

5G Base Station - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 120 pages | Mordor Intelligence

AVAILABLE LICENSES:

- Single User License \$4750.00
- Team License (1-7 Users) \$5250.00
- Site License \$6500.00
- Corporate License \$8750.00

Report description:

The global 5G base station market was valued at USD 41.12 billion in the current year. It is expected to reach USD 141.35 billion by the end of the forecasted year, registering a CAGR of 28.01% during the forecast period.

Key Highlights

- Because of the rising need for high-speed data with lower latency, the 5G base station market is likely to evolve significantly throughout the studied period. Furthermore, the growth of the 5G Internet of Things ecosystem and robust competition provide lucrative prospects for the 5G base station market to develop. Furthermore, one of the primary reasons propelling market expansion is the growing trend to employ networked devices.
- A majority of the 5G networks are feasible to be composed of small cells. Small cells are critical to the functionality of 5G networks because they provide the improved data capacity that 5G demands. They also enable providers to reduce costs by eliminating expensive rooftop systems and installation costs, and they are expected to allow improvements in the performance and battery life of mobile handsets. In today's environment, small cells are required for applications needing increased bandwidth and the increasing number of connected devices. For instance, according to Cisco Systems Inc., 500 billion devices will be connected to the internet by 2030. Moreover, 5G telecom operators are focused on deploying small cells under a low-frequency band to provide enhanced bandwidth services to the customer.
- Further, according to Ericsson, 5G subscriptions are expected to increase globally between 2022 and 2023, rising from over 0.55 billion to over 1.67 billion. Further, According to GSMA, The usage of 5G in GCC states will be slightly higher (16% customer 5G adoption) than the global average (15%) by 2025, mainly driven by governments and mobile operators with the support of mobile technology partners. Moreover, the number of 5G subscriptions is expected to reach 129.62 million in the Middle East and North African regions. Such a huge rise in 5g subscriptions would drive the market.
- According to the Ministry of Industry and Information Technology China, At the end of 2022, the number of 5G base stations in

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

China amounted to 2.31 million. With extensive infrastructure investments and ambitious rollout plans, China has achieved significant 5G coverage. According to estimates, the number of base stations is expected to reach over six million by 2024. Further, according to the Ministry of Internal Affairs and Communications (Japan), More than 45 million 5G subscriptions were estimated in Japan as of 2022. The domestic rollout of 5G networks by Japan's major mobile carriers KDDI, SoftBank, NTT Docomo, and Rakuten Mobile started a few years back with an initial focus on urban areas. The Japanese government intends to reach a coverage of 95% of the population by March 2024.

-Moreover, several authorities are focusing on addressing the spectrum challenges and reducing the cost barriers associated with deploying 5G infrastructure. For instance, in July 2023, the draft requirements for the radio frequency auction that will enable the deployment of 5G throughout the nation were issued by Sutel, the Costa Rican telecom authority. The implementation of infrastructure is given priority above collecting fees for spectrum rights in the current plan, in contrast to earlier auctions. This indicates that no further contributions will be made to the Fonatel Telecommunications Development Fund. These initiatives align with the challenges posed by high initial capital expenditure and contribute to overcoming the restraints associated with deploying 5G networks.

-During the Covid pandemic, it was expected that 5G, at least in its earliest version, would see mobile network operators (MNOs) globally launch deployment widely within their networks in both urban and rural areas, taking considerable advantage of the move by telecom regulators to free up spectrum in few frequency bands. Then the COVID-19 pandemic hit worldwide, causing significant supply chain interruptions that slowed down the expanded rollout of 5G at the beginning of covid.

5G Base Station Market Trends

Smart Cities are Expected to Drive the Market

- Globally, smart cities are growing as urbanization picks up speed. According to the United Nations, India (404 million), China (292 million), and Nigeria will each have an extra 212 million urban dwellers by the year 2050. The highest pace of urbanization in the globe is observed in the emerging continent of Latin America.

- Further, Globally, many smart city projects and efforts are being implemented, encouraging global investments owing to urbanization. The Organization for Economic Co-operation and Development (OECD) predicts that between 2010 and 2030, worldwide investments in smart city endeavors will total around USD 1.8 trillion for all metropolitan city infrastructure projects. Such developments towards smart cities are expected to raise the demand for the 5G base stations to provide uninterrupted services to its customers.

