

POWER OVER ETHERNET (POE)

Lighting System

Will create back-bone for building automation/ big data harvesting/ way finding/ location tracking/ evacuation systems and future proof system for adopting new innovations going ahead; e.g., Li-Fi based internet systems

SOFTWARE is the
new **HARDWARE**

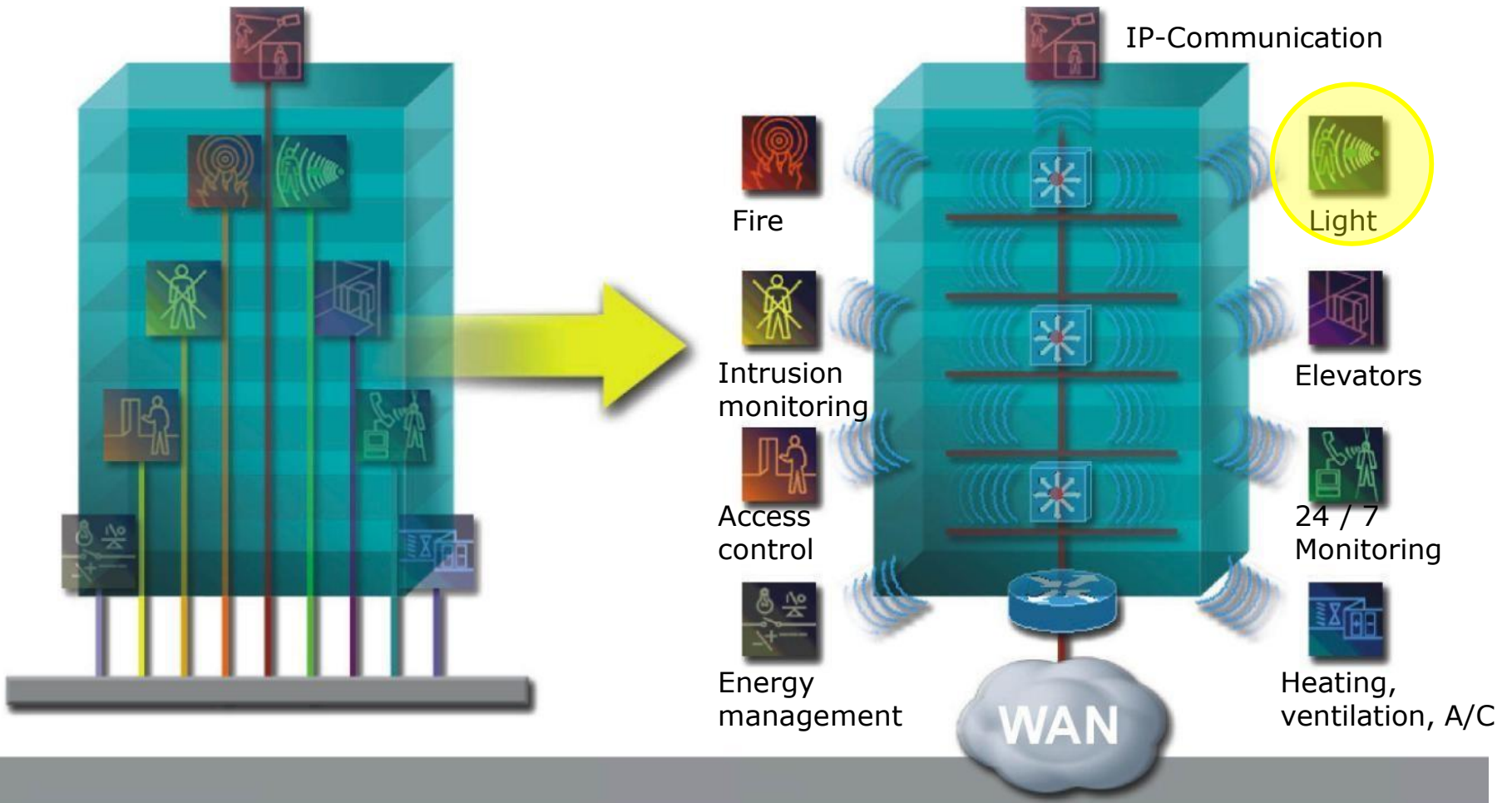


The convergence

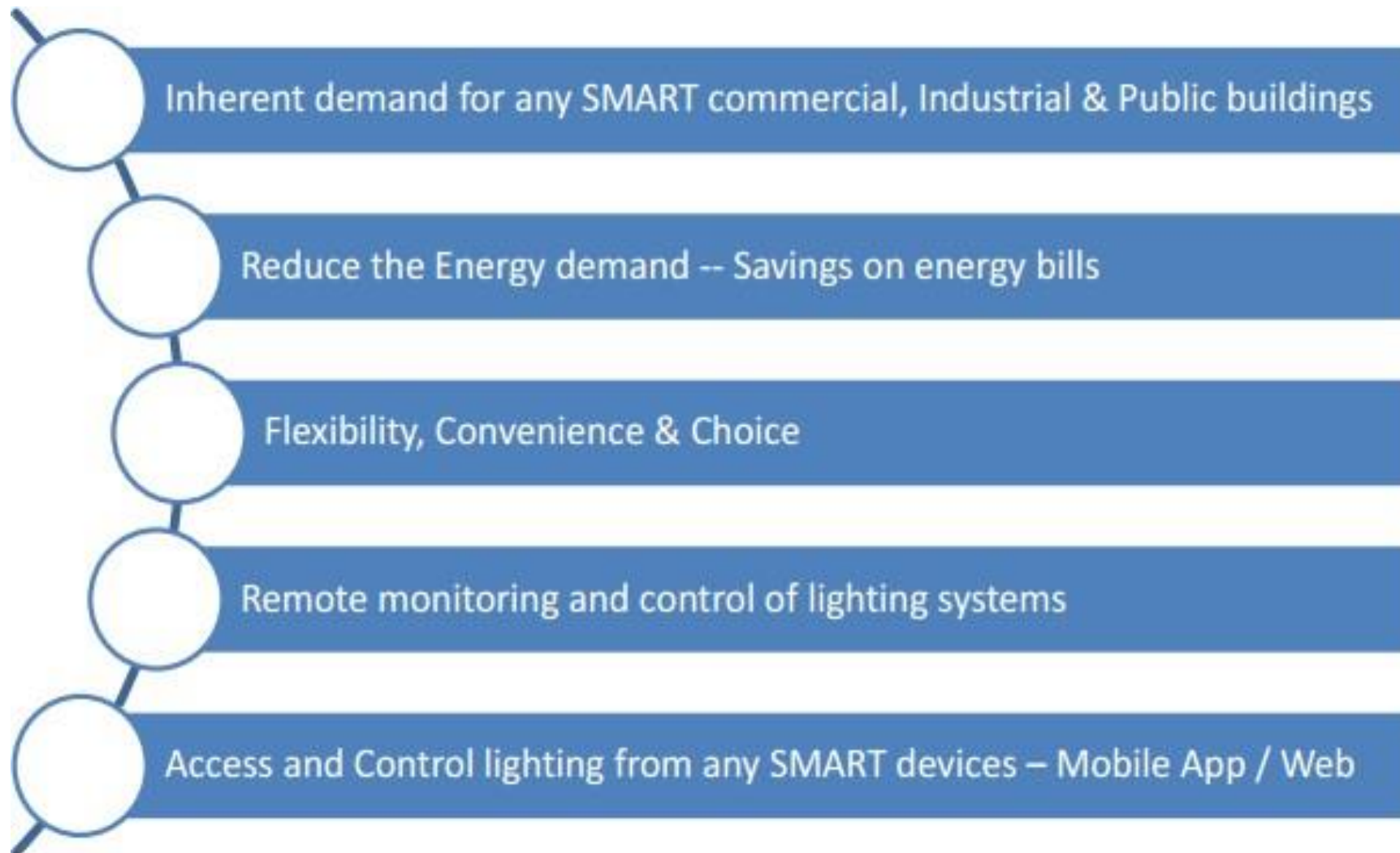
IT and Building Automation Systems

Traditional solution:
Individual networks

Future oriented solution:
Intelligent IP- standard network



Why is Lighting Automation Important !



POE Lighting : Key Offerings

01 Human Centric Lighting - Lighting systems, which can not only dim, but also CTT or Kelvin change for improved circadian rhythms, mood – preference, visual acuity, performance and energy savings – sustainability.

02 Day Light Harvesting - Using available day light to offset the artificial lighting needed to properly light a space, in order to reduce energy but more importantly maintaining the optimal light levels for providing efficient work spaces.

03 Connected Lighting Solutions – Smart Lighting for today's smart buildings that demands communicating with other devices, sharing data across, Interoperability. Leveraging IoT to deliver CONVERGENT lighting solutions.



