GreatWhite®
Electricals

Smart Warehouse

Lighting & Automation

RENOVATION I UPGRADE I DIGITALIZATION

GreatWhite® Electricals

RENOVATION

UPGRADE

DIGITAL IZATION

GreatWhite® Electricals

Green & Sustainable Warehouse Solutions

Luminaires with Inbuilt Sensors

- Highbays
- Industrial Battens
- Eco Battens
- Indoor Luminaires
- Outdoor Luminaires

Sensors For Warehouse Applications

- Light ON-OFF
- Light + HVAC or Fan ON-OFF
- Dimming and Daylight Harvesting Sensors
- Highbay Sensors
- 2 Channel Meeting Room Sensors
- DALI-2 LMS Sensors

Special Application Warehouse Luminaires

- Highbays
- Industrial Battens
- Eco Battens
- Indoor Luminaires
- Outdoor Luminaires
- Fire Escape Luminaires

projectlighting@great-white.in | www.great-white.in

Smart Warehouse Opportunities
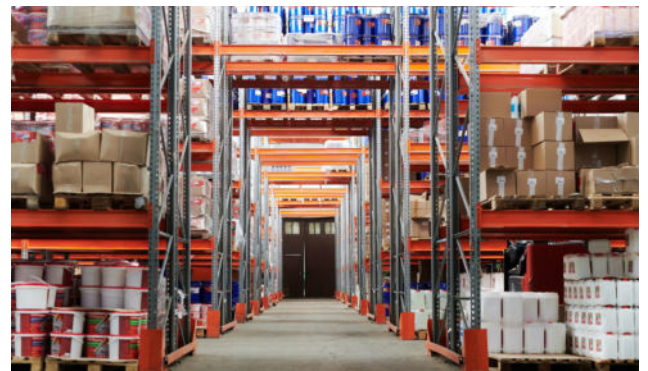

Heighted Isles Area

Lighting: Switch to High efficacy LED Lights (Preferably Linear Modular).
Upgrade: (1) Use High bay Sensors for Occupancy based switching, Orientation Dimming & Daylight Harvesting OR (2) Use Daylight harvesting High bays with Inbuilt Sensor.

Low Height Isles

Lighting: LED battens design for industrial applications.
Upgrade: (1) Use Core Sensor (with detection control mask)/Surface PIR / HF Sensor for Automatic ON-OFF of lights based on movements at the isles.


Heighted Open Area

Lighting: Switch to High efficacy LED Lights (Modular or UFO).
Upgrade: (1) Use High bay Sensors for Occupancy based switching, Orientation Dimming & Daylight Harvesting OR (2) Use Daylight harvesting High bays with Inbuilt Sensor.

Loading Area

Lighting: Switch to High efficacy LED Flood Lights.
Upgrade: Use All in one "Defensor" (Dusk to Dawn Switching, Timer. Motion Sensor) OR Use HF Sensor for Occupancy based Switching, Orientation & Daylight harvesting.

![GreatWhite Electricals logo]

Smart Warehouse Opportunities
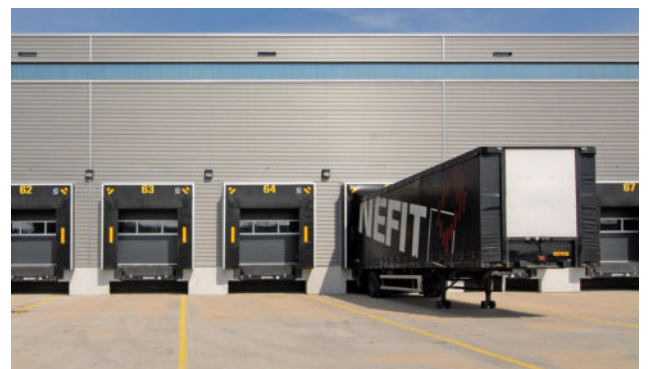

Outdoor Areas
Lighting: Switch to High efficacy LED Street Lights or Flood Lights.
Upgrade: Use Dusk to Dawn Sensors (With or without timer) for Day Night Auto Switching.

