

# WISYS HELPS “SNEHRAJ BOOKS” CUT LIGHTING ENERGY COSTS BY 65% WITH INTELLIGENT LIGHTING UPGRADE IN THEIR FACTORY

## Project Highlights

Number of lights  
**50X25W Downlights**

Sensors Used  
**Occupancy, Humidity and Temperature**

Energy savings  
**65% (Based on actual data)**

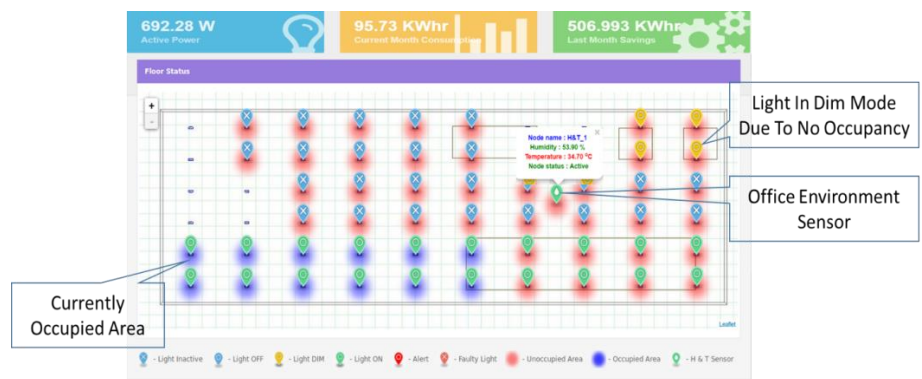
5 Year energy cost savings  
**1,80,000 Rs**



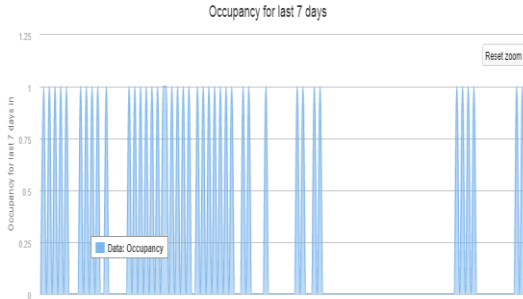
### Project Information – Snehraj Books (Changodar–Ahmedabad)

The project location is in Changodar – which is about 45 minute drive from Ahmedabad. Snehraj Books established the Smart Lighting Initiative in an effort to reduce the lighting energy consumption and to automate the lighting control in their remotely located factory. The installation included a deployment of 50 numbers of network-controlled 25 Watts LED downlights.

The lighting installation with controls has reduced annual energy use by an estimated 6000 kWh, saving about 36,000 Rs. annually in energy costs only. The additional savings attributable to the lighting controls was measured with the help of a network connected class 1 accuracy energy meter. Other than the energy savings and the automated controls with occupancy sensors, the system is capable of reporting light failures and power supply issues and real time monitoring of the employees movement.

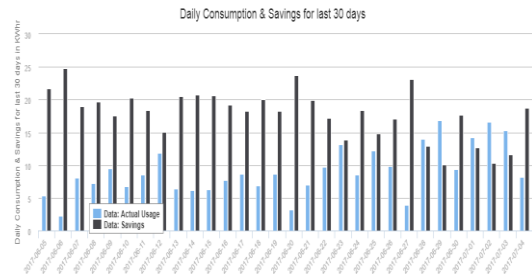


### Occupancy Analysis of the Workspace



- Occupancy monitoring:
  - Clear indication of occupied vs unoccupied areas based on color coding
  - Complete analysis of workspace occupancy over a period of time

### Daily/Monthly Consumption Reports

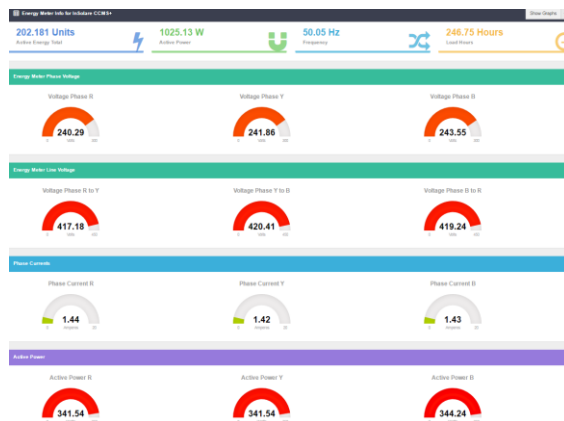


### User Configurable Schedules

Schedules							Delete All Schedules	Push Changes	Force Push Schedules
Group	Type	Date	Time	OLI	NOLI	Odelay	Actions		
LightCube	Weekday		00:01 - 08:00	100	0	600			
LightCube	Weekday		08:01 - 12:00	50	25	600			
LightCube	Weekday		12:01 - 15:00	0	0	600			
LightCube	Weekday		15:01 - 18:00	50	25	600			
LightCube	Weekday		18:01 - 23:59	100	50	600			

- ✓ Holiday scheduling
- ✓ Auto discovery and simple commissioning
- ✓ Parameter configuration for active hours etc
- ✓ Fully controllable lighting system with occupancy delay configurability from web page

### Per Phase Energy Monitoring



- ✓ Per Phase energy monitoring
- ✓ Per phase On/Off control for maintenance and leakage avoidance
- ✓ Accurate metering with monitoring of other 12 important electrical parameters



### Innovative Hybrid Model for Intelligent Lighting Solution

Wisys has developed a patented low cost technology for intelligent lighting. The system covers most of the features of the conventional per light wireless controllers based systems available in market at a lower cost and with a disruptive ROI. In the patented hybrid model each wireless controller is capable of controlling 4 lights independently and supports different sensors. Wisys lighting system provides touchless lighting with the help of occupancy sensor and software based control to tune in occupancy parameters based on the working hours. Workspace occupancy data can be used for optimal office space utilization and employee monitoring. Dimming control improves the lighting efficiency and saves good amount of energy. Customized energy reporting helps in effective lighting planning

### The Results

- Provide 65% energy savings with configured schedules and occupancy parameters
- Analysis of the factory occupancy pattern was done for a month and layout changes were done to make optimal space utilization
- Dimming adjustment as per worker feedback for improved efficiency
- Analysis of actual load hours and operational hours of factory