

U.S. Manufacturing Private CBRS Network Forecast, 2021 – 2026





U.S. Manufacturing Private CBRS Network Forecast, 2021 – 2026: *CBRS Network Build, Integration and App Spending in Manufacturing Facilities*

A Market Study

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Table of Contents

Abstract	3
Executive Summary.....	5
Total Spending for Private CBRS Networks, Manufacturing Buildings	7
Table A: Total Spending for Private CBRS Networks in Manufacturing Buildings, 2021-2026 (\$M)	7
Figure A: Total Spending for Private CBRS Networks in Manufacturing Buildings, 2021-2026 (\$M)	8
What this means	8
Methodology.....	10
Sources	10
Definitions	11
Manufacturing Buildings.....	12
Table 1: Number of Buildings and Enclosed Floor Space, U.S. Manufacturing Sites	12
Figure 1: Number of Buildings and Enclosed Floor Space, U.S. Manufacturing Sites	13
Manufacturing and In-Building Wireless	15
802.15 and 802.11	15
Reasons for limited deployment	15
Industry 4.0	16
What is required for a Smart Factory?	17
Major Challenges	17
Case Studies	18
Outlook for Private CBRS Networks in Manufacturing Buildings	18
Technologies and spectrum behind connected Manufacturing Buildings ..	21
5G	21
CBRS	22
Forecast Methodology and Assumptions	24
Basic Assumption	24
Buildings Methodology	24
Methodology – Manufacturing Buildings.....	24
Network Build & Operate Spending Methodology	25
Network Build Spending	25
Operational Spending	25
Network/Systems Integration: Assumptions and Methodology	26
Application Spending: Assumptions and Methodology	26
Private CBRS Network Spending Forecast – Manufacturing Buildings	28
Private CBRS Networks Build and Operation	28
Manufacturing Network Build.....	28
Table 2: Private CBRS Network Build Spending in Manufacturing Buildings, 2021-2026 (\$M)	28
Figure 2: Private CBRS Network Build Spending in Manufacturing Buildings, 2021-2026 (\$M)	29
Manufacturing Operational	29
Table 3: Private CBRS Network Operational Spending in Manufacturing Buildings, 2021-2026 (\$M)	29
Figure 3: Private CBRS Network Operational Spending in Manufacturing Buildings, 2021-2026 (\$M)	30

Total Private CBRS Network Build and Operational Spending	30
Table 4: Total CBRS Private Network Spending for Manufacturing Buildings, 2021-2026 ...	30
Figure 4: Total CBRS Private Network Spending for Manufacturing Buildings, 2021-2026 ..	31
Private CBRS Networks Integration.....	31
Systems/Network Integration.....	31
Table 5: Private CBRS Systems/Network Integration Spending in Manufacturing Buildings, 2021-2026, (\$M)	31
Figure 5: Private CBRS Systems/Network Integration Spending in Manufacturing Buildings, 2021-2026	32
Private CBRS Networks Application.....	32
Applications spending.....	32
Table 6: Private CBRS Network Applications Spending in Manufacturing Buildings, 2021- 2026.....	32
Figure 6: Private CBRS Network Application Spending in Manufacturing Buildings, 2021- 2026.....	33
Total Spend	33
Table 7: Total Spending for Private CBRS Networks in Manufacturing Buildings, 2021-2026 (\$M)	33
Figure 7: Total Spending for Private CBRS Networks in Manufacturing Buildings, 2021-2026 (\$M)	34
Definitions	35
Definitions Table	35
About iGR	52
Disclaimer	52

Abstract

There are many thousands of U.S. manufacturing buildings, such as factories, assembly plants and mills, many of which make use of advanced machine tools and automation. As such, manufacturing facilities have always used wired technologies because industrial applications typically have strict thresholds for latency, reliability, and throughput. Also, many factory engineers are hesitant to adopt wireless options due to a perceived lack of reliability, determinism, and security of wireless solutions compared to wired equivalents.

5G, and Private CBRS network systems, can enable the factory floor with very high throughput, ultra-reliable and low latency cellular-based solutions. This is seen as the path toward the “smart factory” and “Industry 4.0.”

For this report, iGR defines an in-building private cellular system as one that uses the U.S. CBRS band for 4G/5G-based services and is funded by a third party distinct from a Mobile Network Operator (MNO). Note that iGR includes campus-wide cellular networks within the “in-building” umbrella.

This market study provides a five-year forecast for spending for three types of spending on in-building private cellular systems using CBRS in U.S. manufacturing buildings. The three types of spending include:

- Network build and operational spending: the costs associated with installing and operating the private CBRS network
- Network/systems integration spending: the costs associated with designing, sourcing equipment, integrating the network and applications, etc.
- Applications: the costs associated with purchasing and licensing the applications that run on the private CBRS network.

Key questions addressed in this market study include:

- What is a private cellular network?
- How can a private cellular network be used to create a connected manufacturing building/campus?
- What is the primary purpose of a connected manufacturing building or campus?
- What technologies are required for a connected manufacturing building or campus?
- What use cases are enabled in a connected manufacturing building or campus?
- How much will be spent to build and operate a private CBRS network in U.S. manufacturing buildings from 2021 to 2026?
- What is the forecasted network/systems integration spending associated with the private CBRS network opportunity in U.S. manufacturing buildings from 2021 to 2026?

- What is the forecasted applications spending for private CBRS networks in U.S. manufacturing buildings from 2021 to 2026?

Who should read this report?

- Systems integrators and wireless network integrators
- CBRS solutions vendors
- Mobile operators
- Infrastructure OEMs
- Financial analysts and investors.