

SMARTRONIC

Automation Magazine

Volume - 01 / January / 2017

Five Things to Know about Lighting Control
Lighting control is more than just a light switch

BEOPLAY M5 Wireless Speaker

The BeoPlay M5 is an omnidirectional Bluetooth speaker flow through every room by connecting more Multiroom enabled speakers together and experience seamless sound.

6 Smart Home Features

While there is a lot of talk about smart homes



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Smart Solutions for Smart World

Li-Fi has just been tested in the real world, and it's 100 times faster than Wi-Fi

How Innovations in IoT & Smart Buildings are creating Sustainable Work Places

Thoughtful Home with AIR
Our house are full of appliances
Appliances we bought to make our lives better, more comfortable

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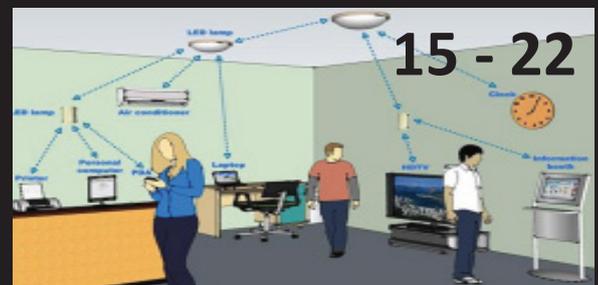


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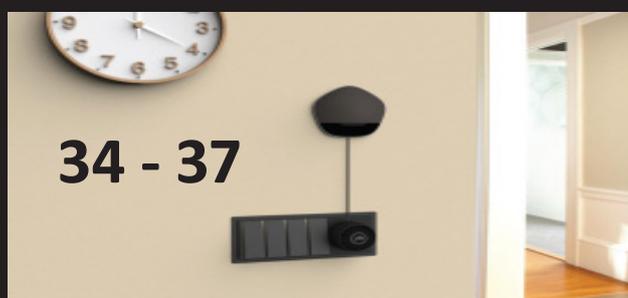


LG PROBEAM NEW LASER PROJECTOR FOR HOME

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SMART TOUCH
LIGHTING AUTOMATION

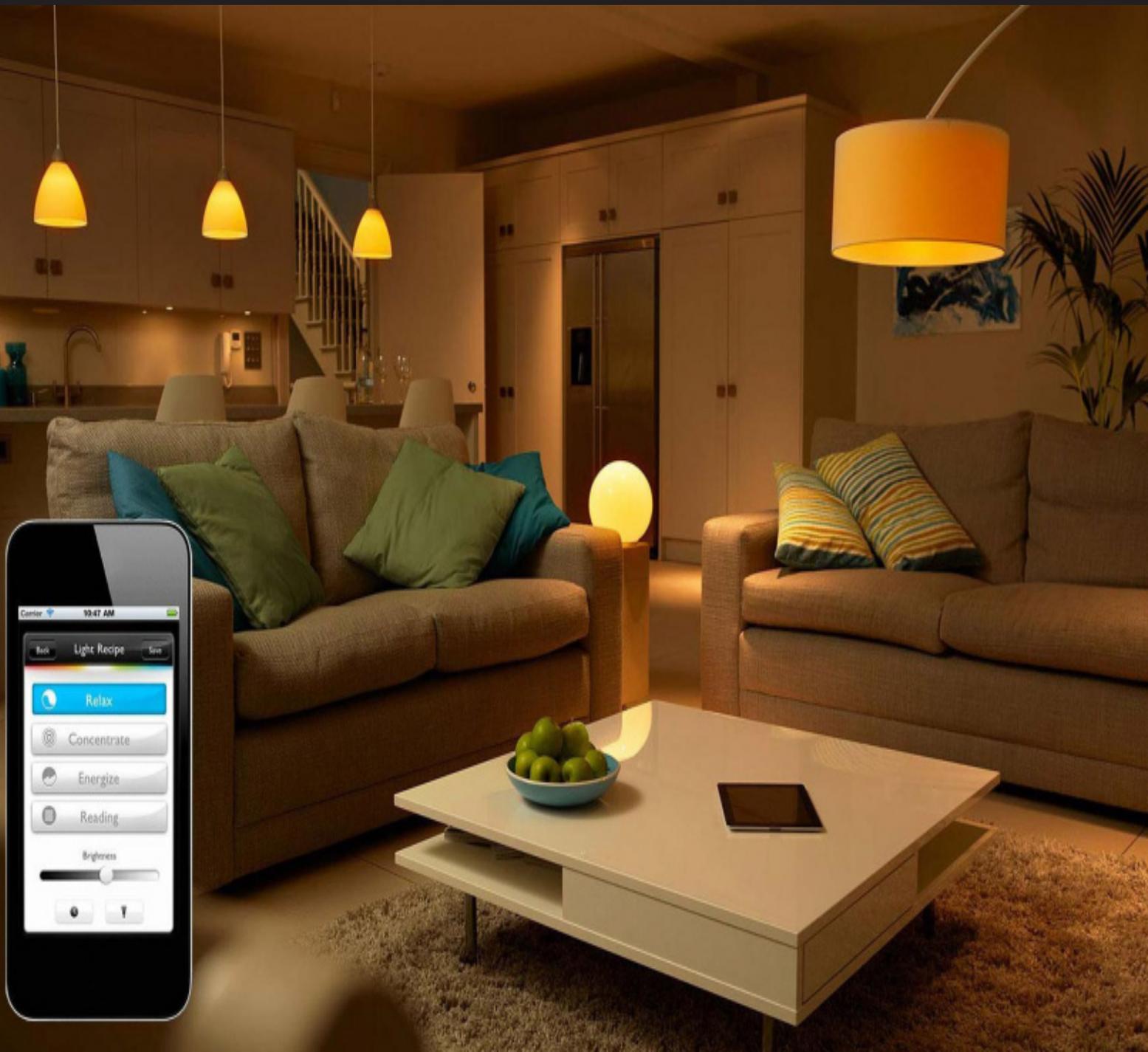


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Five Things to Know about Lighting Control , Lighting control is more than just a light switch



First off, unless you've been exposed to advanced lighting control at a friend's house or in a dealer's showroom, you probably don't even know what the term refers to. For most people, lighting control consists of on/off switches and dimmers, placed at the entrances to rooms or on lamps. The truth is, lighting control can be a whole lot more than that. We've rounded up the top five things people don't know, but should, about lighting control (and we've thrown in a bonus item too.

But first, let's explain what we mean by lighting control. Whether it's a single wall dimmer, multiple controls in a room or a complete home system, managing the amount and quality of your light can help save energy and enhance your home environment. A light control system, when properly installed and configured, can better integrate your lifestyle with the most fundamental electronic system in your house—your lights. In short, light is essential, so why do so many people short change themselves with decade's old technology to control it like the on/off switch?

1 ● Light Control Is Simple

A lighting system doesn't have to be complicated and expensive. Sure, a sprawling estate with hundreds of switches may be a big job, but for most people, it's easy to start small and see what works for you. With the invention of wireless technology, lighting systems can be easily installed in any home with very little wall cutting or new wiring. Because most of the control is at the keypad itself, there's very little that needs to be installed. Also, all kinds of lights can be integrated: lamps, chandeliers,

2 ● Makes Life Easier

If you have a large house, you're probably familiar with the task of walking through and shutting off lights in empty rooms, especially if there are children in the home. A lighting control system can make managing those lights a breeze with wireless controllers or wall-mounted keypads. Occupancy sensors can automatically turn off lights when everyone has left the room.