Why DSLC

- **Scalable and Future proof** – Based on non-proprietary open standards, highly vendor independent, flexibility to choose from any standard DALI compliant drivers and related infrastructure, which avoids getting locked to a particular vendor.
- **Simple network architecture** – Simple architecture, less to go wrong
- **Easier and Faster commissioning** – De-facto standard commissioning tool, easier to support and maintain
- **Seamless access to real-time data** - Functionality necessary to allow the commissioning, control, management, monitoring and analytics of intelligent DALI light fixtures in real-time from anywhere.
- **Lower the cost of installation** – Less hardware, Lighting Fixtures without Drivers

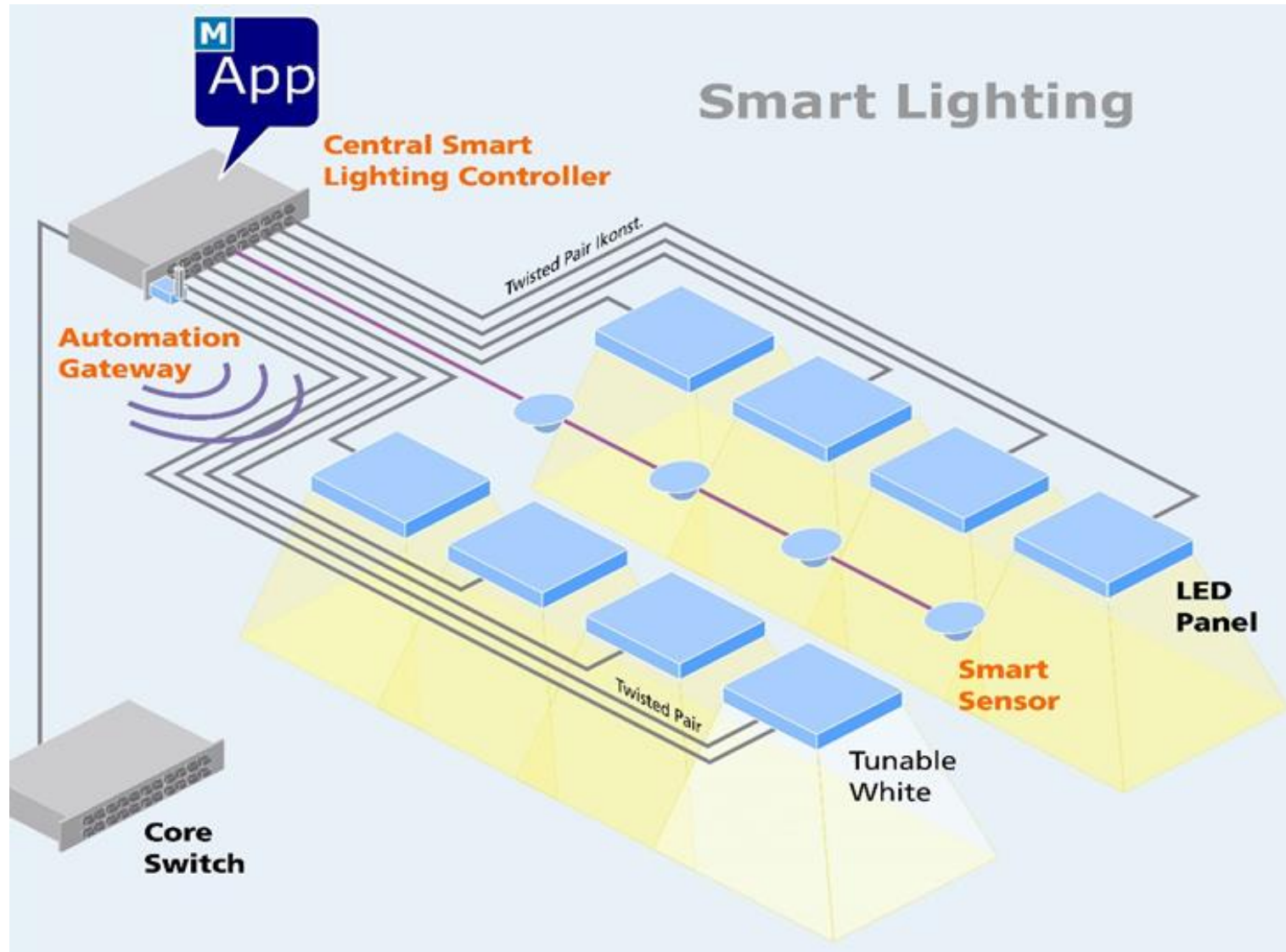
DSLCL : Product Features

- PoE Solution: Powering + Controlling via same wires
 - Lower Overall Wiring design and implementation cost
- Built-in (0-100%) Dimmable LED Drivers:
 - Hence diver-less simple stand-alone luminaires can be used (lower cost).
- Central Power: With output capacity of 1632 W per controller.
- Each CSLC with 48 'independently' controllable (Programmable) channels
- Per Channel output: Max 34W (20V-50V), Max 1A
- Additional ports for Sensors built within the box.
- Enabled for integrated App for Room/Floor control with a user friendly interface
- Software is onboard the box itself – No Separate A/C Server room required
- CSLC will be closer to the luminaires – Eliminating DDC (for lighting)
- Data Monitoring and Reporting (Eg: Power Consumption per Port)
- Operating Environmental Temp: 0°C - 60°C

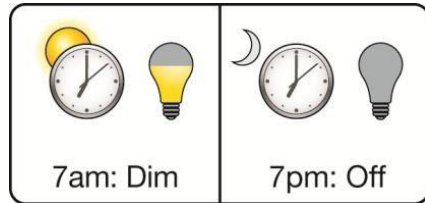


Smart Lighting System

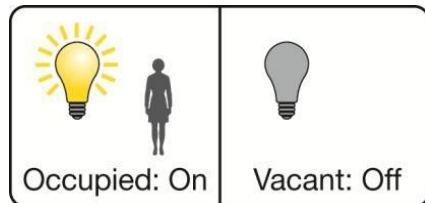
Light provided by the network



