

## ABP Ports

- / Hull, East Riding of Yorkshire.
- / LED upgrade
- / 96% energy saving
- / Wireless lighting controls



### The Brief

Port of Hull Terminal required a lighting system that could meet the energy demands of a 24-hour port with very little downtime. The design, supply and installation of an LED lighting and wireless lighting controls system for three warehouses located on the Finland Terminal, Queen Elizabeth Dock. The existing 250W and 400W High Pressure Sodium luminaires were to be replaced in the same location with suitably rated, individually fused LED luminaires generally in accordance with TM21, to meet the desired specification. The installation should utilise all existing cabling where possible.



## The Solution

The Glamox [Hi-Max luminaire](#) was specified in all areas. This dedicated, extremely high efficiency warehouse luminaire was supplied with appropriate glare and luminance ratings. The scheme was proven via a DIALux calculation prior to installation.

The warehouses' 24/7 working cycles and lighting usage information was collated and our Energy Calculator was then used to calculate energy savings. Calculations showed that the new lighting system would provide high energy cost savings and payback would be achieved in only 2.4 years.

The [wireless control system](#) was designed to be programmable with an android tablet. The system had the ability to collate occupancy data for energy usage monitoring and status of the emergency lighting. The luminaires were to be supplied with a presence detector and light sensor. This provided the ability to program the system to make full use of natural daylight, and the illumination of areas as specifically required.



## The Result

Representatives from the Estates Department were provided with training, which then allowed them to fine-tune the system as required in future. ABP ports later informed us that they had achieved 96% energy cost savings, exceeding our realistic calculations. The whole system was wireless, and so reconfiguration in future would be possible without rewiring and without the need to gain access to the light fittings or sensors. The same lighting system was later installed at Port of Immingham.