And at bedtime you can press one button on a bedside remote to engage the "Night time" scene to shut off all the main lights, turn on the outside security lights and leave a dimmed light on in the hallway without leaving your bed.

canister, landscape, incandescent, compact fluorescent, halogen, and LED.



Application:

- See your home from smartphone when you are out
- Monitoring your kids and infants
- Care for the elderly
- Guard your Home
- Guard your car
- Guard your shops
- Care for your pets

Ip Camera



Application:

- Apply to your doors and windows
- Monitor unexpected intrusions
- Care for your family and pets

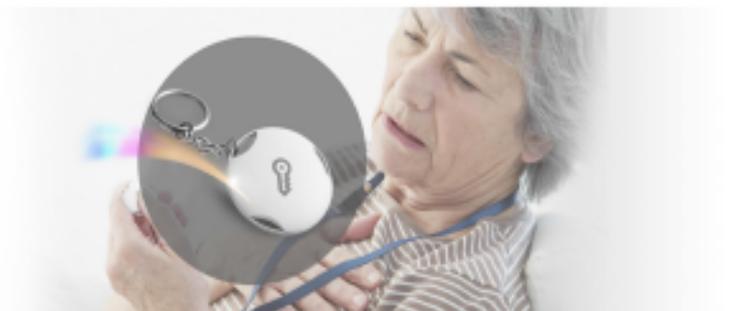


Contact Sensor

Application:

- Monitor illegal invasion with contact sensor or vibration sensor
- Care for your family in emergency

Smart Beacon



Add: 2nd Floor, B1 Blvd, Digital Technology Park, High Tech Park,
Nanshan, Shenzhen, Guangdong, China



3. Safety and Security

Most people feel safer with a little light on. It started when we were children with small night lights to help us sleep. Now as adults, we realize that lights not only make us feel safer from (and help discourage) intruders, but they also can prevent accidental injuries from falls.

A lighting system can add to your home's security in several ways. First, you can program lighting scenes that simulate occupancy when you're away. Simply program a vacation mode in your lighting system, and it will turn on and off lights to create the appearance that someone is home much more effectively than basic plug-in timers.

To avoid coming home to a dark house, your lights can be programmed to automatically come on when you enter the driveway or open the garage door. A wireless control device in your car can turn on a sequence of lights to light up a walkway and key rooms in your home.

4. Energy Savings

lighting control is not only convenient; it's also a responsible method of energy management. Many integrators point out that turning down the lights by 10 percent will create energy savings, but no noticeable change in the room's light. A control system can do that automatically so the homeowner doesn't need to fuss with individual dimmers.

Room sensors can also automatically turn off lights when there are no occupants, and outdoor lights can be connected to sensors or put on schedules so they're not accidentally left on during the day. Lighting control, combined with window covering control, can help to maximize your home's use of natural daylight for lighting and warming your home. Daylight sensors can trigger a control system to automatically adjust your window shades, preventing too much heat coming through the windows and forcing your air conditioning system to work harder. In cold months light sensors and automated window treatments can do the opposite by taking advantage of the sun's warming rays.



5. Lighting as Decor

While people may spend thousands of dollars decorating their homes to create just the right décor, they often don't realize that ambient lighting can play an important role in how it looks. Proper accent lighting can add drama and create moods in an otherwise flat environment. Lighting adds depth as well as impacts colour to properly showcase your home.

Using shades and blinds, combined with daylight sensors, makes it easy to create energy-efficient rooms. The proper blending of daylight and electric light helps to beautify a home by making the space more inviting and comfortable. It's also beneficial to use automated shades and blinds to protect your home's interior furnishings from fading due to sun exposure. Advanced light control systems will integrate with shades to adjust the shade levels based on the sun's position throughout the day.

Additionally, pre-programmed exterior lighting scenes can create a dramatic look for a house by highlighting landscape and architectural features that would otherwise be hidden.



Where to get it?

One of the most surprising things about an advanced lighting control system is that you don't get them from a lighting store or home improvement outlet. The most comprehensive lighting control technology is generally available from the same independent dealers you go to for your home theatre, high-end audio needs or home automation systems.

Which self-respecting couch potato
gets up to control the lights.™



smart living

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BEOPLAY M5 WIRELESS SPEAKER



The **BeoPlay M5** is an omnidirectional Bluetooth speaker flow through every room by connecting more Multiroom enabled speakers together and experience seamless sound. And supports both Chrome cast built-in and Beolink Multiroom technologies or can connect via Bluetooth or Apple Airplay. It's a great addition to the home system, and combines seamlessly with Beoplay A6 and Beoplay A9. Comes complete with spotify connect and Google Chromecast.

Do you “dream of a home where music flows through every room and speakers double as design objects”? Well, if you do, then according to B&O you're the perfect audience for its newest wireless speaker, the BeoPlay M5.

The M5 has three tweeters, a front-facing midrange driver, and a 5in neodymium downward-firing woofer for the low frequencies, all aiming to deliver omnidirectional sound to ensure you can place it wherever you like in your room.

Pre-set sound modes will also help with placement: free standing, corner, or wall position. These are controlled by the BeoPlay companion app on your smartphone.



On its top, a silver aluminium disc controls playback and volume; pressing the disc gently downwards will play or pause the speaker, or if you press it while it's inactive the M5 will go into pairing mode.

The M5 has Beolink Multiroom (to link to other B&O speakers, Spotify Connect, QPlay 2.0 and Apple Airplay connectivity, as well as being able to link via its built-in Chromecast to other speakers like the Beoplay A6 and Beoplay A9.

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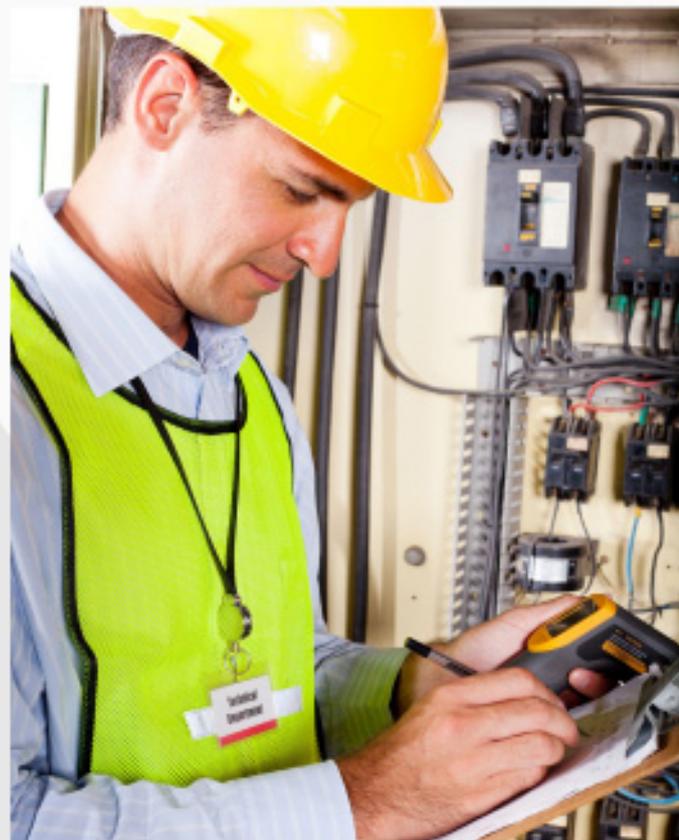
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How Innovations in IoT & Smart Buildings are creating Sustainable Work Places

As Indian economy grows at 8%, the demand for new office spaces in big cities like Bangalore, Delhi, Mumbai etc. has increased exponentially. According to a study done by CBRE, 150 Million Square feet of new office space will be ready in 2017! Most of this office space will be consumed by IT & ITES companies.

