

# Industrial Lighting & Automation



## SMART FACTORY



## Switching Automation

- Handsfree automated switching of lights by using standalone PIR/HF sensors.
- One sensor can connect up to 600W LED lights for occupancy based ON-OFF.
- 6/8/12/20/24/32/40 meter detection range models available (360°).
- Detection control mask provision.

## HVAC / Fan Automation

- Automated ON-OFF switching of Light + A/C or fan by using 2 channel PLUS sensor.
- One channel for lights up to 600W and the other channel for HVAC or fan up to 2300W load.
- Option of push button and or remote control for manual override.
- 8/24/32 meter detection.

## Outdoor Light Control

- Fixture inbuilt or panel inbuilt twilight switches for dusk to dawn automated switching of outdoor Lights.
- Wall mounted twilight switches for area lighting (with or without timer option).



## Highbay Sensor Automation

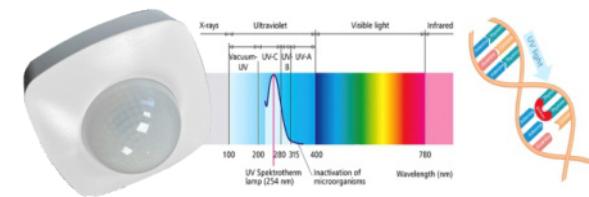
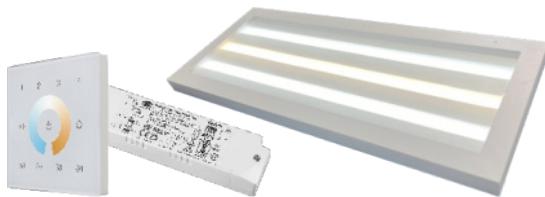
- 1-10V analogue dimming standalone sensors for highbay/high mounted light control.
- Occupancy based switching, Daylight harvesting, Auto dimming & Orientation lighting.
- One sensor to control up to 400W highbay load.
- Mounting height up to 15 meter.
- Up to 24 meter detection.

## Daylight Harvesting-DALI

- Daylight Harvesting-DALI
- Daylight harvesting & dimming for office lighting by DALI broadcast sensors.
- One sensor can connect up to 25 DALI fixtures.
- Occupancy based switching, daylight based dimming, orientation light etc. are some features.
- Push button and remote options for manual override. 6/8 meter options.

## Meeting Room Automation

- All in one DALI-DUO sensor for meeting room automation.
- This standalone sensor can connect up to 50 DALI devices. Any non DALI device like A/C, projector etc.
- Can also be connected by using suitable DALI relays as accessory.
- Scene control by remote/push button.



## Speciality Lighting

- Paint shop lighting & automation for automobile industry
- Vehicle body color based CCT change
- Dimming and CCT Tunable scenarios for better defect identification
- Uniform illumination
- Highly reliable and long life luminaire
- Available with control system

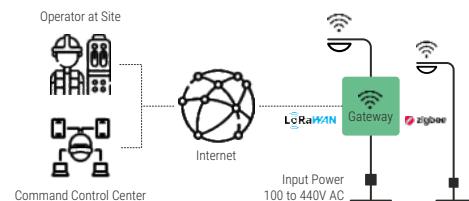


## LMS & BMS DALI-2 APC Multi Room Control

- DALI-2 Lighting management systems & building management systems for indoor lighting control.
- For open offices, Conference rooms & entire building

## Lighting Scene Control

- DALI lighting controllers for dimming, CCT Tuning and scene controls.
- Best for creating different intensity and CCT of lights for office area, VC rooms, Conference rooms, Inspection area, Painting area etc.
- Connect up to 50 DALI devices/DALI lights per controller



## CCMS – Outdoor

- Wireless CCMS (Centralized Control & Monitoring Systems) for outdoor and area lights.
- IoT based controllers, Gateway, & software for wireless CCMS.
- Remote control, Monitoring & scheduling.

