

Lighting up Yamaha warehouse with Bluetooth mesh standard

Lights-out warehouses are on their way, but it will take many years before we reach that level of automation on a global scale. What can be done in 2020 is a smooth upgrade from full-on luminaires to efficient, sensor-driven control strategies. This is what *Yamaha Motor Corporation* did at its major warehousing unit in Pleasant Prairie, Wisconsin.



SILVAIR

DETAILS

Category:	warehouse
Technology:	McWong's TruBlu™ Control Platform EnOcean wireless energy harvesting switches
Strategies:	occupancy sensing / manual control
Location:	Yamaha Motor Corporation 10801 88th Avenue, Pleasant Prairie WI 53158, USA
Year:	2019

They say the warehouses and factories of the future will be very dark places. Operating fully autonomously, they won't require human presence - and thus won't need any lighting during typical working hours. Lights-out warehousing might be somewhere down the road, but it's 2020 and there is no reason to light up warehouse aisles all day long. And it takes surprisingly little effort to prevent such a waste of energy and money.

Yamaha Motor Corporation is a Japanese manufacturing company with global recognition. Its product lines include motorcycles, scooters, all-terrain vehicles, boats, golf carts, and snowmobiles. At its Pleasant Prairie warehouse, the company stores engines for a wide range of vehicles it produces. Comprising both round-the-clock active spaces and rarely occupied areas, warehouses are particularly challenging spaces when it comes to lighting efficiency. In a move to reduce energy consumption and slash energy bills, Yamaha Motor Corporation decided to replace its always-on lighting installation with a responsive, sensor-driven lighting control system based on the globally interoperable Bluetooth mesh standard.

PARTNERS:



Technology Partner

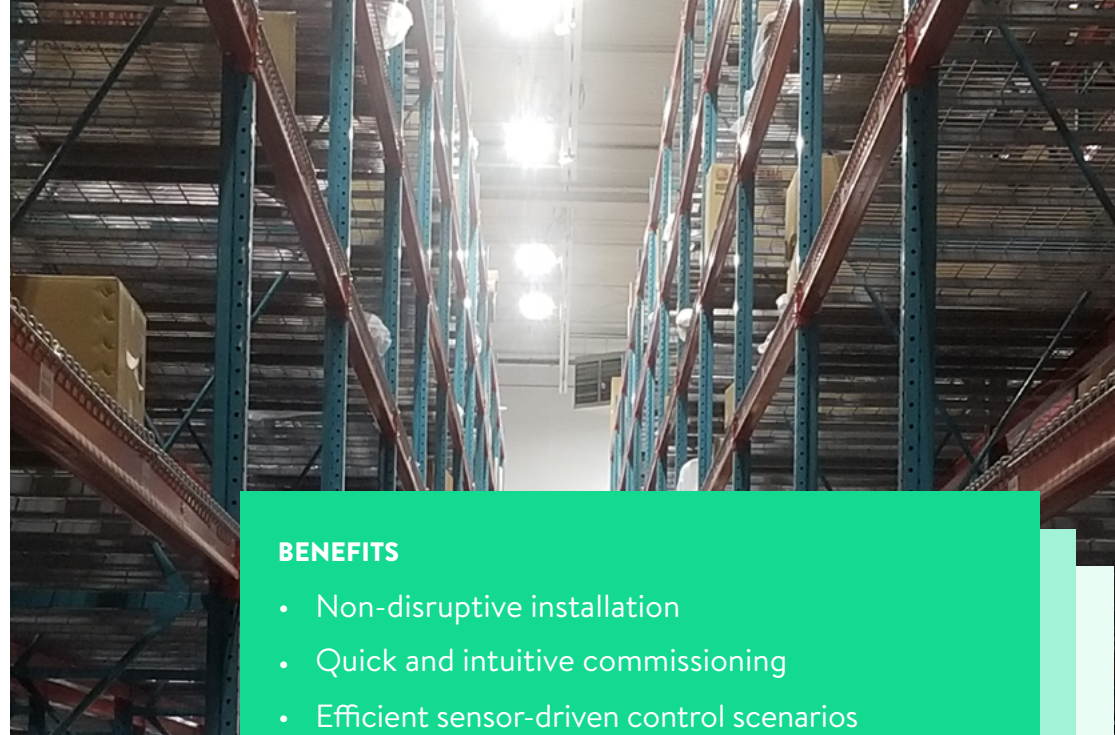


There are several different ways to deliver Bluetooth mesh connectivity to standard LED luminaires. In this particular project, this was done through a Bluetooth SIG-qualified sensor device. The project team installed a TruBlu™ control network from McWong, which includes occupancy sensor-controllers as well as the TruBlu™ app, developed in cooperation with Silvair as McWong's technology partner. A total of 320 TruBlu sensors were used - one for each standard high bay Orion LED fixture installed inside the warehouse. The luminaires were commissioned using the TruBlu app which enables easy and time-efficient commissioning, customizing, and monitoring of Bluetooth mesh luminaires. In addition, a single EnOcean wireless energy harvesting switch was deployed and configured as the central switch for the entire facility. It allows for overriding the applied occupancy sensing strategy to turn on/off all of the luminaires at once.

As is always the case with Bluetooth lighting control networks, both the installation and commissioning looked nothing like what lighting professionals are used to. With no need for any new lighting control wires, the installation of sensors went much faster and cost significantly less. With intuitive commissioning apps, the daunting task of setting up a sensor-driven control network was carried out quickly and conveniently. At the end of the day, the warehouse of Yamaha Motor Corporation gained truly efficient and flexible lighting without any downtime or serious disruption. Waiting for the lights-out warehousing future, it's already making massive savings.

“The commissioning process was incredibly fast. Working with project partners Pentalux and Contemporary Energy Solutions, we commissioned the entire project in approximately three hours!”

Tony Savalle, McWong
Eastern Sales Manager.



BENEFITS

- Non-disruptive installation
- Quick and intuitive commissioning
- Efficient sensor-driven control scenarios
- Energy savings
- Future-ready infrastructure for occupancy analytics and asset tracking