Such a rapid growth in office space naturally leads to big increase in power consumption. It is therefore natural that reduction in energy usage has become a top priority for owners of commercial and industrial buildings to help save money and also save environment in the process.

Adding to the desire to save operation costs, government and non-government agencies are increasingly demanding compliance with IGBC (LEED Green Building Standards. Examples include ASHRAE standard 90.1-2007 and ECBC 2008 and California's 2013 Title 24 Building Energy Efficiency Standards. In future several new, more stringent standards are likely to go into effect by 2020.

These changes in regulations implies that in future, businesses will need to implement technologies that enable highly energy efficient office spaces and factories and ultimately leading to zero-net-energy buildings - Office, Factory, or Warehouses.

To meet this challenge, several innovations are happening. Internet of Things (IoT) is the game changer and is enabling the revolution in managing energy requirements of buildings.

Some of the innovations include Smart LED Bulbs which can connect wirelessly to a central Building Management System - which monitors & controls the bulbs can lead to 70-80% of energy savings when compared to regular lighting. Smart sensors for Temperature, CO₂, Humidity, Motion detectors help in optimizing air-conditioning, which leads to big power savings.

In short, the need to create sustainable buildings has led to a plethora of innovations in all aspects of building management. Building are now being equipped with intelligent networked systems for controlling and managing energy-related applications. Wireless networking removes a number of limitations, such as which devices (lighting, thermostats, plug-loads and CO₂ sensors etc. can be controlled.

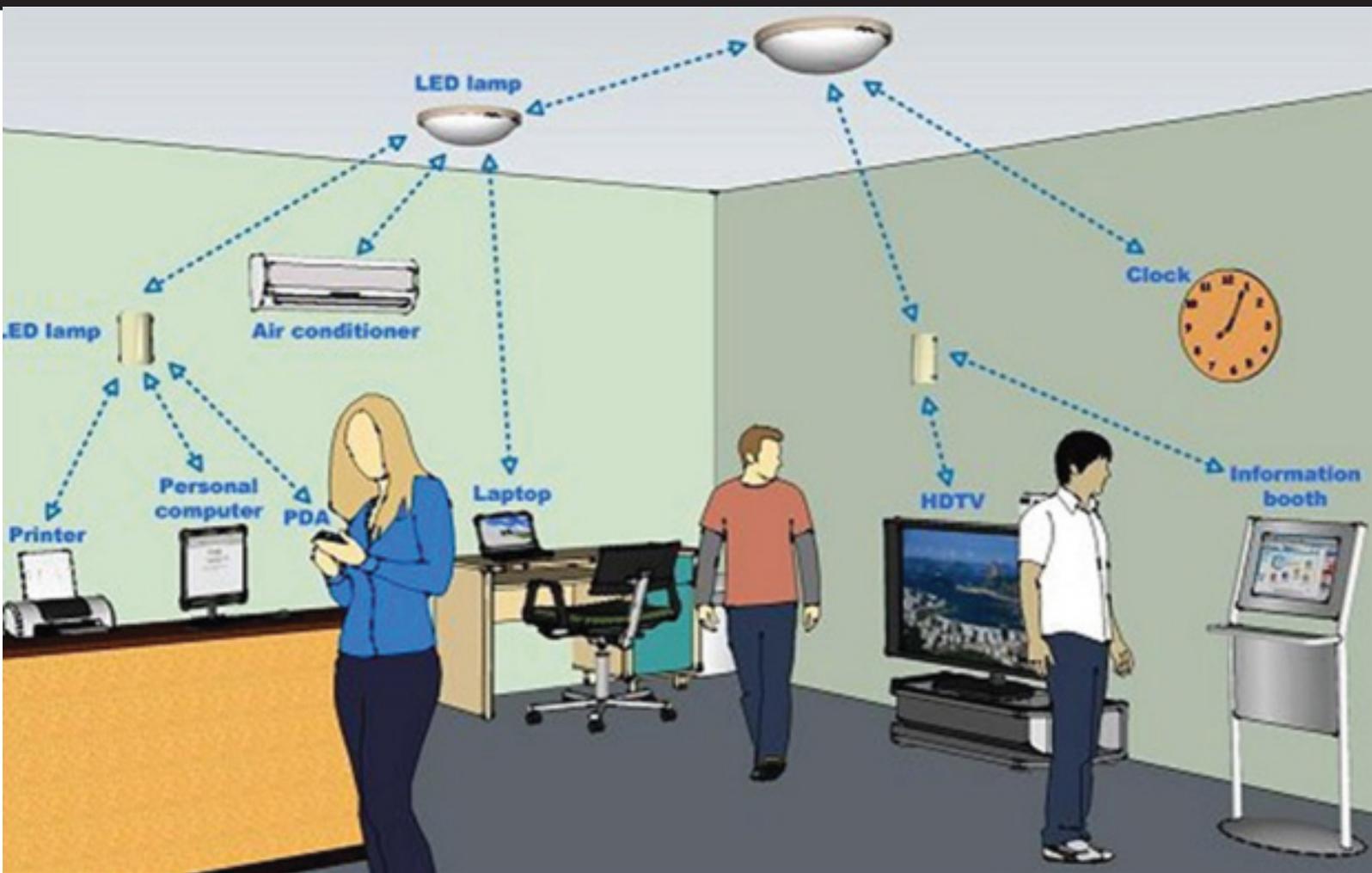
Innovations in Building Lighting

Building lighting presents on the greatest opportunity for implementing energy savings and costs. Automated lighting control systems allow lights to be turned off or dimmed to accommodate time and usage factors, providing the correct amount of light where and when it's needed. These systems can reduce building energy consumption by 70 percent or more, and when combined with LED lighting, savings can top 90 percent.

Power saving from LED alone makes a strong business case to adapt LED lighting. But LED can offer several more advantages.

The new innovation in LED lights is Li-Fi. A new light based Internet connection system that will replace Wi-Fi. Light based data transmission can transfer data at 224 gigabits per sec! Even at 1 Gbps, it is 100 times faster than Wi-Fi.

Smart lighting will provide several other benefits such as enhanced comfort to occupants, improved operational efficiencies and very fast Internet connectivity. Since the available bandwidth on Li-Fi is in several Gbps, one can create a mesh architecture where each Smart light device can connect to other devices and data is passed through the wireless network from device to device. New technologies such as Li-Fi will eliminate the need for data wiring. The savings from eliminating wiring alone is an incentive enough for many building owners to make the move to Li-Fi systems.





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Innovation in Smart HVAC Systems

Building heating & cooling is a big consumer of energy in office buildings and optimizing it with smart sensors and smart controllers will save operational costs.

