

**U.S. In-building
Wireless Forecast,
2020 - 2025:
*Supporting
Commercial Buildings
and Manufacturing
Facilities***

Market Study
Third Quarter, 2021





U.S. In-building Wireless Forecast, 2020-2025: *Supporting Commercial Buildings and Manufacturing Facilities*

A Market Study

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Abstract

Indoor small cells and in-building wireless (IBW) systems are deployed in commercial buildings and manufacturing facilities to provide a secure network and improve the experience of employees and guests indoors. They are also used to support industry-specific use cases, such as online concessions in smart stadiums and ultra-reliable and low latency automated applications on the factory floor.

IBW systems use many types of indoor small cells, including Distributed Antenna Systems (DAS), DAS Lite, picocells or enterprise small cells, femtocells and cellular signal boosters.

This market study provides a five-year forecast for spending for in-building wireless systems in U.S. commercial buildings and manufacturing buildings. *iGR* found that due to the pandemic, the IBW market for 2020 and beyond is significantly different than it was previously. The 2021 revised forecast was modeled with:

- New data and assumptions regarding the (ongoing) COVID-19 pandemic
- Newly available data (November 2020) from the Commercial Buildings Energy Consumption Survey (CBECS)
- Information gathered from conversations with multiple solution providers in the IBW market.

Included in the market study is a five-year forecast for both network build spending and operational spending for the deployment of cellular IBW in U.S. commercial and manufacturing buildings in the sub 6 GHz, CBRS, and mmWave bands.

Note that this market study provides separate spending amounts for commercial buildings and manufacturing buildings, but it does not provide spending breakouts by types of commercial buildings, such as retail, healthcare, stadiums, and transportation buildings, nor does it provide spending breakouts by types of manufacturing facilities. This detailed spending can be found in *iGR's* Enterprise 5G series of building-specific market studies that was published in Q2 2021 – <https://igr-inc.com/advisory-subscription-services/enterprise-5g/>.

Key questions addressed in this market study include:

- How much will be spent to build and operate sub 6 GHz, CBRS and mmWave IBW systems in U.S. commercial buildings from 2020 to 2025?

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- How much will be spent to build and operate sub 6 GHz, CBRS and mmWave IBW systems in U.S. manufacturing buildings from 2020 to 2025?
- Which technologies and mobile industry trends are impacting the deployment of IBW systems?
- What are the different types of indoor small cells included in *iGR's* forecast?
- What are the key benefits of using in-building wireless systems and indoor small cells?
- What are some of the perceived negatives and issues related to indoor small cell deployments?

Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.

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