

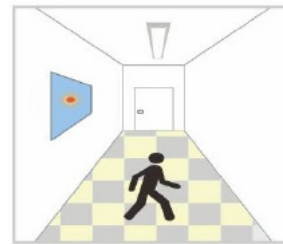
Slash Electricity Costs and Emissions with i-Site

i-Site Intelligent 110V Site Lighting

Every i-Site fitting has built-in movement and light level detection, which means that lights don't burn electricity when natural light levels are sufficient or when no one is working in an area. There is a very wide range of adjustment, allowing lights to dim and then turn off within a few seconds, or they can be set to dim when there has been no movement for up to 30 minutes and then remain dimmed indefinitely or turn off after a period of up to 60 minutes.

The speed at which i-Site fittings pay for themselves depends on many factors, including the rate paid for electricity. In the examples below, if the rate is at the low end of the costs shown (£0.20 per kWhr) the pay back period will be within 12 months. As the kWhr rate increases, the pay back period reduces in line. Should kWhr rates reach £0.40, the pay back period will be less than 6 months.

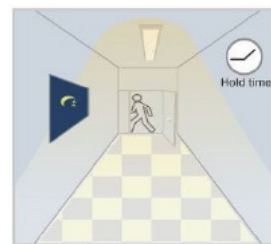
The cost savings and the reduction in CO₂ emissions should be dramatic and the savings increase with every hike in the cost of electricity, as illustrated in the tables below.



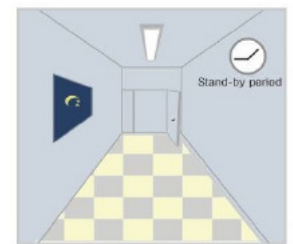
1. With light level detection engaged, if there is sufficient natural light, no light is on even when movement is detected.



2. With light level detection off or when light levels are low, movement in the vicinity causes the light to turn on.



3. After the last movement is detected (from a few seconds to 30 minutes) the light will dim for a pre-set period.



4. After the pre-set period, the light will switch off, unless it is set to remain permanently dimmed until next movement.

Running Costs and Emissions

Costs and Emissions based on 100 no. 30W 2' i-Site 110V LED fittings for 52 weeks

kWhr Cost £	24 hours per day, 7 days per week	Average of 10 hours per day, 5 days per week	Total Annual Saving	Saving per Fitting per annum	CO ₂ Saving per Annum
£0.20	£5241.60	£1682.70	£3558.90	£35.59	4146kg based on 0.233kg per kWhr
£0.30	£7862.40	£2524.08	£5338.32	£53.38	
£0.40	£10483.20	£3365.44	£7117.76	£71.18	

Costs and Emissions based on 100 no. 44W 5' i-Site 110V LED fittings for 52 weeks

kWhr Cost £	24 hours per day, 7 days per week	Average of 10 hours per day, 5 days per week	Total Annual Saving	Saving per Fitting per Annum	CO ₂ Saving per Annum
£0.20	£7687.70	£2410.70	£5277.00	£52.77	6148kg based on 0.233kg per kWhr
£0.30	£11531.52	£3616.08	£7915.44	£79.15	
£0.40	£15375.36	£4821.44	£10553.92	£105.54	

i-Site fittings use approximately 1W of power when the light is extinguished (to constantly monitor the light level and movement) and the above savings take this load into account.

A major installation benefit of the i-Site system is that standard and emergency fittings are fed from standard site transformers using regular 3 core cable without jeopardising the integrity of safety critical emergency lights. Transformers do not require time clocks or contactors and there is no need to install separate photocells or other controlgear because everything is integral within the fitting.

In tunnel applications, where it is likely that fittings will need to remain dimmed (and not go out altogether) the pay back period will extend, because consumption is approximately in line with light output. However, on a large long term project, the cost and emission savings should still be very significant. We would be happy to model different scenarios in order to estimate the savings.

i-Site fittings can be supplied loose (unwired), pre-wired with Tee boxes or pre-wired with Flori-67/3P adaptors, as part of our Flori-67 plug and play site lighting system.