- In a 5G-enabled Smart City, detecting an emergency can start several emergency response procedures, such as a quicker dispatch of first responders, medical teams, and firefighters to the disaster scene. The device may also automatically close fire shutters and switch on fire sprinklers when appropriate when a fire is detected. Building sensors can also detect fires, sending an alarm to the building's management system and instructing the actuators to act. Fire sprinklers are activated 1 to 2 seconds after a fire is detected because of 5G's faster response times.

- In June 2022, At Critical Communications World Conference, Motorola Solutions launched several solutions to demonstrate how its mission-critical, integrated ecosystem of technologies is assisting the public safety industry in overcoming some of its most difficult and unforeseen challenges. While rapidly evolving technologies and user needs to continue to drive the need for modernization, public safety and military organizations must be prepared to handle any situation. This includes cross-border communication in significant emergencies, identifying threats with artificial intelligence (AI), and deploying cloud solutions for remote operations.

- The players in the market are developing new 5G solutions to capture the smart cities market, which would proportionately increase the demand for the 5G base stations. For instance, in December 2022, a strategic alliance was established between, Dubai Integrated Economic Zones Authority (DIEZ) and Derq to provide advanced capabilities and competitive smart city solutions to DIEZ's Freezones. Top representatives and employees from both parties attended a signing ceremony to mark the partnership.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

With the new partnership, a 5G MEC server or platform from the Khazna Data Centre will enable DIEZ to demonstrate smart city solutions powered by 5G communication and edge computing technologies.

- According to International Institute for Management Development, as of 2022, Denmark ranked as the most digitally competitive country in the world. Digital competitiveness rankings aim to analyze a country's ability to adopt and implement digital technologies within enterprises and government organizations. Many Nordic countries ranked high, with Sweden, Finland, and Norway in the top fifteen. The United States was ranked second, listed as the most competitive country in 2021. Such huge adoption of digitalization would create an opportunity for the 5G services, which would increase the installation of 5G base stations.

North America is Expected to Hold Significant Share of the Market

- The United States is one of the major innovators and investors in the 5G Base station market, owing to a high investment rate for 5G deployment. The telecom industry in the country accounts for a significant portion of the global consumption of 5G technology. Also, the United States dominates the regional 5G base station market regarding investment, adoption, and applications. Telecom operators in the country, such as AT&T, Verizon, and T-Mobile, have made billion-dollar deals with network equipment vendors, such as Ericsson, Samsung, Nokia, Huawei, and ZTE, to build up their 5G network infrastructure in the United St.

- Moreover, in April 2023, The US Secretary of Commerce officially launched a USD 1.5 billion public wireless supply chain innovation fund, which will be used to build Open and Interoperability networks. By demonstrating the viability of new, open-architecture techniques for wireless networks, this initial budget round will ensure that the United States and its global allies and partners will produce the future of 5G and next-gen wireless technology. To demonstrate the feasibility of new wireless technologies, such as Open Radio Access Networks, with a view to removing barriers to their adoption, NTIA's first NOFO will seek to improve and extend tests in accordance with feedback received from these processes.

- Further, the booming 5G deployments in the country will increase the demand for 5g base stations to support the 5G features and services being rolled out. For instance, according to Ericsson, there will be more than 195 million 5G subscriptions by 2026, and by 2029, in the United States, 5G will account for about 71.5% of the entire US mobile market. According to CTIA, rapid growth creates a platform for the US's 5G economy. It will lead to USD 275 billion in investment and 3 million new jobs, creating USD 500 billion in economic growth.

- Canada is emerging as a potential market for the studied market. Over the past few years, the 5G industry has expanded, despite continued offshoring and greater competition from the US and East Asian manufacturers. In 2022, The Canadian findings from Ericsson's largest consumer survey have been made public. Ericsson is a key provider of 5G network services in Canada. According to the data, four million Canadian smartphone users intend to upgrade to 5G service in 12 to 15 months. Since 2020, Canadian smartphone users have had access to 5G networks. Ericsson's Consumer Lab performed the 5G: The Next Wave study. It demonstrates that the number of 5G users has multiplied by six over the previous two years. Additionally, eight out of ten Canadians already using 5G said they would not want to return to 4G. Only a third of 5G users believe they are linked to 5G more, despite 75% of Canadians having access to 5G.

