CASE STUDY

BT Magna Park

Overview

Situated on the largest distribution park in Europe, BT's 400,000 sq. foot site at Magna Park is the company's main distribution centre, in addition to housing its fleet warehouse and associated administration offices. Having delivered a number of successful projects, Energys Group was briefed to design, specify, manufacture and deliver the project.

Challenges

There were a number of issues with the lighting across the site, particularly within the warehouse where a number of lights had ceased working all together, and lighting levels were inadequate. Due to the 13m height in the warehouse, they were difficult to maintain.

Alongside the need for energy savings and improved light levels, Energys needed to ensure minimal disruption to the work on the site which is operational 24/7.

Solutions

Design specification

Energys Group's design specification team worked closely with BT's own PM and FM teams to ensure products specified enabled optimal energy-saving, maintenance reduction and lighting improvement outcomes; including 5 year warranties.

In particular, the wattage of the high bay units required careful design to ensure that the light output was appropriate at floor level. Intellidim Sensors were also carefully positioned to ensure movement 13m below could be detected. Which in turn lead to reduced energy usage and significantly lower costs.

Phased installation

All works were carried out in phases to ensure minimal disruption. The site is operational 24/7 which presented its own challenges, so a separate compound was created onsite away from BT's main site activities.

The BT managers of each specific work area were informed and kept appraised of activity, before and during the installation in each area. The installation took a total of eight weeks to complete.

Projected impact

Project quantum	BT's largest centre totalling 400,000 sq. feet of warehouse and office space
Project Value	£280,000
ROI	1 Year, 10 months
No of Lights Replaced	2,500
Annual £ Savings	£150,000
Annual kWh Savings	1.22 million



"The upgrade achieved the required BT ROI period of less than 2 years with 1.2m kWh saved per annum to date. Not only have the energy savings requirements been met, but improvements in lighting levels have been commented on by staff across the site."