Open Offices
Lighting: Switch to high efficacy LED lights with low UGR (Unified Glare Ratio), and Zero flicker drivers.
Upgrade: (1) Use ON-OFF Sensor for Occupancy based switching, OR (2) Use DALI Dimmable Sensors for Daylight Harvesting (In case of glass façade / window)
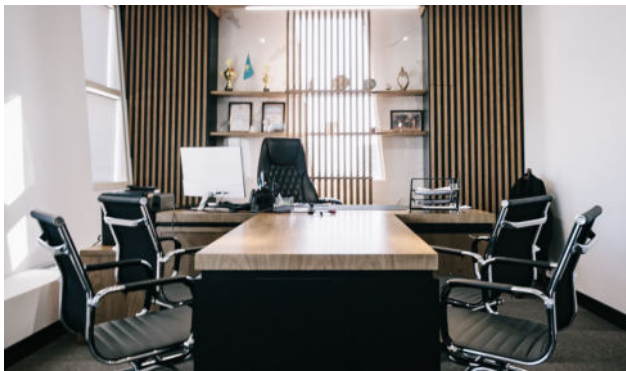
Executive Cabins
Lighting: Switch to High efficacy LED Luminaires with low UGR
Upgrade: (1) PLUS Sensor for Lights + A/C, OR (2) DALI Dimming Sensors for daylight harvesting & Dimming, OR (3) Human Centric Lighting for productivity.

Conference Rooms
Lighting: Switch to High efficacy LED Lights
Upgrade: (1) DALI-DUO Sensor for Device management, OR (2) DALI Touch panels for presentation scenes, OR (3) Human Centric Lighting for Video Conferences.

projectlighting@great-white.in | www.great-white.in

Smart Warehouse Opportunities


Passages, Staircases & Lobbies

Lighting: Switch to High efficacy LED Lights
Upgrade: (1) ON-OFF Sensor for Occupancy Switching, OR (2) DALI Dimmable Sensor for Orientation Lighting, OR (3) Dimming Driver Cum Sensor for orientation lighting.

Wash Rooms

Lighting: Switch to High efficacy LED Luminaires
Upgrade: (1) Use HF Sensors for Occupancy based ON-OFF, OR (2) Use Sensor for Light + Exhaust fan (1 Channel or 2 Channel)
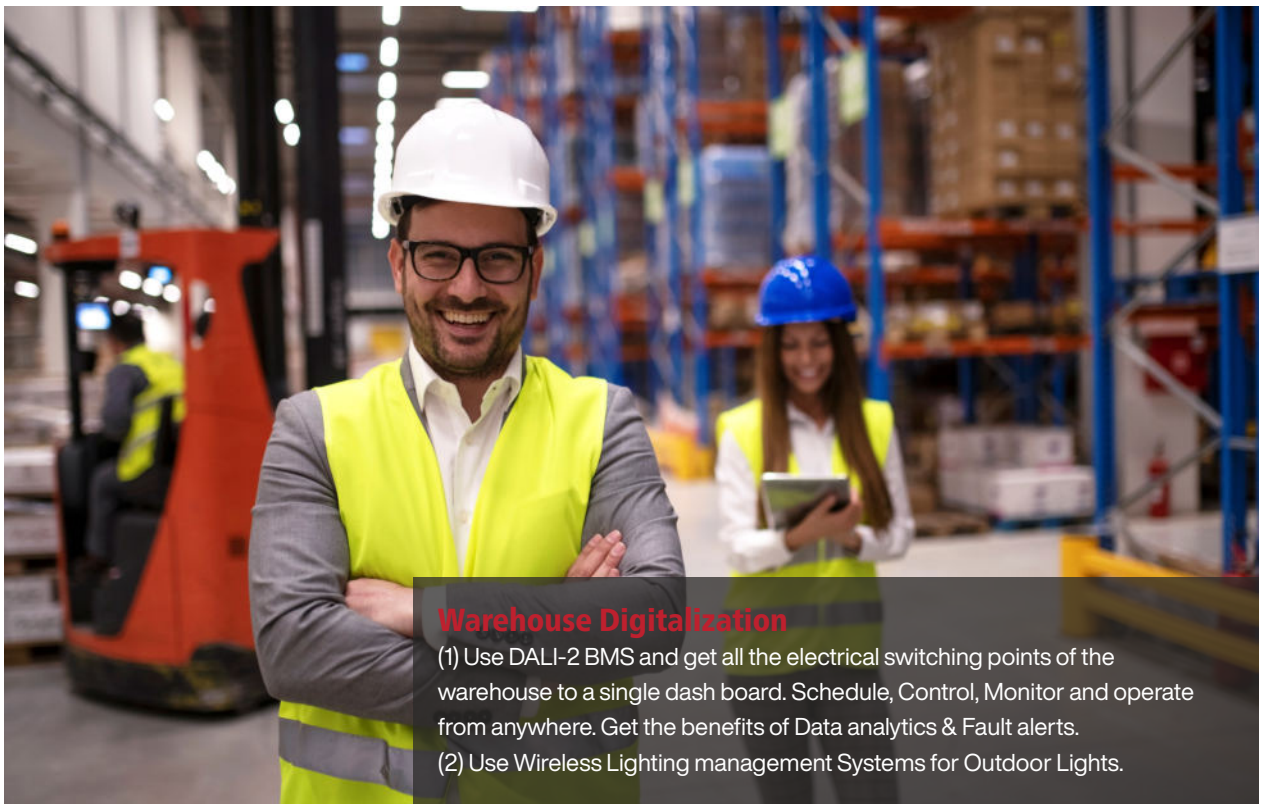
Warehouse Digitalization