Humidity, CO₂ and temperature significantly affect personal health and comfort; thus measuring humidity and temperature in this context and reacting to the changes can improve personal well-being. Applications include temperature control, humidity control and quality of air.

Smart HVAC systems can sense the various air quality parameters inside the building and can change and control it automatically and efficiently. Smart HVAC systems use sensors that distributed across the building and have VAV fans to control the ventilation system to achieve optimal ventilation. And temperature control.

Measurement of humidity and temperature can help optimize processes and thus save energy and costs. Applications include automotive engine control, smart condensation control for refrigerators and optimization of A/C cooling cycles.

Smart Temperature Sensors will enable several levels of automation. Knowing the hot & cold zones in the building from the sensors will enable HVAC controllers to direct cold air via VAV fans to the required regions and avoid cooling/heating the entire building. Such systems can reduce energy consumption by as much as 25%.

Innovation in Elevator Control & Management

A bank of Elevators have become a mandatory feature in all office buildings. All elevators have a common feature - it annoys users in several ways. Firstly it makes people wait. Secondly it is impossible to know which elevator will take you to the desired floor quickly. Often we see one elevator being filled to capacity and the next elevator going empty.

Occasionally it make people happy when the elevator goes nonstop to the desired floor. Smart Elevators are going to change this. Some of the new innovation in Elevator control and management. Instead of choosing the floor to stop after entering an elevator, users will have to enter their destination floor on a common keypad set at the bank of elevators.

The smart elevator management system instantly assigns the user to the elevator that will get him most quickly to the desired floor. Knowing how many people have similar destination allows for clustering of people into a common elevator. This allows elevators skip floors and minimizing

stops. It also prevents random cramming into the first available elevator.

Another innovation in elevator management is use the information embedded in employee smart badges which reads the floor details and even eliminate the need to press buttons!

When elevator management system is integrated to motion sensors, it can automatically shutdown elevators when there are less number of people and turn them on when number of users increase.

Smart Elevators not only gets the users with less waiting, but the system saves energy and equipment wear by minimizing empty trips. Smart elevators also enhance user comfort by reducing waiting time and enhance user experience!

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Innovation in Water Efficiency

Water is fast becoming one of the scarce resource all over the world. In India, we are already seeing critical water shortages. It may be our most precious resource. Where alternatives exist for energy sources, but there are no alternatives to water. It therefore makes sense to look at innovative solution to improve water management and improve water efficiency.

Office buildings require large amounts of water for Landscaping, HVAC chillers, toilets and taps/faucets. Water also has a direct connection to energy use. Every gallon or liter of water used may require some pumping or treatment which uses energy. Reducing potable water uses reduces energy consumption.

In most office buildings, monitoring and management of water is generally pathetic. How many facility managers can monitor and manage real-time water use in their buildings? Water is often seen as cheap and limitless resource.

Office buildings have two main needs for water. One is the plumbing system within the building

and the other is the irrigation system for the building's landscape.

Green Building codes in form of USGBC LEED Certification in US or IGBC Certification in India, have defined building codes that specifies the type of fixtures, water recycling requirements, usage of recycled/ reclaimed water and water metering systems.

For real savings in water usage, one must use smart technologies such as smart water meters which can detect leakage and alert facility management. Smart meters can record water usage for specific areas and generate reports & alerts when the usage pattern changes or crosses set thresholds.

Smart irrigation control systems can take inputs from weather monitors, timers and soil moisture sensors and then regulate the amount of water used for landscaping or irrigation.

Smart water management systems that monitors and manages water usage that will change the process from simply supplying water to managing the demand for water - thus saving water and reducing costs.





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Innovations in Building Management Systems

Buildings today use complex systems. Each component inside a building has been developed and improved, allowing modern-day building owners to select lighting, security, heating, ventilation and air conditioning systems independently.

For real savings, buildings must connect the various pieces in an integrated, dynamic and functional way. Smart building management systems will seamlessly integrate disparate systems while minimizing energy cost, supporting a robust electric grid and mitigating environmental impact.

At the most fundamental level, smart buildings deliver useful building services that make occupants productive (e.g. illumination, thermal comfort, air quality, physical security, sanitation, and many more) at the lowest cost and environmental impact over the building life cycle.

Today, Building Management Systems aggregate all data sources and data analysis tools can generate previously unattainable insights in real time.

For example, building management systems monitor multiple HVAC systems and detect performance anomalies. When HVAC systems in the campus have different power consumption - then the BMS will flag this alerting maintenance crew to find & fix the issue.

Smart building management system looks beyond the equipment and uses data from each system (Lighting, HVAC, Security, water meters etc.) to optimize total building performance. It allows buildings to be responsive to smart power grid and interacts with building operators to empower them with new levels of visibility and actionable information.

Imagine predicting when equipment is about to break down. Imagine having clarity into which retrofits can get you the highest ROI, before any project has even started. Imagine automating your lights so that when you are approaching peak demand, they dim automatically. Holistic building data analysis are at the heart of the hidden insights which were previously impossible to find.

Smart Technologies are more valuable when they are connected. Data is meaningful only when it is holistic. Siloed data causes more harm than good. That's why smart building management systems connect various systems, thus enabling completely automated buildings that enhance user comfort and productivity and lower costs in the process.

Closing Thoughts

Today, new building management software systems can collect data, organizing it, normalizing it and highlighting actionable insights which are then used to identify, quantify, implement and verify efficiency improvements.

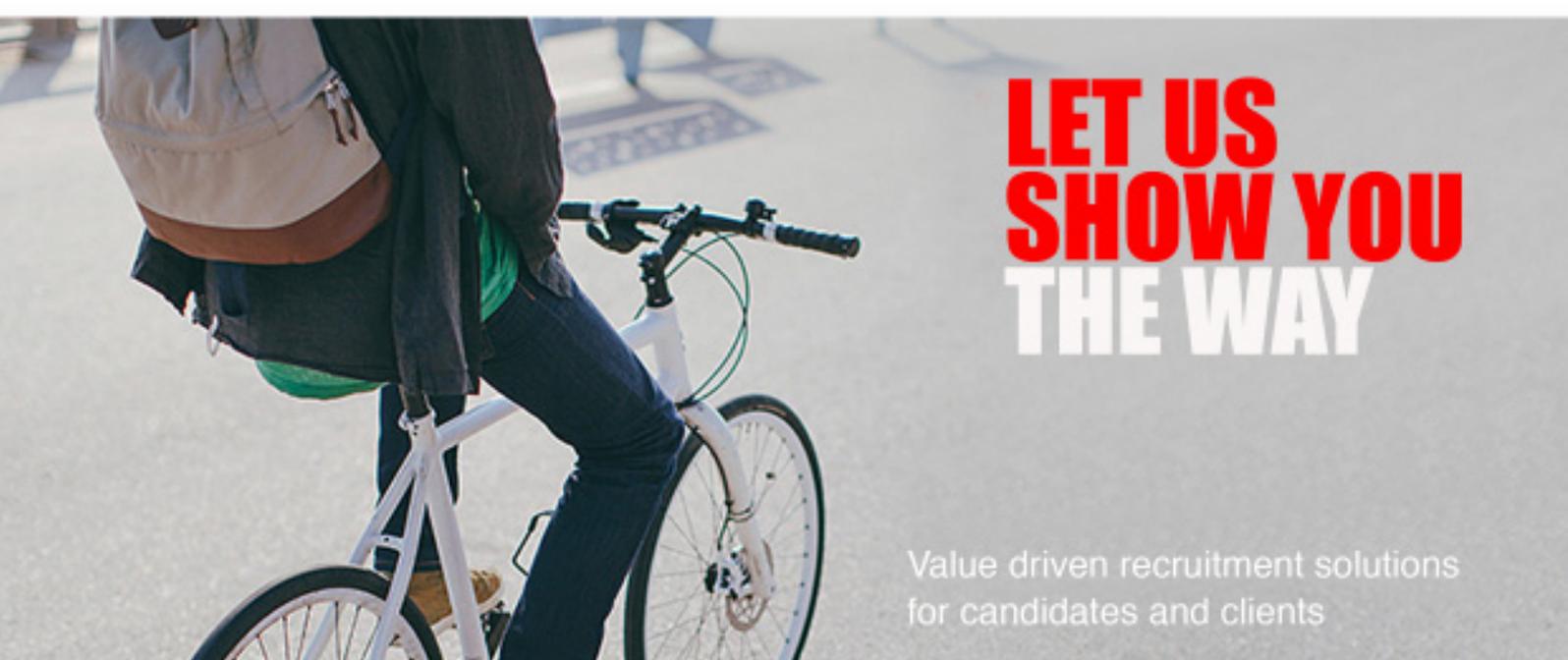
At the heart of smart buildings lies IoT. A set of connected smart objects that create a powerful impact on how people interact with their environment.