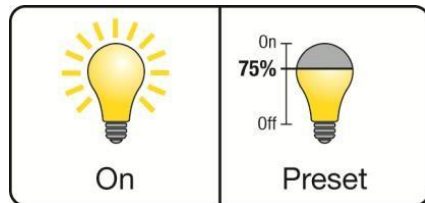
POE Lighting : Control Functionalities



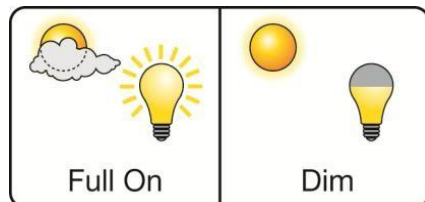
Scheduling: Lights automatically turn off or are dimmed at certain times of the day or based on sunrise or sunset.



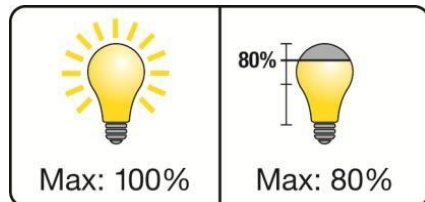
Occupancy/Vacancy Sensing: Automatically turning lights off when people vacate the space.



Multi-level Lighting/Dimming: Providing users one or more light levels than full-on and full-off.

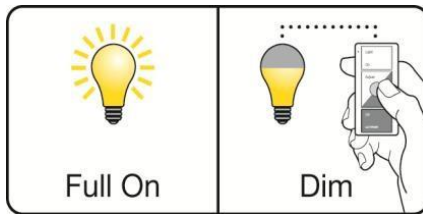


Daylight Harvesting: Automatically adjust light levels based on the amount of daylight in the space.

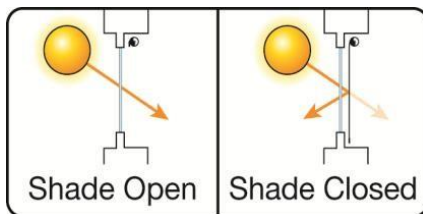


High-End Tuning: Set target light level based on occupant requirements in the space.

POE Lighting : Control Functionalities...



Personal Light Control: Allow users in the space to select the correct light levels for the desired task.



Controllable Window Shades: Allows users to control daylight for reduced solar heat gain and glare.



System Integration : Enabling the system to integrate with the Fire Alarm system and the Lights can be Set To Cascading pointing to Exit in Case of Fire. .



Tunable Lighting: Create any colour of Light with a swipe of a Finger . Mood Lightings and Human Centric Lighting

Value Proposition:

➤ Energy Savings—

- Energy savings/optimization based on various control strategies -- Up to 60-70% lighting energy savings



➤ Comfort & Convenience—

- Flexible to adopt specialized lighting
 - Human Centric Lighting
 - Mood / Theme Lighting
 - Task Lighting
- Auto-adjust to the required light levels – no manual intervention



➤ Meet Standards—

- Contributes to obtaining points for standards like LEEDetc

