

# **Telecom Data Center Market Forecasts to 2032 – Global Analysis By Type (Hyperscale Data Centers, Enterprise / Edge Data Centers and Colocation Data Centers), Tier, Size, End User and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global Telecom Data Center Market is accounted for \$58.0 billion in 2025 and is expected to reach \$113.02 billion by 2032 growing at a CAGR of 10.0% during the forecast period. A Telecom Data Center functions as a foundational infrastructure element for communication service providers, enabling secure and efficient handling of the massive data flows created by modern digital applications. These centers manage critical tasks such as network traffic control, customer data operations, virtualization, and rapid information processing required for stable telecom performance. With the growth of 5G networks, connected devices, and distributed computing, telecom data centers are essential for achieving fast responsiveness and consistent service availability. They leverage robust power management, cooling frameworks, and intelligent automation to ensure round-the-clock reliability. As digital adoption rises, these data centers continue advancing to offer improved scalability, performance, and operational stability.

According to the International Energy Agency (IEA), data centres and data transmission networks each account for about 1–1.5% of global electricity use, with internet traffic expanding 20-fold since 2010 due to rising demand for digital services.

Market Dynamics:

Driver:

Rising demand for edge computing

The increasing importance of edge computing significantly drives the Telecom Data Center Market, as businesses aim to minimize delays by processing data near its source. Edge infrastructures are crucial for applications dependent on instant response, including smart mobility, immersive technologies, and live analytics. Telecom data centers are transitioning to distributed models that support these localized computational demands. As consumers and industries rely more on real-time digital interactions, telecom companies are establishing compact edge sites to enhance speed, reduce congestion, and optimize network operations. This movement toward decentralized processing complements the growth of 5G and IoT, intensifying the market need for capable and resilient telecom data centers.

#### Restraint:

##### High capital and operational costs

The Telecom Data Center Market faces major limitations due to the substantial capital and operating expenses associated with developing and running these facilities. Establishing modern data centers demands heavy spending on land acquisition, construction, power backup units, cooling systems, and advanced IT equipment. Operational costs—including electricity usage, security operations, routine maintenance, and skilled staff—further intensifies financial strain. As data requirements escalate, expanding infrastructure becomes increasingly expensive because of the need for efficient designs and cutting-edge hardware. Smaller telecom companies struggle to keep up with investments made by large competitors. These financial challenges restrict market growth, delay upgrades, and slow the overall pace of infrastructure enhancement.

#### Opportunity:

##### Growing demand for cloud and hybrid infrastructure

The rising adoption of cloud technologies and hybrid IT architectures provides a major growth avenue for the Telecom Data Center Market. Companies are increasingly transitioning operations to cloud platforms, driving demand for elastic, interconnected, and secure data environments. Telecom providers can benefit by offering colocation, cloud hosting, and managed service solutions strengthened by reliable network capabilities. Hybrid deployments, blending on-premise systems with cloud resources, rely heavily on telecom data centers for consistent performance and smooth integration.

With digital transformation expanding across sectors, enterprises require adaptable infrastructure to support remote operations, AI workloads, and advanced analytics. This broad cloud shift positions telecom data centers as pivotal in enabling modern digital ecosystems.

Threat:

Intensifying competition from hyperscale providers

Rising competition from hyperscale cloud giants poses a significant threat to the Telecom Data Center Market. Companies like Microsoft Azure, Google Cloud, and AWS are aggressively scaling their infrastructure, offering powerful and cost-effective cloud solutions. Their deep financial resources, rapid automation, and global data center networks allow them to provide superior performance and agility. In contrast, many telecom operators face limitations in funding, modernization speed, and capacity expansion. As businesses increasingly adopt hyperscale platforms for digital transformation, telecom data centers risk losing relevance and customer share. This widening competitive gap forces telecom providers to accelerate innovation while balancing financial pressures and operational efficiency demands.

Covid-19 Impact:

The COVID-19 crisis reshaped the Telecom Data Center Market by sharply increasing the need for reliable digital infrastructure as remote working, e-learning, and online communication became widespread. Data centers experienced substantial traffic growth due to rising dependence on cloud services, streaming platforms, and remote collaboration tools. While component shortages and logistical delays created temporary setbacks, telecom providers boosted investments in automation, scalable architecture, and network optimization to manage heightened demand. The pandemic underscored the importance of robust, secure, and flexible data center operations to maintain service continuity. Consequently, COVID-19 ultimately accelerated market expansion, driving long-term digital transformation and strengthening the strategic value of telecom data centers.