(1) Use DALI-2 BMS and get all the electrical switching points of the warehouse to a single dash board. Schedule, Control, Monitor and operate from anywhere. Get the benefits of Data analytics & Fault alerts.
(2) Use Wireless Lighting management Systems for Outdoor Lights.

GreatWhite®
Electricals

Auto Switching of Lights
- 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 degree).
- Option of detection control mask .

Light + 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.

Light + Exhaust Fan Control
- Sensors specially designed for Washroom Applications.
- High capacity relay to control both Lights & Exhaust fan together.
- Connect Load up to 1000W.
- Options of 8Mtr / 16mtr Available.

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 Mtr.

Daylight Harvesting - DALI
- Daylight harvesting & dimming for office lighting by DALI broadcast sensors.
- One sensor can connect up to 25/64 DALI fixtures.
- Occupancy based switching, daylight based dimming, orientation light etc. features.
- Push button and remote options for manual override.

Meeting Room Automation
- All in one DALI-DUO sensor for meeting room Automation.
- This standalone sensor can connect up to 50 DALI devices.(Channel 1:25, Channel 2:25)
- 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.

projectlighting@great-white.in   l   www.great-white.in

GreatWhite® Electricals

Defensor Safety & Control
· Standalone sensor for area lighting control.
· Dusk to Dawn light switching, Timer based switching, Motion sensor and safety from vandalism, all in one sensor.
· First of its kind. Award winning innovation from ESYLUX, Germany.

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 etc.
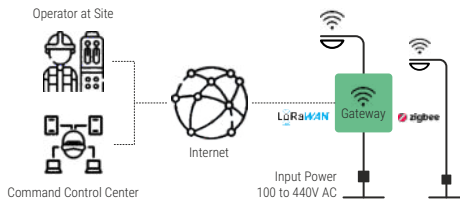· Connect up to 50 DALI Devices / DALI Lights per Controller

Dusk To Dawn Switching
· 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).

LMS & BMS
· DALI-2 Lighting management Systems & Building Management systems for Indoor Lighting control.
· For Open Offices, Conference Rooms & Entire warehouse. Dash board / app control.

