

Smart Homes and Home Automation



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- **Insights** from 30 executive interviews with market leading companies.
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- **Summary** of industry trends in key vertical market segments.
- **Statistical** data on adoption of smart home systems in Europe and North America.
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179 million homes in Europe and North America will be smart by 2024

Smart home and home automation systems include a wide range of solutions for controlling, monitoring and automating functions in the home. Berg Insight's definition of a smart home system is one that is accessible from remote and includes a smartphone app or a web portal user interface. Devices that only can be controlled and automated locally, through switches, timers, sensors and remote controls, are thus not included in the scope of this study. Smart home systems can be grouped into seven primary categories: security and access control systems; energy management and climate control systems; audio-visual and entertainment systems; lighting and window control systems; healthcare and independent living systems; home appliances and service robotics.

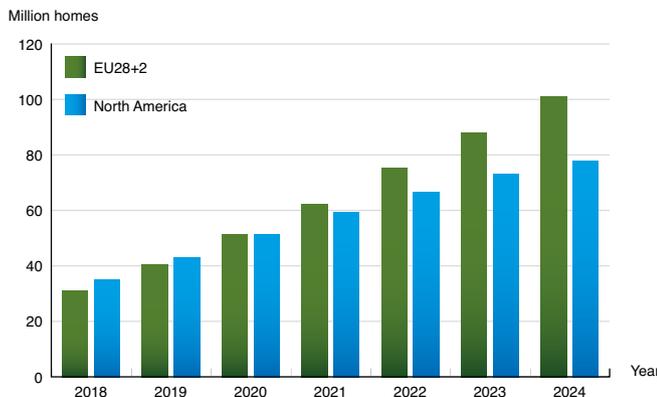
The North American smart home market recorded strong growth during 2019. The installed base of smart home systems increased by 28.5 percent to reach 172.6 million at the year-end. An estimated 19.1 million of these were multifunction or whole-home systems whereas 153.5 million were point solutions designed for one specific function. As some homes have more than one smart system in use, the installed base totalled an estimated 43.1 million smart homes at the end of the year. This corresponds to 30.2 percent of all households, placing North America as the most advanced smart home market in the world. Between 2019 and 2024, the number of households that adopt smart home systems is forecasted to grow at a compound annual growth rate (CAGR) of 12.5 percent, resulting in 77.9 million smart homes. The market value reached US\$ 27.0 billion (€ 24.1 billion) in 2019, an increase of 20.5 percent year-on-year. The market value is expected to grow at a CAGR of 14.1 percent between 2019 and 2024, reaching US\$ 52.3 billion (€ 46.7 billion) in yearly revenues at the end of the forecast period.

The European market for smart home systems is still a few years behind North America, both in terms of market penetration and maturity. At the end of 2019, there was a total of 111.9 million smart home systems in use in the EU28+2 countries, up from 83.9 million in the previous year. Around 10.8 million of these systems were multifunction or whole-home systems whereas 101.1 million were point solutions. This corresponds to around 40.3 million smart homes when overlaps are taken into account, meaning that 17.4 percent of all households in Europe were smart at the end of the year. The number of European households to adopt smart home systems is forecasted to grow at a

compound annual growth rate (CAGR) of 20.2 percent during the next five years, resulting in 101.1 million smart homes by 2024. The market value grew by 28.7 percent to € 16.6 billion (US\$ 18.5 billion) in 2019. The market value is forecasted to grow at a CAGR of 24.3 percent between 2019 and 2024 to reach € 49.0 billion (US\$ 54.9 billion) at the end of the forecast period.

A point solution will in many cases constitute the consumer's first smart home purchase. Compared to whole-home systems, point solutions generated 62 percent of the combined market revenues in North America and Europe. The most popular point solutions to date, in terms of sold units, include smart thermostats, smart light bulbs, smart plugs, connected security cameras and voice controlled smart speakers. These products are marketed by incumbent OEMs such as Signify, Resideo, Danfoss, Belkin, Chamberlain, Kwikset and Assa Abloy and newer entrants such as Ecobee, Sonos, Arlo, Netatmo, IKEA and Wyze Labs. In the whole-home system market, traditional home automation vendors such as Crestron Electronics, Control4, Savant Systems, eQ-3 and Loxone are facing new competition as companies from adjacent industries have entered the market. Communications and security service providers such as ADT, Vivint, Comcast and Brinks Home Security (Monitronics) have established themselves among the largest whole-home solution vendors in North America. Major vendors in Europe include Centrica, Somfy, Deutsche Telekom and Verisure.

The Covid-19 pandemic has so far had a very limited negative effect on the smart home market in North America and Europe. While sales in brick-and-mortar stores declined, online sales instead surged. Many people spent more time at home during the pandemic and thus became interested in home improvement activities such as adding smart homes devices. Berg Insight expects that working from home will become increasingly common in the future, even as Covid-19 related lockdowns and restrictions are eased. Smart home products that make people feel safer at home as well as enable time-savings and convenience are likely to be popular among the many people that spend an increasing share of their time at home.



Total number of smart homes (Europe and North America 2018–2024)

This report answers the following questions:

- Which are the main verticals within smart homes and home automation?
- What are the main drivers behind growth in Europe and North America?
- What are the challenges and roadblocks towards widespread adoption?
- What are the business models and channels-to-market for smart home solutions?
- Which are the leading whole-home system vendors in Europe and North America?
- How are product OEMs and whole home solution vendors positioning themselves?
- What home connectivity technologies are smart home system vendors betting on?
- What is the potential market size for cellular IoT in home automation?
- How will the smart home market evolve in the next five years?

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Glossary

About the Author



Martin Bäckman is an IoT Analyst with a Master's degree in Industrial Engineering and Management from Chalmers University of Technology. He joined Berg Insight in 2018 and his areas of expertise include smart homes and consumer Internet-of-Things.

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