

An app to bridge the gap

There's a huge gulf between stand-alone lighting controls and a full scale building management system. One company believes it has developed a way of filling that void

Stand-alone controls have traditionally had the lion's share of the lighting controls market and are easy to fit, adjust and maintain, benefitting from rapid payback but can be criticised for being too inflexible. Building Management Systems (BMS) and Lighting Control Systems (LCS) benefit from increased functionality and sophisticated feedback BUT at a much greater cost, not in just terms of installation and commissioning (prolonging payback) but also in delays in maintenance and adjustment, leaving the end user waiting for specialist or certified installers.

To bridge that gap between sophisticated but expensive systems and stand-alone controls and help customers achieve the goal of even greater energy and cost savings with the flexibility to adapt in response to change of strategy or change of usage in buildings, DANLERS Ltd have launched their innovative ControlZAPP range of stand-alone products.

ControlZAPP offers end users, specifiers and installers a simple to use, free APP to download from the DANLERS website onto an Android Mobile Phone or Tablet to manage lighting (or other connected loads). Switching, maintained lux levels (daylight linked dimming), time lags, timed override ON or OFF functions etc can be scheduled to occur exactly when required, reducing energy consumption without compromising end user safety or comfort.

The APP enables you to create multiple control strategies through PROFILES - a package of control instructions such as occupancy switching, time lag settings, photocell switching or dimming, governing how and when a particular ControlZAPP device controls a load or loads. The PROFILE can be configured into one or more MODES which are the individual switching, timing, override or dimming instructions which can be placed into a SCHEDULE (a calendar of times and dates) of when/how you wish these MODES to occur for any ControlZAPP product or group of controls. Because ControlZAPP

The ControlZAPP enables end users to create multiple control strategies



devices have an internal time clock they can be accurately programmed in real time to change their function at different times of day, or on different days of the week, even holidays can be programmed into the ControlZAPP product's schedule. Once you have configured your PROFILES, MODES and SCHEDULES you can proceed to UPLOAD those settings to your ControlZAPP hardware for controlling lighting or other connected loads. Password protected Security Keys stop unwarranted tampering with settings.

Most lighting loads

The ControlZAPP product range includes versions for: mains switching, controlling DALI dimmable ballasts, controlling 1-10V dimmable ballasts and all products are suitable for most lighting loads including LED. Volt free versions are also available.

ControlZAPP devices have a real time clock ensuring very accurate scheduling of switching, dimming and override functions (Modes). Time lags, threshold lux settings and maintained light levels for daylight

control can turn the load OFF after a short visit time.

For many applications, such as catering and workshops, that require permanent ON during normal working periods to ensure safety is not compromised. ControlZAPP can be programmed to override loads ON for fixed periods then revert to automatic occupancy based switching out of hours ensuring lights are not left on when not required. The Group Control feature can act as a manual on/off if the automatic programmed settings require temporary overriding.

For additional safety and security, functions can be accurately scheduled either in real time or by sunset and sunrise prediction times based on your location using GPS. So lighting can be anticipated and turned ON slightly before dusk and OFF slightly after dawn or accurately timed switching functions can be applied to mimic occupation during holiday periods and company shut downs. Even display lighting for museums and retail units can be timed to turn ON/OFF at specific times on different days of the week.

The ControlZAPP interface is designed to be within the scope of all energy management professionals, specifiers, consultants, contractors etc without the need for specialised training. However, if required, the DANLERS technical support team can pre-programme Profiles to special order. Profiles can be changed at any time by uploading new profiles to the installed hardware. Adjustments can be made remotely within Bluetooth Smart range (up to 100m) and therefore there is no need to remove the device from the ceiling. Warehouses can be programmed and adjusted without the need for ladders or cherry pickers. The freely downloadable APP also removes the requirement for expensive IR hand controllers and does not require a central control hub.

ControlZAPP enabled products are ideal for installations including: offices, factories, warehouses, retail units, hospitals, hotels, theatres, schools and colleges, leisure parks and shared accommodation.

“Display lighting for museums and retail units can be timed to turn on or off at specific times”

linked dimming (DALI or 1-10V options) can be altered to suit the building's usage via the Scheduling feature so during key occupancy periods settings could include longer time lag periods and increased lux thresholds, then settings can be reduced during times when auxiliary staff such as cleaners and caretakers are occupant. Different settings can be applied at weekends when buildings are normally unoccupied.

When using the Passive Infra-Red Occupancy sensing function ControlZAPP devices have a two-tier time lag system (the time that has to elapse before the load is switched off after the last movement detected). For example, if a person visits an area for a brief period to pick up a document the