

Smart Homes and Home Automation



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144 million homes in Europe and North America will be smart by 2023

Smart homes and home automation are ambiguous terms used in reference to a wide range of solutions for controlling, monitoring and automating functions in the home. Berg Insight's definition of a smart home system requires that it has a smartphone app or a web portal as a user interface. Devices that only can be controlled with 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 assisted living systems; home appliances and service robotics.

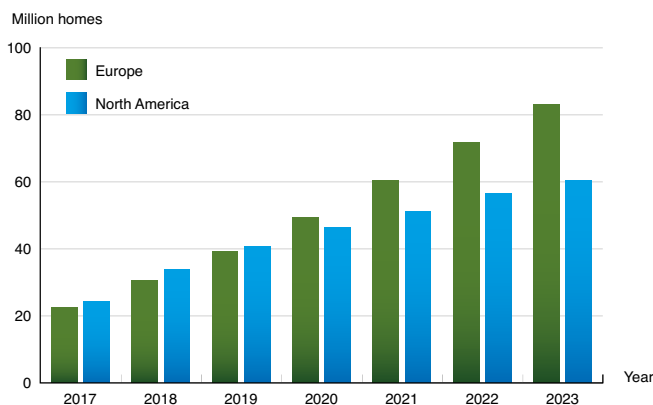
The North American smart home market recorded strong growth during 2018. The installed base of smart home systems increased by 49.7 percent to reach 135.4 million at the year-end. An estimated 13.3 million of these were multifunction or whole-home systems whereas 122.1 million were point solutions designed for one specific function. As some homes have more than one smart system in use, the installed base totalled an estimated 33.8 million smart homes at the end of the year. This corresponds to 23.9 percent of all households, placing North America as the most advanced smart home market in the world. Between 2018 and 2023, the number of households that adopt smart home systems is forecasted to grow at a compound annual growth rate (CAGR) of 12.3 percent, resulting in 60.3 million smart homes. Market revenues reached US\$ 22.3 billion (€ 18.9 billion) in 2018, an increase of 24.8 percent year-on-year. The market is expected to grow at a CAGR of 17.3 percent between 2018 and 2023, reaching US\$ 49.5 billion (€ 42.0 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 2018, there was a total of 82.3 million smart home systems in use in the EU28+2 countries, up from 57.3 million in the previous year. Around 6.8 million of these systems were multifunction or whole-home systems whereas 75.5 million were point solutions. This corresponds to around 30.5 million smart homes when overlaps are taken into account, meaning that 13.2 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 22.3 percent during the next five years, resulting in 83.2 million smart homes by 2023. Market revenues grew

by 24.2 percent to € 12.9 billion (US\$ 15.2 billion) in 2018. The market is forecasted to grow at a CAGR of 23.4 percent between 2018 and 2023 to reach € 36.8 billion (US\$ 43.5 billion) at the end of the forecast period.

A point solution will in most cases constitute the consumer's first smart home purchase. Compared to whole-home systems, point solutions generated 67 percent of the combined market revenues in North America and Europe. The most successful point solutions to date, in terms of sold units, include smart thermostats, smart light bulbs, smart plugs, connected security cameras, multi-room audio systems as well as voice controlled smart speakers. These products are marketed by incumbent OEMs such as Signify, Honeywell, Danfoss, Belkin, Chamberlain, Kwikset and Assa Abloy; service providers such as Ailce France and Centrica; and newer entrants such as Nest, Ecobee, Sonos, Canary, Netatmo, IKEA, D-Link and Wyze Labs. In the whole-home system market, traditional home automation system vendors such as Crestron Electronics, Control4, Savant Systems, Gira and Jung are facing new competition as companies from adjacent industries have entered the market. Communications and security service providers such as ADT, Vivint, Comcast, Brinks Home Security (Monitronics) and AT&T have established themselves among the largest whole-home solution vendors in North America. Major vendors in Europe include eQ-3, Deutsche Telekom, Verisure, Somfy, Innogy and Loxone.

Smart speakers with built-in voice assistants have had a major impact on the smart home industry in recent years. Amazon and Google are the largest vendors of such devices, having a combined market share of about 90 percent in North America and Europe. Many of the well-known smart home device and system vendors have made their products compatible with Amazon Alexa and Google Assistant, allowing consumers to easily interconnect various smart home devices. More and more consumers find it beneficial to use smart speakers as the hub and main interface for the smart home. The high growth of the smart home market in the past 2 years can partly be credited to the popularity of smart speakers.



Total number of smart homes (Europe and North America 2017–2023)

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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