Operator at Site

Command Control Center

Internet

LoRaWAN Gateway zigbee

Input Power 100 to 440V AC

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

PoE SYMBI LOGIC
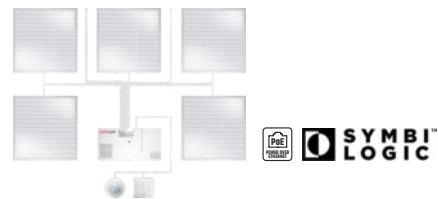
Human Centric Lighting
· POE + DALI Controller & Tunable Luminaires with Patented German technology for Human centric Lighting.
· Biological effective lighting & Emotional effective lighting together.
· For Board rooms / Conference Room

Special Application Warehouse Luminaires

GreatWhite® Electricals

Linear Highbay
- Linear Modular Highbay with optics, Specially designed for heighted isles.
- More coverage & better illumination.
- Aluminum extrusion body for best thermal management.
- Available in 50/80/100/150/200W variants.

UFO Round Highbay
- Round UFO High bay with 60 degree/90 degree optics.
- High efficacy LED with special optics.
- Uniform light distribution.
- Available in 80/100/120/150/180W.
- Fully Encapsulated Isolated LED Driver

Warehouse Battens
- Industrial grade Linear fixture suitable for 24 Hrs. warehouse application.
- Isolated encapsulated LED Driver.
- Low UGR Diffuser.
- Available in 28/30/36/42W.
- Dimmable & Non Dimmable options.
- Compatible for Sensor Control.

Modular Highbay
- Modular High bay with multiple module provisions.
- Designed for shaded area coverage.
- Available in 80 to 180W
- Optics designed for uniform light distribution.
- Dimmable & Non Dimmable options.
- Compatible for Sensor Control.

Street Lights & Flood Lights
- Lights specially designed for Loading/Unloading area for higher illumination.
- Option of wide beam angle / narrow beam angle.
- With or without optics available.
- Professional model and economic model available.

Fire Escape Lighting
- Say "NO" to Inverters and DG set for emergency lighting.
- Specially designed Fire escape lighting fixtures with inbuilt battery.
- Maintained or non maintained Fire escape lights.
- Recess / Surface mounted models available.
- Customized models also available.

GreatWhite®
Electricals

Special Application Warehouse Luminaires

Daylight Harvesting Highbay
· A specially designed Auto Dimming Highbay for warehouse applications.
· Modular design with Optics, High Power LED.
· Inbuilt Dimming Sensor for Occupancy Based ON-OFF and Daylight based Auto Dimming.
· Available in 80 to 180W.

Auto Switching Battens
· Industrial/Eco LED battens with inbuilt sensors
· Occupancy based ON-OFF
· Dimming and Orientation
· Available in 18/20/36W variants.

Auto Switching Street Light
· Street light with inbuilt motion sensor
· Auto ON-OFF & Auto dimming
· Available in 36 to 150W

Auto Switching Flood Light
· Flood light with inbuilt sensor 50 to 200W
· Motion based ON-OFF
· Dusk to dawn switching

Auto Switching Troffers
· 2x2/1x1/4x1 troffers with inbuilt sensor
· Auto ON-OFF
· Orientation dimming
· Available in 20/28/36/42W

Auto Switching Down Lights
· Surface/Recess mounted down lights with inbuilt sensors
· Auto ON-OFF
· Orientation dimming
· Available in 12/15/18W

GreatWhite®
Electricals

Benefits of Warehouse Lighting Automation

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 – *30-35%*

Better Productivity
- Enhanced Productivity by Illumination Management
- Meeting Room scenarios for effective presentations

Health & Safety
- Many Intangible benefits from Human Centric Lighting
- Reduced errors and enhanced creativity
- UVC Germicidal Irradiation help healthy work space
- Fire escape lighting for emergency evacuation

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 !

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

projectlighting@great-white.in l www.great-white.in

![GreatWhite Electricals]

Head Office
GreatWhite Global Pvt. Ltd. 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

projectlighting@great-white.in
www.great-white.in