The Private LTE/5G Network Market

4th Edition

The Private LTE/5G Network Market is a strategy report from Berg Insight analysing the latest developments on the roll-out of private cellular networks worldwide. This strategic research report from Berg Insight provides you with 120 pages of unique business intelligence including 5-year industry forecasts and expert commentary on which to base your business decisions.

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Private LTE/5G network deployments reached 6,500 in 2025

Private LTE/5G networks, referred to as non-public networks by the 3GPP, are networks that use spectrum defined by the 3GPP and LTE or 5G NR base stations, small cells and other radio access network (RAN) infrastructure to transmit voice and data to edge devices. For the purpose of this report, Berg Insight defines a private cellular network as a 3GPP-based private LTE/5G network built for the sole use of a private entity such as an enterprise or government organisation. Private LTE/5G networks offer numerous benefits, including strong security and reliability, high bandwidth, low latency, smooth handoffs for mobile use cases and compatibility with public networks for increased coverage.

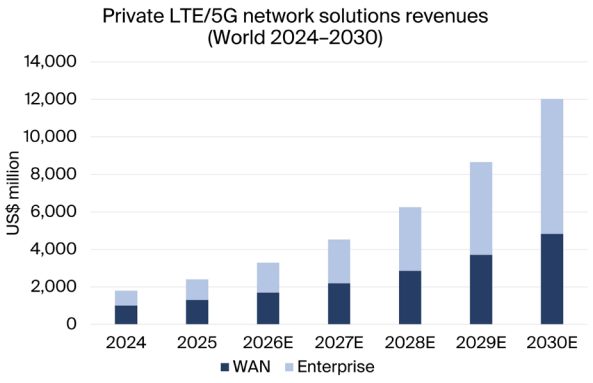
The private cellular network market is undergoing a transformation, driven by the increasing availability of dedicated spectrum, evolving device ecosystem and growing number of latency-sensitive enterprise use cases. While the market historically has been mainly supply-driven, it is today increasingly driven by organic demand from end users.

The major RAN vendors (Ericsson, Nokia and Huawei) have achieved significant progress in the private cellular network market in recent years and all play important roles as end-to-end solution providers. Nokia is the largest private LTE/5G network solution vendor of the three with about 960 customers and over 2,000 private network deployments at the end of 2025. However, Nokia announced in November 2025 that it is looking to divest its flagship Nokia DAC solution in favour of focusing more on its other larger segments. Several other noteworthy exits took place in 2025, including divestments by the cloud service providers AWS and Microsoft, signalling a significant shift in the industry.

A number of small cell and other RAN equipment providers offer competitive LTE/5G radio products and in some cases complete private network offerings, including Airspan Networks, Askey, AW2S, Baicells, Benetel, BLiNQ Networks, Cablefree, Celona, Firecell, GXC, JMA Wireless, Mavenir, Microamp, Samsung Networks, Sercomm, Star Solutions, Telrad, XCOM RAN and ZTE. Important specialised core network software (EPC/5GC) vendors include AttoCore, Blue Arcus, Cisco, Cumucore, Druid Software, Expeto, Hewlett Packard Enterprise (HPE), Highway 9, IPLOOK, Onomondo, Obvios and Pente Networks. In total, RAN and EPC/5GC offerings for private networks are available from close to 60 vendors.

Private LTE/5G network deployments are growing rapidly, with an increasing number of organisations prioritising production-grade deployments over the extensive trials that previously characterised the market. Berg Insight estimates that there were 6,500 private LTE/5G networks, excluding proof-of-concept (PoC) projects, deployed across the world at the end of 2025, up from 4,700 networks in the previous year. The private LTE/5G network market can be divided into two main segments: Enterprise and Wide Area Networks (WAN). Enterprise networks are smaller, typically covering areas ranging from single buildings to mid-sized cities. WANs extend across much larger areas, sometimes entire countries, and are typically owned by government organisations or utilities and used for critical communications.

The market value for private LTE/5G network solutions reached an estimated US$ 2.4 billion in 2025. The Enterprise and WAN segments accounted for US$ 1.1 billion and US$ 1.3 billion respectively. The figures do not take into account adjacent revenue streams such as installation, system integration and cross-selling of other adjacent products and services. Berg Insight believes that the market value for private LTE/5G network solutions will grow at a steady pace over the next five years, largely driven by new network deployments. Revenue growth will also be driven by upgrades and expansions of existing networks, as enterprises add new applications and transition from LTE to 5G. Growing at a CAGR of 38 percent, the total market value for private LTE/5G network solutions is forecasted to reach US$ 12.0 billion in 2030.



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Glossary

Highlights from the report

Insights from 35 new executive interviews with market leading companies.

360-degree overview of the private LTE/5G ecosystem.

Comprehensive overview of spectrum availability for private LTE/5G network deployments.