## UVC Control For Disinfection

- UVGI (Ultraviolet Germicidal Irradiation) and disinfection management by using 2 channel UVC sensor.
- One channel for general lighting and the other channel for UVC light switching.
- This sensor prevents UVC light exposure to human being.
- Up to 16 meter detection range (360°)



## Human Centric Lighting

- POE + DALI controller & tunable luminaires with patented German technology for human centric lighting.
- Biological effective lighting & emotional effective lighting together.
- For board rooms/conference room/R&D room



## Modular Highbay

- Modular Highbay specially designed for Industrial applications.
- Tilttable wings to get maximum coverage on machine areas.
- Available both dimmable & non dimmable options.
- Compatible with ON-OFF or daylight harvesting sensors for energy saving.



## Round Highbay with Optics

- UFO type round highbay with 60/90/120 degree optics options.
- Available in various wattages.
- Up to 145 LPW options available.
- Available both dimmable & non dimmable options.
- Compatible with ON-OFF or daylight harvesting sensors for energy saving.



## Linear Highbay

- Linear modular highbay specially designed for vide coverage.
- 1/2/3/4 modules options with each modules at 50W.
- Available both dimmable & non dimmable options.
- Compatible with ON-OFF or daylight harvesting sensors for energy saving.



## Multi Modular Highbay

- Multi modular highbay expandable up to 1000W.
- 60/90 degree optics options.
- Available both dimmable & non dimmable options.
- Compatible with ON-OFF or daylight harvesting sensors for energy saving.



## Industrial Linear

- Industrial grade linear fixture suitable for 24 Hrs Industrial application.
- Isolated encapsulated LED driver.
- Low UGR Diffuser.
- Available in 28/30/36W.
- Non dimmable and dimmable options.
- Compatible with both ON-OFF and dimmable sensors.



## Clean Room Fixtures

- Cleanroom fixtures of all types.
- Top opening or bottom opening.
- Available in 2x2, 1x1, 2x1 sizes.
- 20/30/36/42/60W option.
- Dimming/non dimming options available.
- Available with or without inbuilt sensors.
- Compatible with ON-OFF or auto dimming sensors.



## Well Glass

- Industrial well glass 30/40W with transparent/milky diffuser.
- Available with inbuilt driver.



## Flood/Highmast Lights

- Flood light fixtures for outdoor applications.
- Specially designed for area lighting and also high mast lighting.
- Options of narrow/wide beam optics.
- Available in various wattages.
- Dimmable/non dimmable options.
- Compatible for wireless lighting control with ILC.



## Diffuser Highbay

- Fabricated linear high bay with diffuser.
- Available in 150/300W.
- Dimmable/non dimmable options available.
- Inbuilt sensor options.
- Compatible with ON-OFF sensors or dimmable sensors when used with relevant LED drivers.



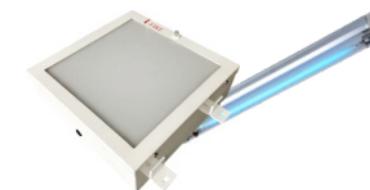
## Street Lights

- Street lights for various outdoor applications.
- COB/SMD LED options.
- Wide range of beam angle.
- Available in various wattages.
- Dimmable/non dimmable options.
- Compatible with Dusk to Dawn sensors/Wireless communications.



## Office Lighting

- Wide range of office lighting fixtures with Low UGR.
- 2x1, 4x1, Linear, Down lights, Surface mounting / Recess mounting fixtures for all application.
- With or without sensors.
- Dimmable/Non dimmable options.



## Fire Escape & UV Lighting

- Maintained or non maintained fire escape lights specially designed for industrial emergency applications.
- UVC disinfection lamps available with fixtures and also with compatible sensors.

DIGITALIZATION



## SHOP FLOOR

- **Renovation:** Switch to high efficacy LED lights (preferably modular) with suitable optic lenses for lower power consumption & higher reliability.
- **Upgrade:** Use Daylight Harvesting Sensors coupled with dimmable high bays.
- **Digitalization:** Wireless / Wired Lighting management Systems (LMS).



