









Clevertronics



## The World's Most Advanced Emergency Lighting System

Zoneworks HIVE is the market-leading emergency lighting system, installed in over 4000+ sites across the UK, Australia and New Zealand.

It simplifies how emergency lighting is designed, installed, and managed by reducing backbone hardware requirements and implementing Dynamic Self-Managed (DSM) meshing technology utilising only a single RF controller per 1000 fittings.

With Zoneworks HIVE, managing emergency lighting is now simpler, faster, and easier:

- · Simpler for system designers.
- · Faster for installation and commissioning.
- · Easier for facility managers.

Plus, every Zoneworks HIVE system is backed by our Lifetime Technical Support team—providing expert assistance for the life of the system, at no extra cost.



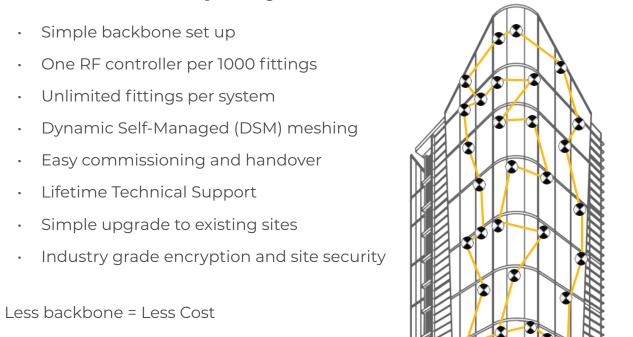
Introducing the latest major upgrade

## HIVE COMBINE

ADVANCED LIGHTING MANAGEMENT FOR CAR PARKS, STAIRWELLS & BACK OF HOUSE



#### Unmatched Simplicity







\*1000 fittings per controller, unlimited fittings per system. Location of the controller is flexible & can be moved should the need arise.

Finally, a solution has arrived to provide the required functionality and reporting in Car Parks, Stairwells and Back-of-House areas.

With HIVE Combine, Zoneworks HIVE now integrates emergency lighting and lighting management controls, eliminating the need for additional infrastructure while delivering real-time energy consumption, occupancy sensing, and system health insights.

Additional HIVE Combine functionality now comes standard with Zoneworks HIVE at no additional cost.

Go to page 18 for more information



## **The Zoneworks HIVE** Advantage

Simpler Design, Faster Install, & Easier Management

Whether you're designing, installing, or managing emergency lighting, Zoneworks HIVE delivers unmatched simplicity, speed, and efficiency—making it the smarter choice for designers, contractors, and facility managers alike.

Now you can specify lighting control functions and reporting for both car parks, stairwells, and back of house areas for no additional cost.

### Designers



## Simpler..... Planning & Specification

- Minimal Backbone Infrastructure One RF controller per 1,000 fittings.
- · Wireless Mesh Network No additional routers, repeaters, or data cables required.
- Scalable & Future-Proof Easily expandable without reworking the system.

What this means for you: Less complexity, reduced design time, and easier compliance with regulations

# HIVE COMBINE

HIVE Combine enhances Zoneworks HIVE by adding intelligent lighting control, optimising energy efficiency, and streamlining compliance—without additional infrastructure or complexity.

## Simpler..... Control, No Extra Complexity

- Seamlessly integrates with Zoneworks HIVE, eliminating the need for separate lighting control systems.
- Adds presence detection, absence detection, and group linking, simplifying design.

#### Contractors



### Faster..... Install & Commissioning

- Auto-Configuring Dynamic Self-Meshing Devices self-connect, reducing setup time.
- Plug & Play Installation No need for additional networking cables or controllers.
- Remote Testing & Commissioning Reduce time spent on-site and simplify handover.

What this means for you: Faster project completion, lower labor costs, and minimal troubleshooting.

#### Facilities Managers



### Easier..... Compliance & Building Management

- Automated Compliance Reporting –
   Meets standards with no manual testing.
- Real-Time Monitoring & Diagnostics Get instant system health updates.
- User-Friendly Dashboard Easily manage emergency lighting across multiple sites.

