



Mount Hospital Main Entrance



Case Study

The Background

With 224 patient-beds, Mount Hospital is one of the largest private hospitals in Perth that provides overnight, multi-day and same-day procedures and provides a comprehensive range of services across most adult specialties.

Managing emergency lighting compliance on a medium to large site without a monitoring and testing system can be challenging. Combine this with buildings that have been extended and upgraded over the years it becomes even more difficult.

Mount hospital has had several additions to the hospital over the years and as such conducting an emergency lighting duration test can be challenging especially when many fittings require regular maintenance or replacement.

The six-monthly test involves cutting power to the fittings via a test switch and then after 90 minutes walking the site to identify and document if any fittings are still not illuminated. The facility manager decided an automatic emergency lighting system combined with long design life fittings would save time, money and ensure the site was compliant but wanted to avoid adding wiring throughout the building due to the spread-out nature of the hospital. Clevertronics was invited to discuss the project and provide a suitable emergency lighting solution.

The Challenge

Upgrading or adding an emergency lighting system in buildings that have undertaken extensions and additions can be challenging as the wiring is not consistent across the site and therefore getting connectivity to each fitting can require additional backbone hardware.

As Mount Hospital had several new buildings and was spread out, adding wiring was not a feasible option to consider and using standard RF was going to be almost impossible to achieve a cost-effective solution without adding multiple antennas.

Project Name

Mount Hospital

Location

Perth, WA, Australia

Industry Application

Healthcare

Project Type

Existing Emergency Lighting Upgrade

Year

2019

Number of Fittings

262

Contractor

Insight Electrical Technology

Product Range

CLP/LP Premium Lithium

Testing System

Zoneworks XT HIVE

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Zoneworks XT HIVE is different to other RF emergency lighting systems as it uses dynamic self-managed meshing (DSM) to build a network of fittings that continually communicate with each other.”

To reduce upfront costs, it was important that the new fittings could be progressively added to the system as existing fittings failed subsequent tests.



The Solution

After reviewing the site and the requirements the Zoneworks XT HIVE system combined with LP premium fittings was selected as the best solution. Zoneworks XT HIVE is perfectly suited to all types of buildings and facilities although when it comes to challenging and spread-out sites like Mount Hospital the advantages are significantly highlighted.

Clayton Bell, project service coordinator at Clevertronics was responsible for the commissioning of the XT HIVE system at Mount Hospital. He was asked about why the XT HIVE can achieve such great outcomes on sites like this one. "Zoneworks XT HIVE is different to other RF emergency lighting systems as it uses dynamic self-managed meshing (DSM) to build a network of fittings that continually communicate with each other. Each fitting chooses the best path to connect together, and this means the system doesn't rely on a single signal to connect the system like other RF systems. The DSM connects perfectly with other fittings in other building or floors with ease. Also, each XT HIVE controller can handle 1000 fittings, so the backbone requirements are very simple to install and commission." he adds.

The LP Premium range of products have a 10+ years battery design life and the extensive fitting selection provides options to cover all the existing product footprints, without the need for patching and repainting the surfaces.

As with all Zoneworks systems, Mount Hospital is now included in the Advantage Lifetime Support program, which provides system health checks, training, and software updates by the local Clevertronics team for the life of the system.

The Result

The first and second stages are now completed at Mount Hospital with 100% meshing of the 262 fittings across the site.

As a result of the project success, a further request for an emergency lighting design has also been provided for batten replacements in the undercover car park areas at the hospital.

Big thanks to the team at Mount Hospital for trusting us with the project and Insight Electrical Technology for the installation.

Find Out More

Mount Hospital is another quality project delivered by Clevertronics. If you would like further information about this case study or are interested in understanding more about Emergency and Exit lighting within your building, contact Clevertronics for a site audit, demonstration, and cost analysis report.



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