



The Connected Home

What is the Connected Home?

- Provides the ability to connect, control and manage IoT enabled modern home devices
- Includes four major elements: environment sensing, equipment, actuators and controllers
- Form the controlled connected home system consisting of devices such as appliances, security and safety, HVAC and entertainment systems
- Installed and maintained professionally or in a DIY manner
- Senses, learns and reacts to its environment, occupants and conditions

Target Customers

- Design engineers
- Original Design Manufacturers (ODMs)
- Small startups
- Original Equipment Manufacturers (OEMs)
- Harness shops
- Cable assembly subcontractors
- PC board houses
- Subcontractors
- Lighting system manufacturers

In-the-Know

- Overall connected home market value is estimated to grow to \$16.4B by 2019
- 2.1B consumers¹ own smartphone mobile devices and realize the value of controlling home functionality such as comfort, security, lighting and entertainment
- Growth is driven by increased consumer interests in safety, security, and energy savings
- Smart energy management systems facilitate the optimized and most economical usage of energy in lighting, appliances and HVAC systems
- Maturing wireless technologies will play a crucial role allowing easier, new and retrofit installation and commissioning
- The concept of the connected home has evolved from a premium, professionally installed solution to a DIY plug and play extendable solution
- Home automation devices continue to shrink in size while becoming more sophisticated
- Smartphone GPS enables increasing functionality, including, but not limited to, unlocking doors and turning on lights
- Remote and wireless communication, control and monitoring are an integral part of the connected home ecosystem

Connected Home Subsystems

Environment Sensing

- Air Quality Monitoring
- Comfort Monitoring
- Utility Measurement
- Safety & Security

Controls

- User Interface Devices
- Communications

Equipment

- Entertainment
- Lighting
- HVAC
- Appliances

Actuators

- Comfort
- Utility Control
- Safety & Security

Design Navigator

Inside the Connected Home solutions guide, the Design Navigator will help you and your customers select the right interconnect, relays, passives, sensors, antennas and switches based on the unique requirements and operating challenges of the design. TE provides solutions for environment sensing, equipment, actuators and controls appropriate for use in a broad range of operating environments, from entertainment, safety, security, and lighting to user interface applications.

When consulted early in the electronic design process, this guide can help optimize your end product by guiding product selection in every step of the design. Choosing the right connectivity solution is critical to the efficient manufacturing and assembly of connected home devices. Selecting the right connector can also ease end-user installation of these devices and together drive home automation adoption.

As consumer awareness and acceptance increases, the connected home will improve energy management and increase peace of mind with added safety and security. Designers will find the products they need to bring their ideas to life with TE's comprehensive product portfolio. TE's experience and product breadth positions the company as a leader and a one stop shop for your connected home application needs.

[For additional information please visit the Connected Home Industries & Solutions page](#)

Key Questions to Ask Your Customers

- Do you want to improve energy management?
- Are you designing an application with safety, security and energy savings in mind?
- Do you face challenges with limited space in your application?
- Does your application require sensing? If so, what is sensed?
- If your application requires sensing, what additional interconnect solutions might be required for your design?
- Is your product a stand-alone device or part of a larger system?
- Does your system require a wireless, time-sensitive, response with reliable and consistent data delivery?

¹ "6.1B Smartphone Users Globally By 2020, Overtaking Basic Fixed Phone Subscriptions," Tech Crunch, June 2, 2015: <http://techcrunch.com/2015/06/02/6-1b-smartphone-users-globally-by-2020-overtaking-basic-fixed-phone-subscriptions/>