low Voltage PSU, Medium Voltage PSU, High Voltage PSU), by Cooling Technology (Air-Cooled PSU, Liquid-Cooled PSU, Hybrid Cooling PSU), by Server. The global Ai Server Power Supply Market was valued at approximately USD 6. 4 billion in 2025 and is projected to reach around USD 11. 8% during the 2026-2031 forecast period. 5kW), By Cooling Method (Air Cooling, Liquid Cooling) and Regional Forecast 2026-2032.

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Over the past year, social concerns around AI have also grown, with data centres serving as a highly visible flashpoint

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The AI age is expected to require scaling data centers, grid capacity, and supply chains. Deloitte's 2025 AI Infrastructure Survey

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As generative AI training, inference workloads, high-performance computing, and hyperscale cloud deployments expand, the AI

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Key Questions on Energy and AI - Analysis and key findings. A report by the International Energy Agency.

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AI Server Power Supply Market 2026 to 2032

These power supplies ensure stable and efficient energy delivery to AI servers, which are critical for cloud-based

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Our comprehensive analysis navigates the intricate ecosystem of power delivery, illuminating the innovations, challenges, and

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The AI server market was valued at USD 128 billion in 2024 and is expected to grow at a CAGR of 28.2% between 2025 and 2034,

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Yet, the industry is also facing scrutiny on many fronts, from inaccuracies in AI outputs

Power Requirements for AI Data Centers (2026):

AI data centers use 20 MW to 1 GW of electricity — up to 10x more per rack than traditional

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AI data center power demand is breaking the grid in 2026. See how grid constraints fuel trillions in on-site

AI is poised to drive 160% increase in data center power demand

Now, as the pace of efficiency gains in electricity use slows and the AI revolution gathers steam, Goldman Sachs

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