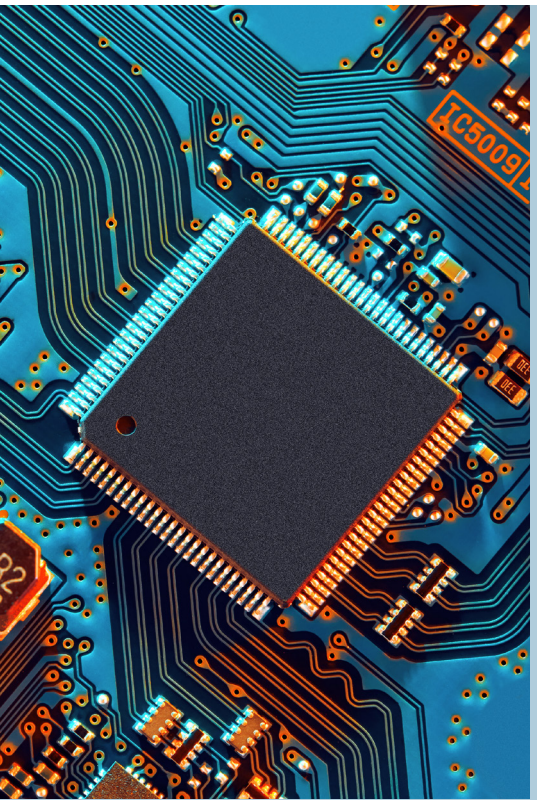
Analysis of market trends and key developments.

Updated profiles of 43 key private LTE/5G solution providers.

Detailed market forecast on private LTE/5G network deployments, market value and IoT device shipments by technology and vertical market lasting until 2030.

The report answers the following questions

- How will the private LTE/5G network market evolve over the next five years?
- What are the main spectrum licensing frameworks for private LTE/5G employed by regulators?
- Who are the leading providers of private LTE/5G network solutions?
- What types of organisations deploy private LTE/5G networks?
- What are the regional differences and the number of networks in each country?
- Which are the most significant private LTE/5G network deployments in recent years?
- What is the outlook for IoT device shipments for private LTE/5G networks?



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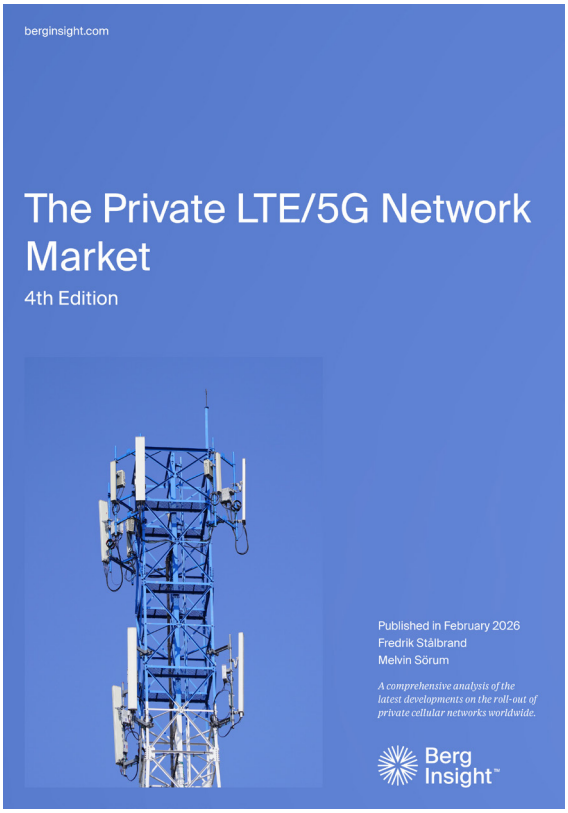
Our market reports offer comprehensive information and analysis on key IoT technologies and markets, addressing important concerns including total addressable market, market penetration, market shares, industry landscape, regulatory environment, market trends and forecasts. Our research portfolio today comprises more than 80 items, where each market report focuses on a specific vertical application area or cover horizontal themes. All market reports come with complementary data sets in Excel format that can be easily analysed and converted into tables and charts. We offer a range of different license options together with bundled packages and subscriptions to suit your specific needs.



HORIZONTAL THEMES

The Private LTE/5G Network Market

Berg Insight estimates that there were a total of 6,500 private LTE/5G networks deployed across the world at the end of 2025, excluding proof-of-concept (PoC) projects. With the growing momentum around private LTE and more local 5G spectrum becoming available across regions, the private LTE/5G network market is set to grow significantly in the next years. Until 2030, Berg Insight forecasts that the number of private LTE/5G network deployments will grow at a compound annual growth rate of 38 percent to reach 32,600 networks at the end of the period. Get up to date with the latest trends and information about vendors, products and markets.

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Who should read this report?

The Private LTE/5G Network Market is the foremost source of information about the emerging private cellular network market. Whether you are a device vendor, telecom infrastructure vendor, system integrator, service provider, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

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