Innovations in IoT is driving Smart buildings which not only improve energy & cost efficiency, but also increase the productivity of people working in those buildings. Data collected from smart systems helps architects and construction engineers to build better and smarter buildings that leads to real saving and create less impact on environment.

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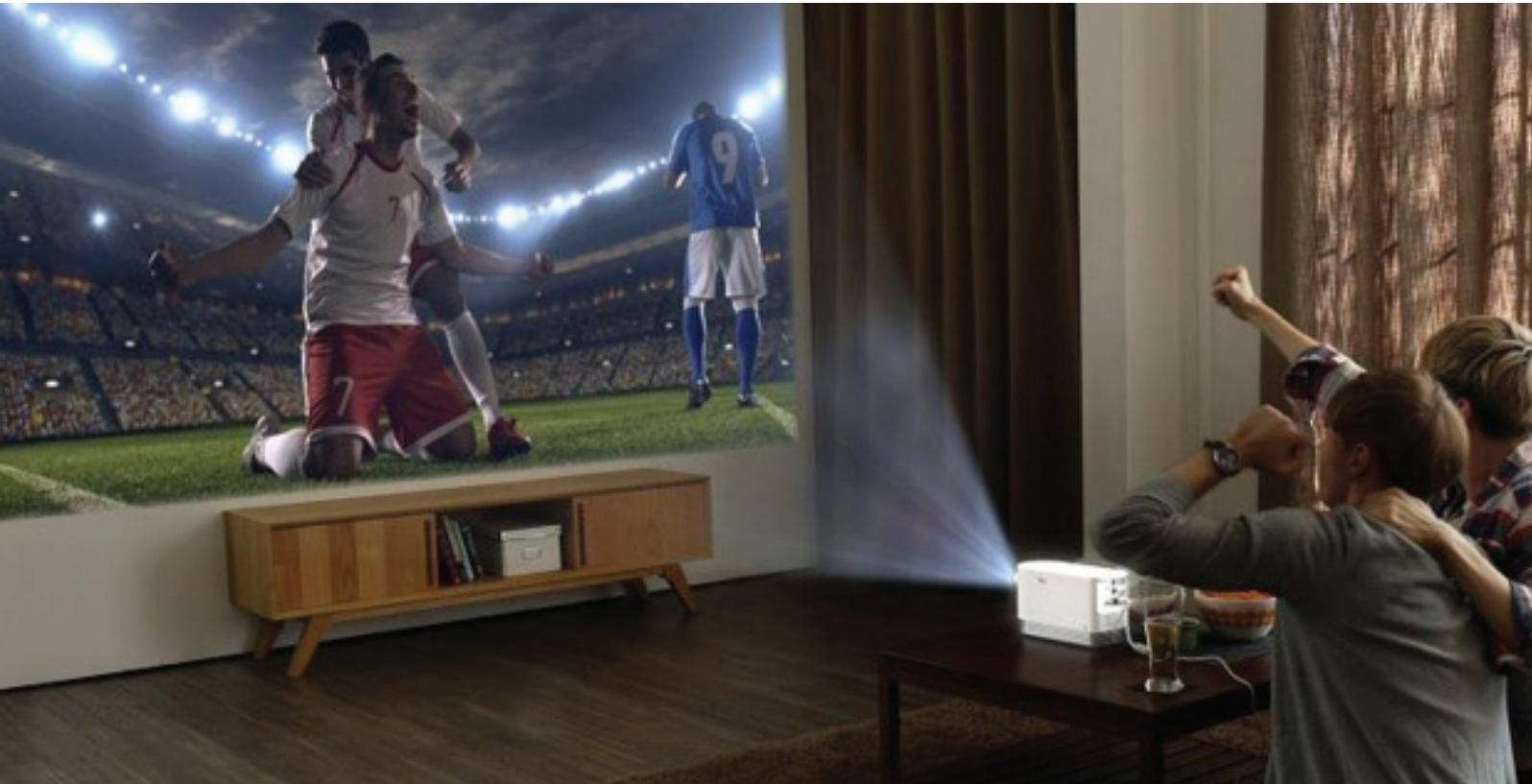
NEW LASER PROJECTOR FOR HOME CINEMA

High performance and the versatility to go outside the comforts of one's living room to enjoy movies and TV programs anytime, any where, is the promise of the new laser projector from LG.



On show at CES 2017, in Las Vegas, the LG ProBeam, model HF80J, is ideal for the home cinema experience because it is equipped with an advanced laser engine that produces up to 2,000 lumens of brightness, enabling viewers to enjoy video content even in a bright room. The LG ProBeam has a slim, sleek design which makes it more portable thanks to its innovative I-shaped laser engine. Employing a compact standing-type design, LG developed the 2.1kg (4.6 pounds) ProBeam as the industry's lightest Full HD laser projector in the brightness range of 2,000 lumens. In addition, the ProBeam's classic look allows it to blend in with any interior décor.

With the innovative Sound Sync Adjustment, the LG ProBeam can be paired with any Bluetooth audio product such as an external speaker or headphones. What's more, the LG



ProBeam's Wireless Mirroring feature takes advantage of Miracast to project content from smart devices onto a large projection screen. The unique four corner keystone and vertical auto keystone features allow consumers to find the best image setting and to balance images quickly and easily.

Consumers will have access to the growing number of streaming services and relevant programs according to their preferences via LG's award winning webOS platform. In addition, LG's Magic Remote Control allows for easy navigation of the webOS Smart TV interface. And with webOS, users can easily access the growing number of streaming services depending on location and availability. These dynamic features make it easier to enjoy movies in living rooms, to watch exciting sporting events in backyards, and to take the LG ProBeam even on camping trips. Or, to use it professionally to show filmed material to clients, anywhere.

