

Article Overview

Nepal offers advanced micro-module and modular data center solutions through providers like Ncell, Subisu, and Data World, delivering scalable, energy-efficient, and Tier III/IV-compliant infrastructure.

Overview of Micro-Module Data Centers in Nepal

Micro-module or modular data centers are compact, pre-fabricated, and scalable units designed to provide enterprise-grade computing, storage, and networking capabilities with high energy efficiency and rapid deployment. These solutions are particularly suitable for organizations seeking flexible, green, and resilient infrastructure without the need for large, traditional data center facilities.

Key Providers and Solutions

1. Ncell Data Center

- o Operates three Tier III facilities in Lalitpur (Nakkhu IDC), Pokhara, and Hetauda, offering geographic redundancy and disaster recovery for enterprises across Nepal .
- o Uses Oracle Private Cloud Appliance (PCA) X10, providing on-premises cloud infrastructure compatible with Oracle Cloud APIs.
- o Features modular containerized POD design, enabling scalability, resilience, and rapid deployment.
- o Implements a three-layer security architecture covering physical, service, and compute enclaves, with biometric access and encryption-at-rest .

2. Subisu Modular Data Centers

- o Nepal's first large-scale modular data center in Baluwatar, Kathmandu, designed for eco-friendly, energy-efficient operations .
- o Modular design allows compatibility, scalability, and waste/recycle management, integrating green building technologies to reduce carbon emissions.
- o Offers turnkey solutions including design, installation, commissioning, and post-implementation support, suitable for government, financial, and enterprise clients .

3. Data World

- o Operates Tier III certified, purpose-built data centers with 14+ strategic locations nationwide .
- o Facilities are optimized for AI/ML workloads, high-density racks, and low-latency connectivity.
- o Provides carrier-neutral colocation, private cloud, and enterprise-grade services, with modular and scalable infrastructure to grow with business needs .

4. Bichuten Tier IV Hyperscale Data Center

- o Upcoming Tier IV hyperscale facility in Chobhar and Birgunj, expected to start operations in August 2026 .
- o Designed for 99.995% uptime, scalable from 240 kW to 5 MW, and powered entirely by hydroelectricity, promoting sustainable operations.
- o Collaboration with Google Cloud, AMD, and Micron ensures global standards and advanced capabilities .

Advantages of Micro-Module Solutions

- o Scalability: Easily expand capacity by adding modular units.
- o Energy Efficiency: Compact design reduces power and cooling requirements; some facilities use renewable energy.
- o Rapid Deployment: Pre-fabricated modules allow faster setup compared to traditional data centers.
- o Resilience: Supports disaster recovery and geographic redundancy.
- o Customizability: Can be tailored for enterprise, government, or telecom requirements.

Conclusion

Nepal's micro-module and modular data center landscape is rapidly evolving, with Tier III and Tier IV facilities offering scalable, secure, and energy-efficient solutions. Providers like Ncell, Subisu, Data World, and Bichuten deliver options suitable for enterprises, government institutions, and cloud service providers, supporting Nepal's growing digital economy and the vision of Digital Nepal .

List of all Data Centers located in Nepal. Find any certified, power consumption, cooling redundancy, services and features for data

Huawei FusionModule2000 is a modular data center solution with smart modules, integrating power, cooling, and energy

The Nepal Data Center Infrastructure Market size was valued at USD 78.93 million in 2020 to USD 171.86 million in 2025 and is

Our modular data center solution is designed to provide you with a scalable and customizable infrastructure that can be rapidly

Nepal's fastest-growing data center services, offering cutting-edge infrastructure and expert support for evolving business needs.

Below you will find locations of 9 data centers in Kathmandu, Nepal. To find other data center locations and colocation, cloud or

Compact data center infrastructure from PROSE comes in modular cabinets that scale easily. Start with one unit and expand by

Cloud Himalaya's Colo, short for colocation, involves housing your servers in our secure data centers. This service ensures optimal



Nepal Data Center Micro-Module

Learn what a micro data center is, why it may suit your business, and how to build one without the cost and

This directive establishes essential guidelines and safety protocols to regulate the growing commercial data center

The Intelligent Micro Module, the Element of Intelligent Data Centers The modular data center, comprised of micro modules, has

WorldLink launches Nepal's largest Tier-3 & Edge-certified data center in Chandragiri, featuring 3.5MW IT power, 520

We currently have 9 data centers listed, from 1 markets in Nepal (Federal Democratic Republic of Nepal). Click on a market below, to

In summary, ZTT micro modular data center is a complete and small data center that can be independently used for computing or

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

The Data Center Journal has collected the details of all three facilities found in Nepal. Use our statistics and

Web: <https://bssoda.pl>

