

Smart Homes and Home Automation



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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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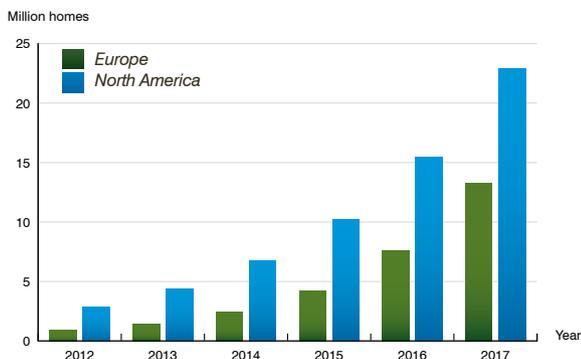


36 million homes in Europe and North America will be smart by 2017

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 six primary categories: energy management and climate control systems; security and access control systems; lighting, window and appliance control systems; home appliances; audio-visual and entertainment systems; and healthcare and assisted living systems.

North America is the most advanced region in the world for smart home solutions with an installed base of 3.5 million systems at the end of 2012. An estimated 0.7 million of these were multifunction or whole-home systems whereas 2.8 million were point solutions designed for one specific function such as climate control or security. As some homes have more than one smart system in use, the installed base represents a total of around 2.9 million smart homes. Market growth has been very strong during the first three quarters of 2013 and North America is on track to reach an installed base of 5.5 million smart home systems by the end of the year. Between 2012 and 2017 the installed base is forecasted to grow at a compound annual growth rate (CAGR) of 55.0 percent to reach 31.4 million smart home systems. Berg Insight estimates that the North American market was worth US\$ 1.6 billion (EUR 1.2 billion) in 2012, including revenues from hardware, services and installation. The market is expected to grow at a CAGR of 42 percent between 2012 and 2017, reaching US\$ 9.4 billion (EUR 7.1 billion) in yearly revenues at the end of the forecast period.

The European market for smart home systems is still in an early stage and approximately three years behind North America in terms of penetration and market maturity. At the end of 2012, there were a total of 1.06 million smart home systems in use in the EU27+2 countries. Around 0.15 million of these systems were multifunction or whole-home systems whereas 0.91 million were point solutions. This corresponds to around 0.93 million smart homes when overlaps are taken into account. ►



Total number of smart homes
(Europe and North America 2012–2017)

► Market growth has been solid during the first three quarters of 2013 and Europe is on track to reach 1.45 million smart home systems by the end of the year. Berg Insight forecasts that the installed base of smart home systems in EU27+2 will grow at a CAGR of 56.0 percent in the next five years to reach 17.4 million systems by 2017. Smart home solution revenues in EU27+2 reached an estimated EUR 0.39 billion (US\$ 0.52 billion) in 2012. The market is expected to grow at a CAGR of 46.0 percent between 2012 and 2017 to reach EUR 2.6 billion (US\$ 3.4 billion) at the end of the forecast period.

Smart home solutions consist of a wide range of hardware and software technologies. As a result a complex ecosystem is emerging comprising whole-home solution vendors, product OEMs and smart home platform vendors. Traditional whole-home solution vendors such as Crestron, Control4, Gira and Jung are facing new competition as telecom operators, security service providers, energy companies and other vendors are entering the industry. This is leading to a rapid increase in consumer awareness which is benefitting all players. At the same time, the market is undergoing a major transformation. New entrants such as Vivint, ADT, Comcast and Vera Controls in North America as well as eQ-3 and SFR in Europe have already managed to establish themselves among the top five whole-home solution vendors in their respective regions. The product OEM category consists primarily of incumbents with decades of experience such as Honeywell, Whirlpool, ASSA ABLOY, Somfy, Philips and Sony. However, connectivity is giving birth to new device categories and redefined value propositions in several application areas such as interactive security and smart thermostats, enabling companies such as D-Link, Sonos, Belkin, Ecobee, Nest, and Numera to enter the market. The smart home software platform category is today led by specialized technology vendors such as iControl, Alarm.com and AlertMe. These vendors have primarily competed against in-house development efforts from smart home solution vendors, but are now also starting to face competition from large technology companies such as Arris, Armdocs and Technicolor that have entered the smart home platform market.

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 main challenges and roadblocks towards widespread adoption?
- What are the business models and channels-to-market of smart home vendors?
- 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 M2M in home automation?
- How will the global smart home market evolve in the next five years?

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Glossary



About the Author

Lars Kurkinen is a Senior Analyst with a Master's Degree in Strategic Management from the Aalto University School of Science and Technology, Finland. He joined Berg Insight in 2010 and his areas of expertise include Smart Homes, mHealth and Mobile Financial Services.

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