

Data Center Micro-Module Pricing



Overview

Highly integrated and flexible installed data center infrastructure for rapid deployment and efficient operation and maintenance.

Key Takeaways

Micro data center modules range from \$82 for ultra-compact edge nodes to over \$36,000 for high-end integrated rack solutions, depending on capacity, features, and vendor. Pricing Overview

Ultra-Micro Edge Nodes: These are compact X86-based micro-servers designed for localized processing, firewall applications, or private cloud storage. Pricing typically ranges from \$82 to \$935, depending on CPU type (N100 to i7) and RAM/SSD configurations. They are ideal for SMEs or edge computing deployments with minimal space and power requirements (Alibaba, Amazon) .

Integrated Single-Rack Cabinets: Self-contained 42U cabinets integrate power, cooling, and UPS systems, effectively serving as a "data center in a box." High-end integrated modules are priced between \$4,350 and \$36,000+, reflecting features such as smart cloud-based management, high availability, and modular scalability (Researchandmarkets, Alibaba) .

High-Density/Outdoor Modular Solutions: These are designed for larger IT loads or outdoor deployment, often supporting AI or 5G workloads. Costs vary significantly based on power capacity, cooling, and redundancy, with CAPEX for modular data centers in the US averaging \$11.7M per MW, though smaller prefabricated modules can reduce site preparation and construction costs (Moduledge, Cushman & Wakefield) .

Cost Drivers

- **Power and Cooling Infrastructure:** Switchgear, UPS, generators, and chillers are major cost components and can influence lead times and overall CAPEX .
- **Prefabrication vs Traditional Build:** Prefabricated micro-modules reduce on-site labor and building shell costs but may have higher factory-integrated material costs .
- **Integration Features:** Intelligent monitoring, access control, and energy-efficient cooling systems (e.g., fluorine pump air conditioning) add to the price but improve operational efficiency and reliability (Inspur, Delta) .
- **Deployment Scale:** Bulk SME deployments via platforms like Alibaba can reduce per-unit cost, while retail-ready edge hardware on Amazon targets smaller-scale buyers .

Vendor Examples

- **Delta InfraSuite:** Offers modular rack-based solutions under 50 m² or 20kVA IT load, with high availability and integrated monitoring .
- **Huawei FusionModule800:** Compact, intelligent micro data center suitable for financial, government, healthcare, and energy sectors .
- **Inspur Micro Module:** Prefabricated, flexible modules with integrated cabinets, cooling, power distribution, and security systems for rapid deployment .

Summary

Micro data center pricing varies widely based on size, capacity, and integration level. Small edge nodes start under \$1,000, while fully integrated single-rack or high-density modules can exceed \$36,000. For larger modular deployments, costs scale with power, cooling, and redundancy requirements, with prefabrication offering potential savings in construction and deployment time. Choosing the right module depends on IT load, space constraints, and operational requirements.

Article Content

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A micro-module data center is a modular form of data center infrastructure that divides the facility into independent,

Global Micro Module Data Center Solutions Market Size, Growth

Micro Module Data Center Solutions Market Overview 2026-2034 The Micro Module Data Center Solutions Market

Modular Data Centers: Prefabricated Containers and Modules

Modular data centers are prefabricated buildings such as a container that house servers, data hall, or data center module for power

Micro Module

Highly integrated and flexible installed data center infrastructure for rapid deployment and efficient operation and maintenance.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

