

Article Overview

Indonesia is rapidly adopting high-performance AI servers with 400G RoCE networks to support large-scale AI training and inference workloads.

AI Server Market in Indonesia

The AI server market in Indonesia is experiencing rapid growth, driven by enterprises, research institutions, and cloud providers deploying AI-optimized infrastructure. These servers are equipped with high-performance GPUs, TPUs, and specialized processors to accelerate deep learning, natural language processing, and computer vision tasks. The market is projected to grow from USD 28.7 billion in 2025 to USD 142.5 billion by 2031, at a CAGR of 30.8%, reflecting the rising demand for infrastructure capable of handling generative AI and large-scale machine learning models .

400G Networking for AI Workloads

To meet the demands of large-scale AI training and inference, Indonesian intelligent computing centers are implementing 400G RoCE (RDMA over Converged Ethernet) networks. This high-speed network enables:

- o Massive GPU cluster interconnects, supporting up to 2,048 GPUs for parallel model training.
- o Low-latency, high-throughput data transfer, essential for real-time AI inference such as voice recognition and video analysis.
- o Multi-tenant efficiency, allowing multiple clients to share computing resources without performance degradation.
- o Scalability, supporting expansion of clusters and edge nodes while controlling operational costs .

The 400G RoCE architecture typically uses a spine-leaf network design, which ensures high performance, redundancy, and future-proofing for AI workloads. This approach addresses limitations of traditional InfiniBand networks, including high cost and long supply cycles, while providing a flexible and cost-efficient solution for AI data centers .

GPU Server Specifications

AI servers in Indonesia are often equipped with high-end GPUs such as NVIDIA RTX 4070 Ti or GeForce RTX 5080 Ti, featuring GDDR6X memory, thousands of CUDA cores, and high memory bandwidth. These servers are optimized for parallel processing, enabling faster training of deep learning models, large-scale simulations, and real-time AI inference . Cooling solutions may include air or liquid cooling to maintain performance under heavy workloads .

Hosting and Deployment Options

Enterprises and developers in Indonesia can choose between:

- o On-premises AI servers for full control over infrastructure.
- o Cloud-based AI hosting for scalability and cost efficiency, with managed GPU clusters and high-speed networking.
- o Hybrid deployments combining local and cloud resources to optimize latency and compute costs .

Conclusion

Indonesia's AI server ecosystem is rapidly evolving, with 400G RoCE networks and high-performance GPU clusters enabling large-scale AI model training and real-time inference. These servers are critical for enterprises, research institutions, and cloud providers seeking to leverage AI for digital transformation, smart city initiatives, and advanced analytics. The combination of scalable GPU infrastructure, high-speed networking, and multi-tenant efficiency positions Indonesia as a growing hub for AI computing.

Cloud GPU Indonesia performa tinggi dengan memori HBM3e, CUDA, dan Tensor cores, hasilkan hingga 3.958 TFLOPS. Cocok

The Indonesia Data Center Market worth USD 1.83 billion in 2026 is growing at a CAGR of 13.71% to reach USD 3.48

AI servers provide powerful compute for training and inference, enabling scalable, efficient AI development and rapid deployment of

LG CNS Co., the information technology services unit of South Korea's LG Group, has bagged a deal to build an artificial intelligence

LG CNS will construct a hyperscale AI data center in Jakarta, with completion targeted for

Agencia Comercial Spirits shares rose 5.6% after signing two nonbinding LOIs for AI infrastructure: a \$120 million

Hosting Server GPU untuk AI: Tulang Punggung Infrastruktur yang Didukung AI Di jantung hosting AI

Lewat Ryzen AI 400 series, AMD memastikan bahwa pengguna mendapatkan pengalaman AI yang nyata, bukan



Indonesia AI Server 400G

These platforms give customers a consistent AI networking foundation across a broad ecosystem of server designs.

A comprehensive guide to upgrading your AI data center infrastructure from 400G to 800G

In Indonesia AI Server Market, offering valuable insights, key market trends, competitive landscape, and future outlook

KOMPAS.com - Google memperbarui paket langganan Google AI Plus di Indonesia. Kini

With the increasing power requirements of Artificial Intelligence (AI) processors, server power supplies (PSUs) must

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As the process of training AI models demands substantial computational resources due to its inherent complexity, the AI training

GIGABYTE GPU servers deliver massive parallel computing for generative AI, machine learning, and HPC with scalable GPU

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