What this means for you: Reduced maintenance effort, seamless compliance, and lower operational costs.

## Faster..... Installation, No Extra Hardware

 Utilises the existing HIVE network, using the same controllers as the emergency lighting, DSM meshing, and simple commissioning

## Easier..... Energy Management & Compliance

- Real-time energy monitoring optimises efficiency and cost savings.
- Occupancy-based control enhances safety and reduces waste.
- Centralises emergency and general lighting systems



#### Reliable & Efficient Wireless Network

with Dynamic Self-Managed (DSM) Meshing

Like a beeHIVE, Zoneworks HIVE's Dynamic Self-Managed (DSM) Meshing enables each fitting to self-discover and form "colonies", dynamically building a reliable, interference-free network. These colonies communicate only within their group, preventing disruptions from other wireless systems. This smart, self-organising approach maximises efficiency, reduces commissioning time, and simplifies ongoing system management—making installation and operation faster, smarter, and more reliable



#### **Key Features & Benefits:**



High Reliability & Availability – No single point of failure, ensuring uninterrupted operation.



Self-Healing & Adaptive Routing – Automatically finds the best data path, adapting to environmental changes.



Interference Avoidance – Multi-channel blacklisting prevents disruptions from other wireless systems.



Resilient in Dynamic Environments – Adapts to obstacles like walls, doors, or changing occupancy levels without impacting performance.



Efficient Operation – Optimises the signal path, reducing energy use while maintaining performance.



Prevents disruption – from other wireless systems by deploying multi-channel blacklisting, adaptive transmit power, short transit times, and retransmission of lost data

DSM Meshing makes Zoneworks HIVE a smart, self-sustaining, and future-proof emergency lighting system that guarantees performance in any environment.









## **Flexible Hosting Solutions** for Every Site

Zoneworks HIVE offers four flexible hosting options to suit different site requirements, ensuring reliable, scalable, and secure emergency lighting management.

- 1. On-Premises Hosting (Physical Server Dedicated Network) Ideal for single sites without a shared network. Data remains on-site, with low infrastructure costs and no internet required
- 2. On-Premises Hosting (Physical & Virtual Server Shared Network) Suitable for multi-building or campus-style sites with an existing network. Enables centralised management with scalability and BMS integration.
- 3. Off-Premises Hosting (Public Cloud Virtual Server) Hosted on Amazon Web Services (AWS) for scalability & cost savings. No on-site server maintenance required, with secure remote access.
- 4. Off-Premises Hosting (Private Cloud Virtual Server) Best for datasensitive environments (e.g., healthcare, government). Offers dedicated cloud resources, enhanced security, and compliance.

Each hosting option is designed to optimise performance, reduce IT overhead, and ensure compliance for single-site and multi-site operations.





#### A System for Every Type of Site

Small sites, large sites, old sites, and new sites

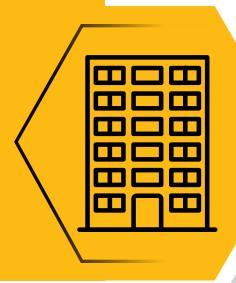
Whether it's a large industrial facility, a small building, or a multi-site operation, Zoneworks HIVE delivers a reliable, scalable, and intelligent emergency lighting system—helping businesses of all sizes reduce costs, simplify management, and improve compliance. The simplicity of Zoneworks HIVE makes it unchallenged as the easiest upgrade to an existing building on the market.

#### 1. Large Sites - Reliable Coverage Without Complexity

Managing emergency lighting across large facilities, warehouses, or multi-building campuses can be challenging, but Zoneworks HIVE simplifies the process:

- Wireless RF Mesh Technology eliminates the need for expensive networking infrastructure.
- Automated compliance reporting reduces manual testing and maintenance.
- Self-configuring DSM Meshing ensures seamless communication across large spaces.

With centralised cloud management, large sites can be monitored remotely, reducing time spent on-site while ensuring real-time system oversight.