## LOW HEIGHT ASSEMBLY AREAS

- **Renovation:** Replace Domestic grade LED battens to Industrial grade linear LED Lights (with isolated driver & High efficacy LED)
- **Upgrade:** Use occupancy sensors for lights (Inbuilt / Standalone) , Use PLUS Sensor for Light + Industrial Fan auto ON-OFF



## WAREHOUSE/STORE AREA

- **Renovation:** Switch to High efficacy LED Lights. Linear Modular High bays for Heighted bays. Industrial Grade Linear LED Light for low height isles.
- **Upgrade:** Occupancy Sensors at the entry & exit of Isles, High bay Sensors up to 15 Meter Heighted lights.

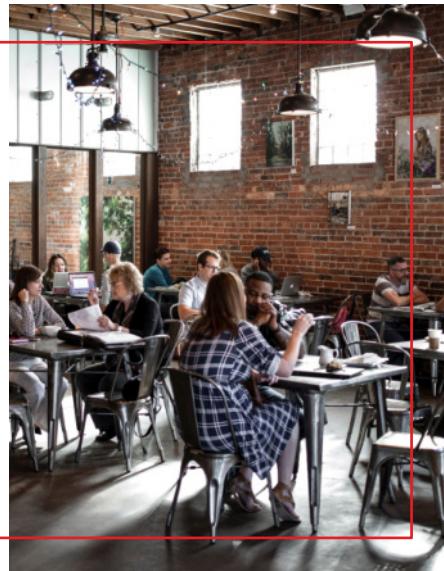


## INSPECTION AREA

- **Renovation:** Improve Lux level by customized luminaires. Switch to 90 CRI.
- **Upgrade:** (1) Sensors for occupancy based ON-OFF (2) Scene Controls with various light intensity (3) Tunable lights with CCT Tunable Controllers for colored object inspection.

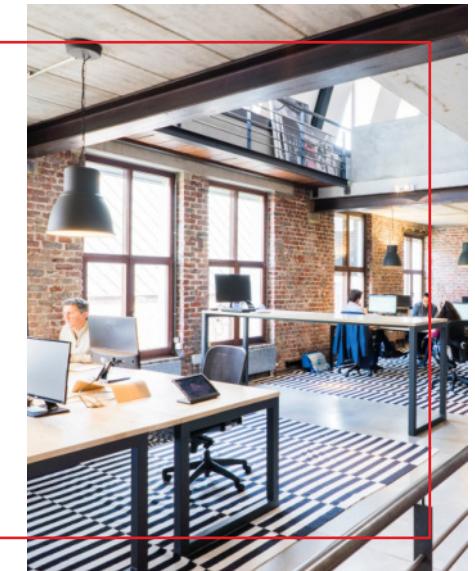
## CANTEEN AREA

- **Renovation:** Switch to High efficacy LED Luminaires
- **Upgrade:** (1) Sensors for Occupancy based ON-OFF (2) Plus Sensor for automated ON-OFF of Lights + Fan (3) UVC Lights & Sensors for disinfection.



## OPEN OFFICES

- **Renovation:** Switch to high efficacy LED lights with low UGR (Unified Glare Ratio), for higher performance.
- **Upgrade:** (1) ON-OFF Sensor for Occupancy based switching (2) DALI Dimmable Sensors for Daylight Harvesting (In case of glass façade / window)
- **Digitalization:** DALI-2 Lighting Management System



## EXECUTIVE CABINS

- **Renovation:** Switch to High efficacy LED Luminaires with low UGR
- **Upgrade:** (1) PLUS Sensor for Lights + A/C (2) DALI Dimming Sensors for daylight harvesting & Dimming (3) Human Centric Lighting.

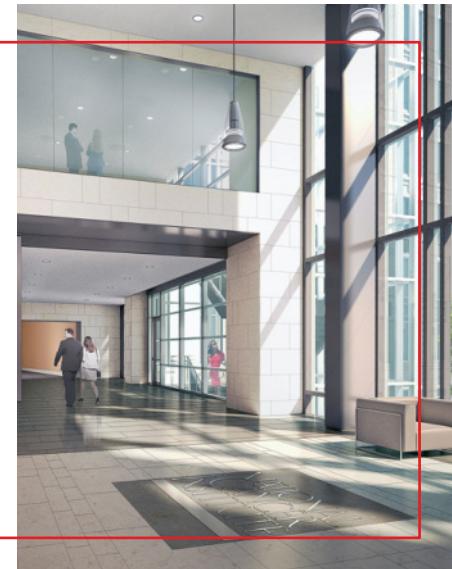


## CONFERENCE ROOMS

- **Renovation:** Switch to High efficacy LED Lights
- **Upgrade:** (1) DALI-DUO Sensor for Lighting Scenarios (2) DALI touch panels for dimming (3) Human Centric Lighting