“As a leader in LED projectors worldwide, LG is confident its experience in the home entertainment sector will make its first laser projector a hit with consumers,” said Brian Kwon, president of the LG Home Entertainment Company. **“LG is proud to continue pioneering new ways to enhance the home cinema experience in dynamic ways.”**

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LG's new laser projector will be on display at CES in Central Hall Booth #11100 from Jan. 5-8 in the Las Vegas Convention Centre.



**Li - Fi has just been
tested in the real
world, and it's 100
times faster than Wi-Fi**

Expect to hear a whole lot more about Li-Fi - a wireless technology that transmits high-speed data using visible light communication (VLC) - in the coming months. With scientists achieving speeds of 224 gigabits per second in the lab using Li-Fi earlier this year, the potential for this technology to change everything about the way we use the Internet is huge.

And now, scientists have taken Li-Fi out of the lab for the first time, trialling it in offices and industrial environments in Tallinn, Estonia, reporting that they can achieve data transmission at 1 GB per second - that's 100 times faster than current average Wi-Fi speeds."We are doing a few pilot projects within different industries where we can utilise the VLC (visible light communication) technology," Deepak Solanki, CEO of Estonian tech company, Velmenni, told IBTimes UK.



"Currently we have designed a smart lighting solution for an industrial environment where the data communication is done through light. We are also doing a pilot project with a private client where we are setting up a Li-Fi network to access the Internet in their office space."Li-Fi was invented by Harald Haas from the University of Edinburgh, Scotland back in 2011, when he demonstrated for the first time that by flickering the light from a single LED, he could transmit far more data than a cellular tower. Think back to that lab-based record of 224 gigabits per second - that's 18 movies of 1.5 GB each being downloaded every single second.

The technology uses Visible Light Communication (VLC), a medium that uses visible light between 400 and 800 terahertz (THz). It works basically like an incredibly advanced form of Morse code - just like switching a torch on and off according to a certain pattern can relay a secret message, flicking an LED on and off at extreme speeds can be used to write and transmit things in binary code.

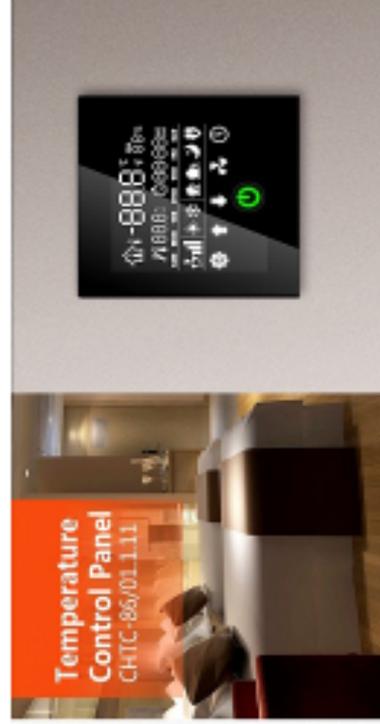
And while you might be worried about how all that flickering in an office environment would drive you crazy, don't worry - we're talking LEDs that can be switched on and off at speeds imperceptible to the naked eye.



7" Touch Screen CHVD-0701.1

Functions

- It comes with function of smart-home control, and video-door phone (optional)
- With the breathing lamps around the base of screen and color adjustable lights
- With the function of proximity sensor, the screen starts automatically when people approach
- With the magnetic absorption application, the touch panel is easy to take and install
- Compatible with Android APP, and users can download and install it by themselves
- With multi-joint touch screen, gravity sensor, vibration motor function
- The screen can be connected to KNX system directly, without via any converter



Temperature Control Panel CHTC-86/01.1.1.1

Functions

- With capacitive touchscreens tech., and high-contrast screen to achieve excellent display
- The panel has its own sensor to detect and display rooms' temperature and humidity
- Function of temperature control, with temperature control algorithm by itself
- Function of cycle timer
- Display clock and week. Time can be updated via KNX net
- Backlight brightness is adjustable
- Function of warning tone. Panel warns when button is pushed, and this function can be activated/ deactivated via ETS
- 1-fold input for thermostat sensor



Smart Home Control Software

Functions

- Switching
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- Conditioning
- Security
- TV
- Scene
- Scene
- Value sensor



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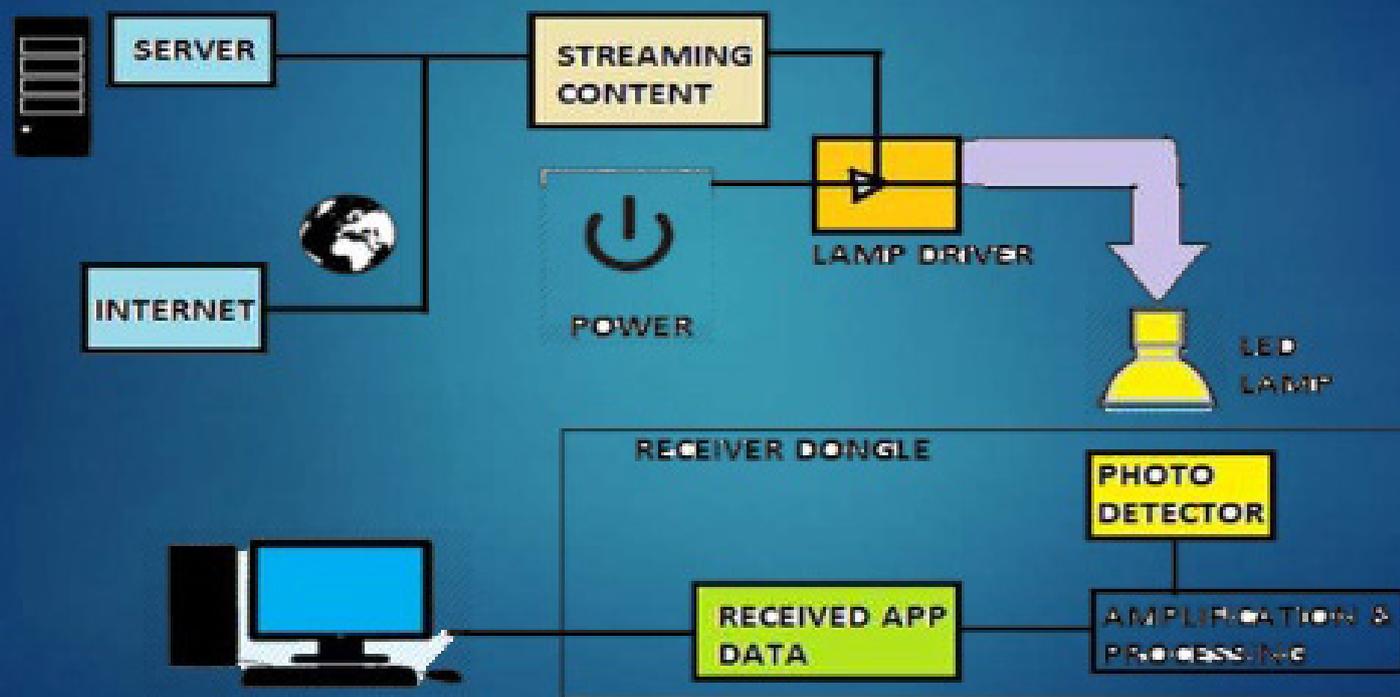
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Architecture of Li-Fi



The benefits of Li-Fi over Wi-Fi, other than potentially much faster speeds, is that because light cannot pass through walls, it makes it a whole lot more secure, and as Anthony Cuthbertson points out at IBTimes UK, this also means there's less interference between devices.

