



LIGHTING



Facilitating smart opportunities with advanced smart lighting

India's demand for automated lighting equipment will be boosted by the availability of automated and digitally addressable dimmable lights.

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With the government's plan to have 100 smart cities in India, how do you view the demand for smart and efficient lighting in commercial and residential segment?

Globally, lighting as an industry is growing at an alarming pace with projected value of around US\$ 2000 million. This decade is going to witness phenomenal changes in the field of lighting. The last decade's thrust was energy saving measures, which gave rise to the LED lighting to replace all other conventional lighting. Application of solid state devices as a source of lighting has given way to new concepts in lighting control and automation. Gone are the days when our options were just limited to the lighting with OLS lamp or FTL lamp with just one off control. Now, the general public are well informed and have started prescribing the lumen requirements, watt per lumen, lighting control, and above all IOT (Internet of things) compliance etc. The order of the day is smart (green) concept in every field viz., smart home, smart city, smart pole, smart lighting, etc. With regard to lighting, smart lighting is a lighting technology designed for energy efficiency. This may include high efficiency fixtures and automated controls that make adjustments based on conditions such as occupancy or daylight availability through lighting control system with an intelligent networked system of devices. These devices may include relays, occupancy sensors, photocells, light control switches or touch-screens, and signals from other building systems.

With the government's plan to have 100 smart cities in India, the demand for smart and efficient lighting in commercial and residential segment is

going to be a major challenge. The availability of automated changes with the digitally addressable dimming interface, drivers with CCT tuning capability and many other devices, will drive the consumers in smart cities to demand for automated changes in lighting levels to affect mood, emphasise architecture, illuminate art, and influence action.

How are IT, IIoT and automation enabling the industry to meet the demand of energy efficient lighting for smart cities?

Smart cities use Internet of Things (IoT) devices such as sensors, lights, and meters to collect and analyse data. The cities then use this data to improve infrastructure, public utilities and services, and more. Smart cities ensure that their citizens get from point 'A' to point 'B' as safely and efficiently as possible. IOT usage has facilitated for (a) Smart parking (b) Smart street lighting control, (c) waste management, etc.

Transformation of all cities (Tier 1 and Tier 2 to start with) has potentially increased bulk orders to the manufacturers and in particular the lighting business and the demand are expected to grow fast in the years to come.

How is the lighting sector contributing in cutting down the environmental impacts and CO2 emissions?

It is only after energy crisis / global warming due to various factors including environmental degradation etc., and the absolute need for energy saving measures were tightened, the possibility of substituting LEDs as a light source in the place of conventional sources like mercury vapour/SV