- In addition, the government aid in developing wireless connectivity in the nation is analyzed to boost the 5G base station demand. For instance, in May 2023, the Government of Canada launched A new framework to enhance connectivity and innovative 5G applications. A new licensing policy has been announced by the Minister of Innovation, Science and Industry that will make access to the local spectrum in 5G easier for internet service operators, innovation companies, as well as rural, frontier, or indigenous communities.

5G Base Station Industry Overview

The global 5G base station market is moderately consolidated with the presence of several players like Huawei Technologies Co.,

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Ltd., ZTE Corporation, Nokia Corporation, CommScope Holding Company, Inc., Qualcomm Technologies, Inc., etc. The companies continuously invest in strategic partnerships and product developments to gain substantial market share. Some of the recent developments in the market are:

In June 2023, Huawei Technologies secured a significant contract that will supply over half of the 5G base stations for telco China Mobile between 2023 and 2024. The contracts have been split into two projects, with the first covering 63,800 base stations using the 2.6G Hz to 4.9 GHz spectrum, while the second covers 23,141 in the 700 MHz band. Huawei is estimated to have secured 45,426 5G base stations worth an estimated 4.1 billion yuan (USD574 million).

In February 2023, AccelerComm, the Layer 1 5G IP specialists, and TTP, an technology and product development firm based in the United Kingdom, announced they are developing a high-performance 5G LEO (low-earth orbit satellites) Regenerative - base station for deployment on LEO (low-earth orbit satellites). The project incorporates expertise and IP from the two companies and additional technology from partners to propose a dedicated 5G regenerative gNodeB solution tailored to support high-performance 5G services in a Non-Terrestrial Network (NTN) complex environment.

Additional Benefits:

- The market estimate (ME) sheet in Excel format
- 3 months of analyst support

Table of Contents:

1 INTRODUCTION

- 1.1 Study Assumptions and Market Definition
- 1.2 Scope of the Study

2 RESEARCH METHODOLOGY

3 EXECUTIVE SUMMARY

4 MARKET INSIGHTS

- 4.1 Market Overview
- 4.2 Industry Attractiveness - Porter's Five Forces Analysis
 - 4.2.1 Bargaining Power of Buyers
 - 4.2.2 Bargaining Power of Suppliers
 - 4.2.3 Threat of New Entrants
 - 4.2.4 Threat of Substitutes
 - 4.2.5 Intensity of Competitive Rivalry
- 4.3 Assessment of the Impact of COVID-19 on the Market

5 MARKET DYNAMICS

- 5.1 Market Drivers
 - 5.1.1 Increase in Penetration Rate of Smartphones
 - 5.1.2 Key benefits offered by 5G over its predecessors
- 5.2 Market Challenges
 - 5.2.1 Design & Operational Challenges
- 5.3 Market Opportunities
 - 5.3.1 Ongoing efforts towards introduction of 5G in emerging countries

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

6 MARKET SEGMENTATION

6.1 By Type

6.1.1 Small Cell

6.1.2 Macro Cell

6.2 By End-User

6.2.1 Commercial

6.2.2 Residential

6.2.3 Industrial

6.2.4 Government

6.2.5 Smart Cities

6.2.6 Other End-Users

6.3 By Geography

6.3.1 North America

6.3.2 Europe

6.3.3 Asia Pacific

6.3.4 Latin America

6.3.5 Middle East and Africa

7 COMPETITIVE LANDSCAPE

7.1 Company Profiles

7.1.1 Huawei Technologies Co., Ltd.

7.1.2 ZTE Corporation

7.1.3 Nokia Corporation

7.1.4 CommScope Holding Company, Inc.

7.1.5 Qualcomm Technologies, Inc

7.1.6 Qorvo inc

7.1.7 Alpha networks inc

7.1.8 NEC Corporation

7.1.9 Telefonaktiebolaget LM Ericsson

7.1.10 Samsung Group

8 INVESTMENT ANALYSIS

9 FUTURE OUTLOOK OF THE MARKET

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

5G Base Station - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts 2019 - 2029

Market Report | 2024-02-17 | 120 pages | Mordor Intelligence

To place an Order with Scotts International:

- Print this form
- Complete the relevant blank fields and sign
- Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$4750.00
	Team License (1-7 Users)	\$5250.00
	Site License	\$6500.00
	Corporate License	\$8750.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-25"/>
		Signature	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