The hyperscale data centers segment is expected to be the largest during the forecast period

The hyperscale data centers segment is expected to account for the largest market share during the forecast period because they are designed to manage massive

workloads, rising digital usage, and expanding cloud-driven operations. Telecom companies depend on these facilities to meet growing needs for fast connectivity, high-throughput data processing, and next-generation services powered by 5G, IoT, and AI technologies. With their advanced scalability, optimized power efficiency, automated systems, and strong network support, hyperscale centers enable consistent and high-quality performance. As global digital adoption accelerates, hyperscale data centers maintain their lead by providing the flexible capacity, operational strength, and technological readiness essential for evolving telecom networks and complex service environments.

The IT & cloud providers segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the IT & cloud providers segment is predicted to witness the highest growth rate as businesses accelerate cloud adoption, shift workloads to virtual environments, and implement hybrid or multi-cloud models. Increasing use of SaaS platforms, cloud-native applications, and real-time data processing fuels the need for telecom-powered data center infrastructure capable of delivering reliable speed and low latency. This segment gains momentum from the demand for flexible scaling, automation-driven operations, and seamless connectivity to support AI-driven workloads, analytics, and distributed computing. With sustained global investments in cloud modernization and digital expansion, IT & Cloud Providers represent the most rapidly growing segment within the telecom data center landscape.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, thanks to its mature cloud ecosystem, sophisticated IT backbone, and heavy presence of hyperscale and telecom-cloud providers. Leading tech companies and service operators continually expand high-capacity, high-reliability data centres to meet strong enterprise and consumer demand. The region's stable infrastructure, advanced connectivity, and wide adoption of technologies such as 5G and edge computing reinforce its leadership. Combined with supportive regulations, skilled talent availability, and high digital service consumption, North America remains the dominant region for telecom data center investments and deployments globally.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest

CAGR. This is driven by rapid digital transformation across the region, increased adoption of cloud and hyperscale services, and accelerated 5G and IoT deployments. Rising requirements for data hosting, colocation, and efficient connectivity support from enterprises and governments are fueling capacity expansion. As demand for advanced services — such as edge computing, streaming, AI, and cloud workloads — keeps increasing across Asia-Pacific, telecom-oriented data centers are witnessing robust growth. Consequently, APAC stands out as the fastest-expanding region in the global telecom data-center landscape.

### Key players in the market

Some of the key players in Telecom Data Center Market include Sify Technologies, Nextra Data (Bharti Airtel), Tata Communications, Reliance Jio, STT GDC India, NTT Global Data Centers, AdaniConneX, Yotta Infrastructure, CtrlS Datacenters, Equinix, Digital Realty, Verizon Communications, AT&T, Deutsche Telekom and Nippon Telegraph & Telephone.

### Key Developments:

In September 2025, Tata Communications has won a contract from the Ministry of Finance to build and operate the digital infrastructure for the Goods and Services Tax Appellate Tribunal (GSTAT). The tribunal, recently notified as a body to handle GST-related disputes, will function through its principal bench in New Delhi and 31 state-level benches.

In July 2025, Bharti Airtel Ltd, through its data center subsidiary Nextra by Airtel, has expanded its renewable energy portfolio by signing a fresh power-wheeling agreement with AMPIN Energy Transition. This move adds 205,167 MWh of annual clean energy supply from Inter-State Transmission System (ISTS)-connected solar-wind hybrid projects, pushing Nextra's total green energy capacity with AMPIN past 200 MW.

In May 2025, The Reliance Group's digital services company Jio Platforms Limited has signed an agreement with SpaceX to offer Starlink's broadband internet services to its customers in India. The agreement is subject to SpaceX receiving authorisation to sell Starlink in India. The development came a day after Jio's rival Bharti Airtel signed a similar pact with SpaceX.

### Types Covered:

Hyperscale Data Centers

Enterprise / Edge Data Centers

Colocation Data Centers

Tiers Covered:

Tier 1

Tier 2

Tier 3

Tier 4

Sizes Covered:

Small

Medium

Large

Mega

End Users Covered:

Telecom Operators

IT & Cloud Providers

BFSI (Banking, Financial Services, Insurance)

Government & Public Sector

Media & Entertainment

Healthcare

Education

Manufacturing & Industrial

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

#### Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

##### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

##### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

##### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

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