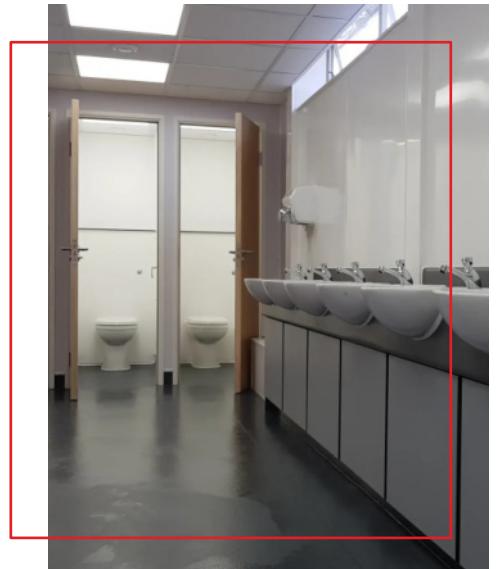
## PASSAGES, STAIRCASES & LOBBIES

- **Renovation:** Switch to High efficacy LED Lights
- **Upgrade:** (1) ON-OFF Sensor for Occupancy Switching (2) DALI Dimmable Sensor for Orientation Lighting (3) Dimming Driver Cum Sensor



## WASH ROOMS

- **Renovation:** Switch to High efficacy LED Luminaires
- **Upgrade:** (1) Sensors for Occupancy based ON-OFF (2) Sensor for Light + Exhaust fan (1 Channel or 2 Channel)



## OUTDOOR LIGHTING

- **Renovation:** Switch to High efficacy LED Luminaires
- **Upgrade:** (1) Dust to Dawn Sensors for Day-Night Switching
- **Digitalization:** (2) CCMS – Feeder level (2) Wireless Lighting Controller – Individual Dimming & Scheduling



## COST SAVING

- Conventional Lights to LED – 55% energy saving
- Change over to High efficacy LED – 30% energy saving
- Occupancy based ON-OFF (Sensors) – 35% energy saving
- Daylight Harvesting (Auto Dimming) – 20-25% energy saving
- Savings from Auto Switching of A/Cs & Fan (fast payback)



## HEALTH & SAFETY

- Many Intangible benefits from Human Centric Lighting
- Better Sleep, Reduced errors, enhanced creativity
- UVC Germicidal Irradiation help healthy work space
- Fire escape lighting for emergency evacuation



## INDUSTRY 4.0 BENEFITS

- Remote Control & Monitoring from LMS & BMS
- Data analytics & Control
- Dash board control
- Fault alerts
- All electrical devices on single dash board control



## SUSTAINABILITY

- Carbon Foot Print Statistics:
- 0.95kg Carbon emission / 1KWhr electricity
  - 1 Tree required for 160kg carbon neutral
  - High efficacy LEDs, Demand Driven Switching & Daylight Harvesting save huge amount of energy, thus reduce carbon emission drastically !





**iTvis**<sup>®</sup>  
— Lighting First —

Head Office: 13th Floor, B-Wing,  
Peninsula Business Park,  
Senapati Bapat Marg, Lower Parel (W),  
Mumbai - 400 013, India.

**Experience Center - Bengaluru**  
No.61/1. PID No. 15-9-61/1.  
12th Main Road, 2nd Block  
Rajaji Nagar, Bengaluru-560010

**Experience Center - Delhi**  
215, Best Arcade,  
Sector-12, Dwarka,  
New Delhi - 110075

**Experience Center - Nashik**  
3, Kalika Plaza,  
Bhaba Nagar, Mumbai Naka,  
Nashik - 422011

**Experience Center - Pune**  
Shrinivas Aptt, 101, S No. 18/2/1/9,  
DP Road, Vishal Nagar,  
Pimple Nilakh, Pune 411027