While Cuthbertson says Li-Fi will probably not completely replace Wi-Fi in the coming decades, the two technologies could be used together to achieve more efficient and secure networks.

Our homes, offices, and industry buildings have already been fitted with infrastructure to provide Wi-Fi, and ripping all of this out to replace it with Li-Fi technology isn't particularly feasible, so the idea is to retrofit the devices we have right now to work with Li-Fi technology.

Research teams around the world are working on just that. Li-Fi experts reported for the The Conversation last month that Haas and his team have launched PureLiFi, a company that offers a plug-and-play application for secure wireless Internet access with a capacity of 11.5 MB per second, which is comparable to first generation Wi-Fi. And French tech company Oledcomm is in the process of installing its own Li-Fi technology in local hospitals.





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If applications like these and the Velmenni trial in Estonia prove successful, we could achieve the dream outlined by Haas in his 2011 TED talk below - everyone gaining access to the Internet via LED light bulbs in their home.

“All we need to do is fit a small microchip to every potential illumination device and this would then combine two basic functionalities: illumination and wireless data transmission,” Haas said. **“In the future we will not only have 14 billion light bulbs, we may have 14 billion Li-Fis deployed world-wide for a cleaner, greener, and even brighter future.”**

Thoughtful Home with AIR



We think our homes should know when we are at home and when we are not. They should know that we like it cool in the morning and cozy at night. They should know we want the geyser in the morning and cooling ON when we get back from work. They should give us a nudge if something wrong is happening in the house or when the kids got back from school. So no matter where you are you will know everything back home is OK. When all the appliances in the house could talk to each other and work together to keep you comfortable and safe, you can focus on things that really matters, people you care for.

AIR makes your home thoughtful. It enables all your appliances to talk to each other, it learns your preferences and habits to enable these appliances to work together for you. So you don't have to curl up in the morning because it was too cold and you don't have to wait for your room to cool when you get back from work. It gives you a notification if there is an emergency like fire or intrusion in the house. It also saves you energy on your electricity bills. Now that's a smart home!



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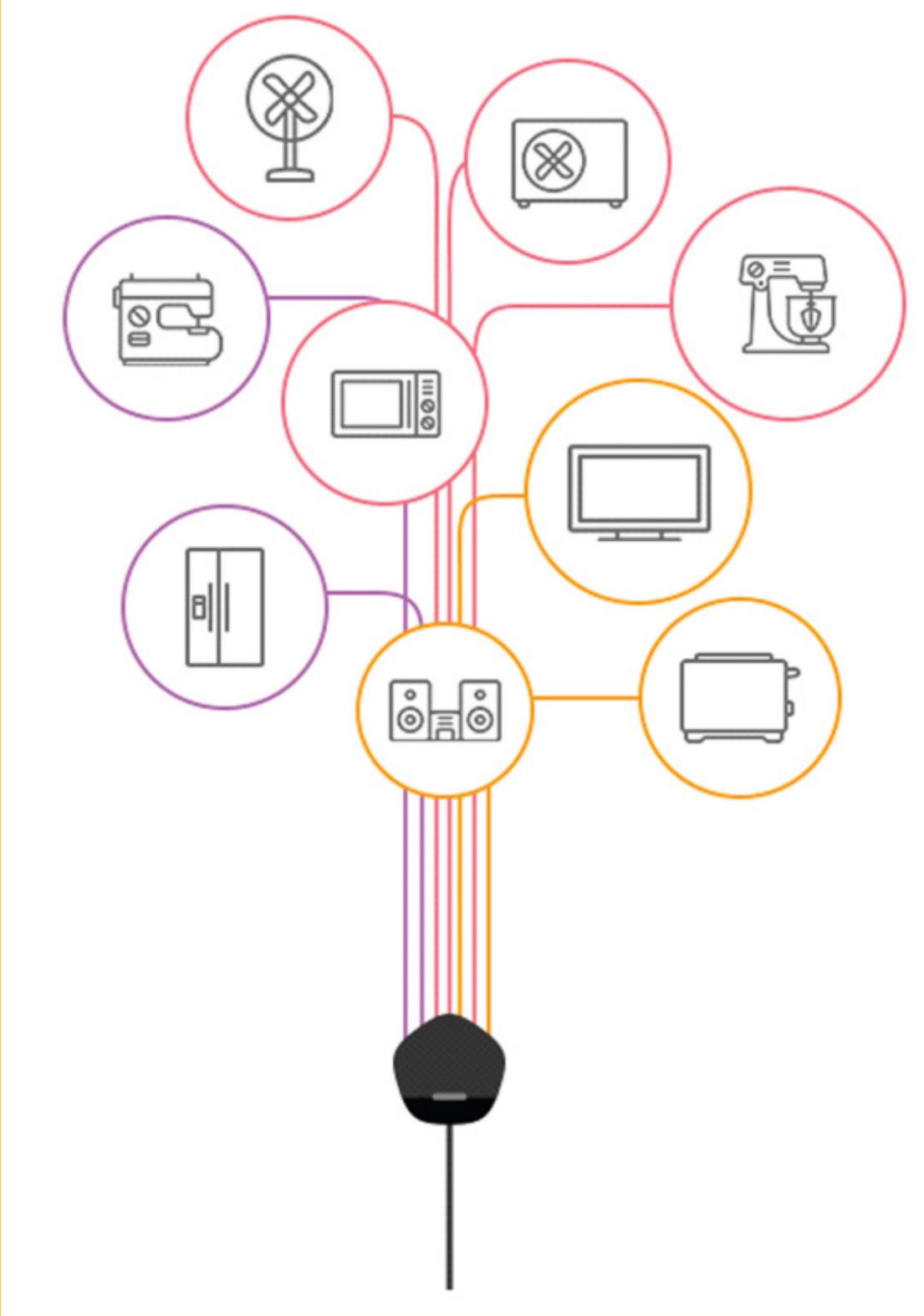


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Our house are full of appliances. Appliances we bought to make our lives better, more comfortable. But these appliances always wait us to tell them what to do. Our Vision with AIR is to make our homes thoughtful. So that our appliances can notice and learn from us, so we don't have to tell them every time what to do and also they could function when we are not around.



We transform your home to a **smart secured & energy efficient** living space

What we offer – Monitor and control every aspect of your home from anywhere in the world through our intelligent home automation solution.



