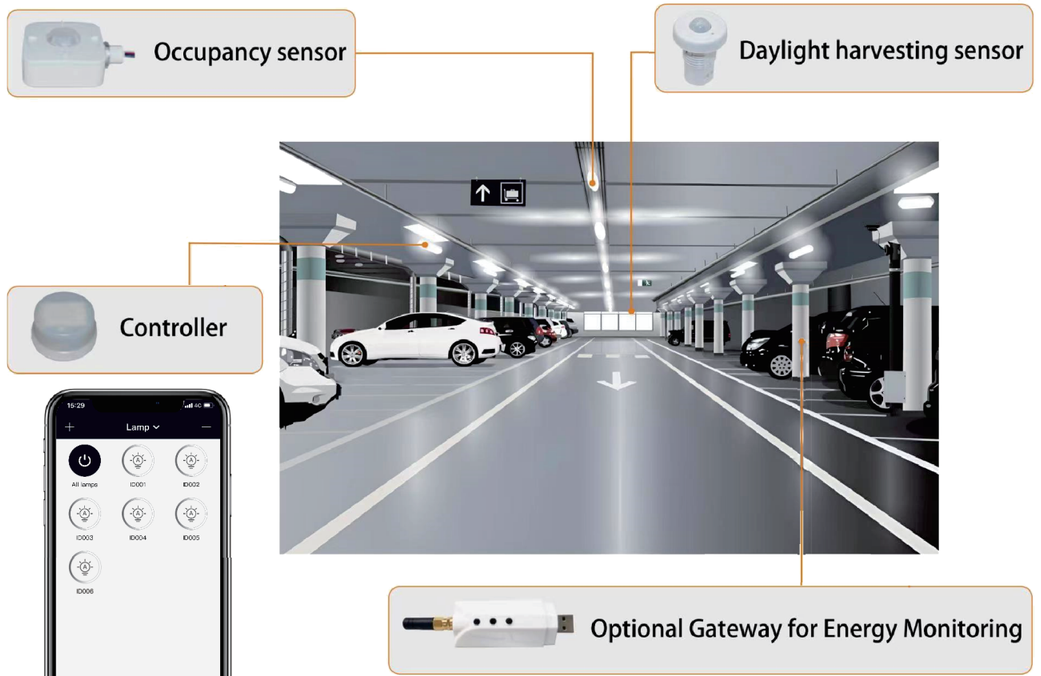
Green Energy Building Controls For Indoor Parking Lot

Developing seamless smart parking solutions remain an active research area. User coordination burden remains high, and systems based on complex instrumentation are often expensive and costly to maintain. Contemporary parking lot management systems are slow to adopt new technology, particularly in cases where there is no perceived immediate return on investment.

Reliable &energy monitoring wireless control system for smart parking

We propose the use of a low cost, low power, Bluetooth Low Energy (BLE) based outdoor localization system coupled with a Random Forest classifier and GEBC Bluetooth mesh network to provide space occupancy detection and sensor data transfer.

- Networking of Luminaires
- Occupancy sensor
- Dayliht harvesting
- Zoning performance
- Individual addressability
- Continuous dimming
- Set your schedule
- Luminaires linkage
- Energy monitoring
- Scene control
- Upgrade OTA
- Automatic calibration



TYPICAL CONTROL PROFILES

Zone	Scenario	Description
Interior aisleways	Daylight harvesting sensor	Lighting on at 20%, increase to 80-100% with motion detection for pathway lighting with advancing car.
parking spots	Controller	Lighting on at 20% during normal operations; increase to 80-100% upon motion detection.
Entrance	Occupancy sensors	Lighting on at 20% of set lux level during daytime, increase to 80-100% with dusk.

Fixture Sensor

Controller

Optional Gateway