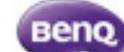
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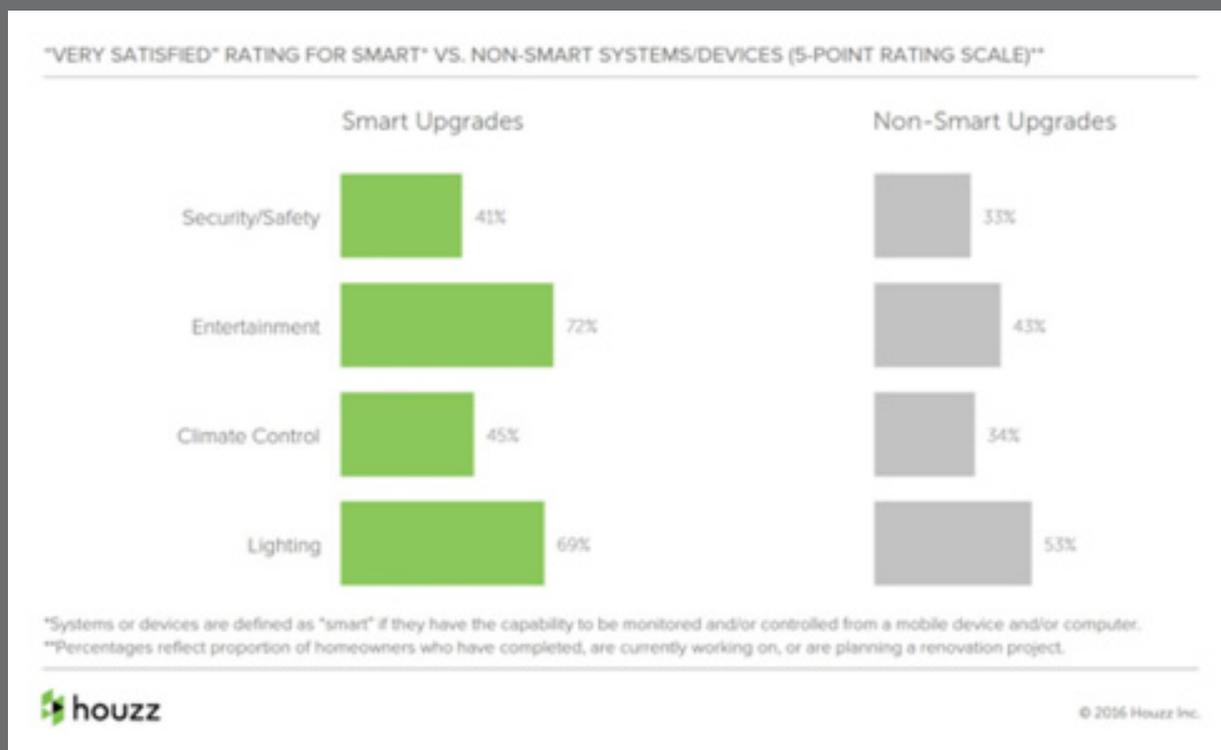
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Smart Home Technology Trends for 2017

The adoption of smart home technologies—security systems, entertainment, lighting and climate control—continues to rise, with nearly half of homeowners (45%) incorporating smart systems or devices during their renovation projects (Houzz).

With that in mind, we've compiled a list of our top 5 highlights from 2016, and (our predictions for) the top five trends of 2017. Scroll down for more details.



Highlights: Smart Home Technology in 2016

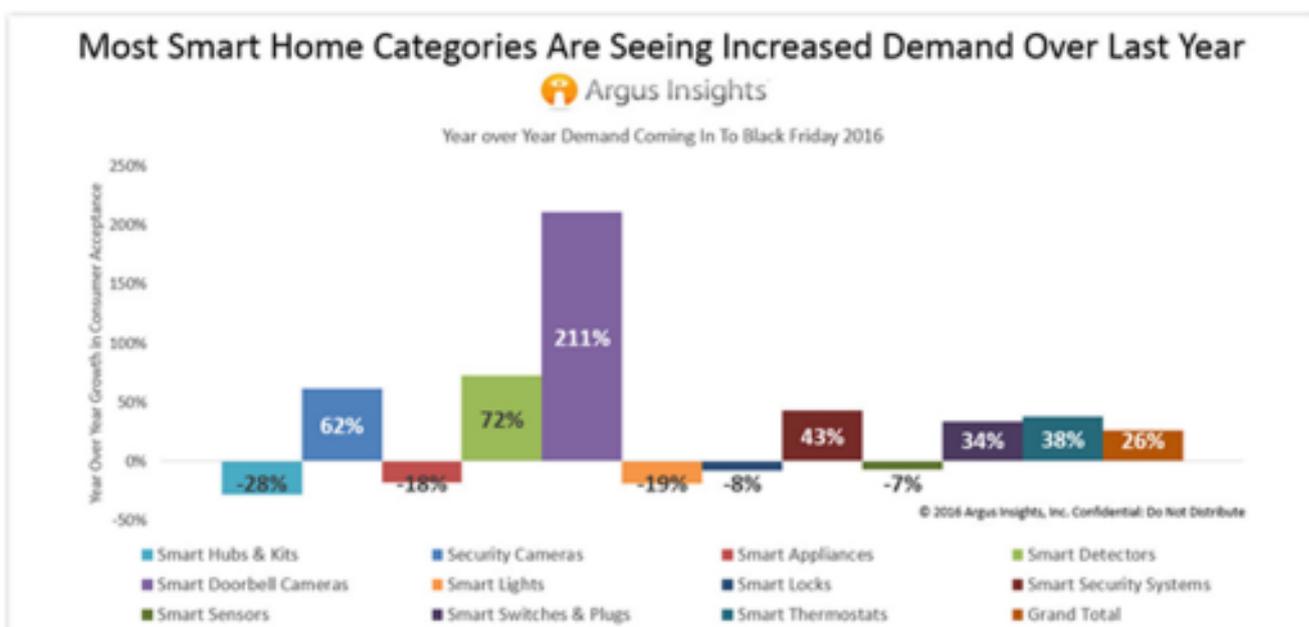
- **Connected thermostats** add comfort while dramatically reducing energy consumption within the home. Perhaps that's why they've become "the single most popular smart device in a renovated home," according to Houzz.
- **Lighting Design** has never been so elegant nor so experience driven. Set scenes to come home to. Light pathways through your home at night. The options are endless.
- **Voice controlled devices** are the star child of 2016 and made our list of Smart Home Technologies in 2017.

Advancements in **whole home automation systems** allow homeowners to adjust lighting, music and temperature; monitor security systems; and manage home entertainment systems from one easy-to-use application.

Top 5 Smart Home Technology Trends for 2017

There's a lot of momentum for 2017 as new technologies continue to hit the market and more comprehensive integration capabilities are developed.

Here are our top 5 trends to watch in 2017.



1. Increased partnerships across technologies allow users to cherry-pick the products that work best for them, and integrate functionality across a user friendly network. Our favorite collaboration: Sonos' integration with Lutron.
2. "According to new report from ABI Research: "Voice controlled smart home devices, a device category that barely existed just two years ago, is expected to represent almost 30 percent of smart home device spending by 2021" (Security Info Watch).
3. Smart home security systems are on the rise, with smart doorbell cameras and smart detectors leading the way in increased demand (according to Argus Insights, see chart below). And while peepholes have always been awkward, these technologies are solving more than the puzzle of what's outside. Get notified about fire or gas problems. Monitor and control locks wherever you are. Maybe even help solve a neighborhood crime. Our pick: Doorbird (which integrates well with Control4).
4. This might be because we live in Colorado (where we get sun 300 days/year) but the smart home technologies for outdoor living have folks stepping up their back yards for year round entertainment. Our picks for outdoor smart entertainment: Ruckus Wireless for outdoor network connection, Sonance for outdoor audio, and Seura for outdoor TV.
5. New 4K and HDR televisions offer unbelievable picture quality, featuring 4 times more detail than standard high definition (to be exact). The result: stunning detail, vibrant colors, and a wholly renewed viewing experience. Our pick: the Sony 4K Ultra HD TV.