#### 2. Small Sites & Upgrades – Cost-Effective and Easy to Deploy

For small businesses, retail stores, and single-site locations, Zoneworks HIVE provides the benefits of a smart system without the complexity or cost of a large-scale installation:

- Almost no backbone one controller will be all you need for most sites
- Cloud-based management No dedicated PC or server required, minimising IT demands.
- Fast, simple installation Wireless self-meshing means minimal setup time.

Zoneworks HIVE ensures small sites get all the advantages of an advanced emergency lighting system while remaining costeffective compared to traditional SPU fittings.





## 3. Multi-Site Operations – One System, Multiple Locations

Businesses with multiple locations, retail chains, or distributed facilities need a solution that provides centralised control while allowing local management. Zoneworks HIVE delivers:

- Seamless multi-site connectivity Monitor and manage multiple locations from one interface.
- Site Group Access Facility managers can grant site-specific access while retaining full compliance oversight.
- Consistent testing & reporting Standardised emergency lighting management across all sites.

This makes Zoneworks HIVE the ideal solution for businesses that need to scale, ensuring all locations remain compliant with minimal administrative effort.

#### Managing Multiple Sites with one Simple Interface

Organisations with multiple sites can manage all their emergency lighting from one central location.

This feature, known as **Site Group Access** enables facility managers to grant specific access to users across different sites. For example, an organisation with multiple locations may have different facility companies looking after each site. With this feature, they can assign them all their particular site but retain central access to all the testing and reporting information for all locations. Those responsible for compliance have access and control of all the information required

Unmatched Performance



## **Unmatched Security & Reliability** with Zoneworks HIVE

#### **Advanced Security for Emergency Lighting Networks**

Zoneworks HIVE provides industry-leading security with three levels of system network protection

- ✓ Message Integrity Ensures that network data has not been tampered with.
- $\checkmark$  Message Confidentiality Encrypts data to prevent unauthorised access.
- ✓ Node Authenticity Allows only authorised devices to join the network.

These security measures ensure that Zoneworks HIVE remains the most reliable, secure, and scalable emergency lighting system on the market today.



Trusted across many industries

overnment & Defence





## Solutions for sites or areas that can't utilise wireless platforms

For environments where RF networks are unsuitable due to client or application requirements, such as hazardous areas and hospital MRI rooms - Clevertronics offers two reliable alternatives:

- 1. HIVE2Wired Bridge Extends Zoneworks HIVE into RF-restricted areas using a wired communication link, ensuring all fittings remain part of the same system.
- 2. XT Data & Powerline A fully wired alternative to Zoneworks HIVE, using data-over-powerline technology to enable emergency lighting management without the need for RF

Both solutions ensure seamless compliance, monitoring, and control, even in RF-sensitive environments.

Both these alternatives can be commissioned to work side-by-side on the same headend Zoneworks software.



Data Centres



Infrastructure & Transport





## Seamless Monitoring, Reporting, & Integration with Zoneworks HIVE

Zoneworks HIVE has all the functionality users are familiar with, including a clean and simple web-based interface that can be integrated seamlessly with other networked building

management services.





Fitting Details



**Emergency Lighting Dashboard** 

#### Seamless Building Management System (BMS) Integration

Zoneworks integrates with third-party Building Management Systems (BMS), allowing emergency lighting data to be managed alongside other integration systems such as lighting, ventilation, security, and access control within a single platform.

Flexible Integration Options:

- ✓ Low-Level Voltage-free contacts for alarm and fault notifications.
- High-Level SQL Direct database access to emergency lighting data (no additional cost).
- ✓ High-Level MQTT Compliance data integration with supervisory control systems and dashboards.

Clevertronics provides a customised system view, ensuring BMS integrators can access only the relevant data for each site.



#### **Automated Compliance & Reporting**

Automated Compliance & Reporting – Zoneworks HIVE automatically schedules and logs test results, eliminating the need for manual logbooks and on-site testing. Compliance data is securely stored and easily accessible, ensuring facilities remain audit-ready without the hassle of manual record-keeping.



## Remote Monitoring & Proactive Maintenance

Facility managers can monitor and control emergency lighting from anywhere via a cloud-based dashboard, accessing real-time fitting status by Fittings Group or individual Fitting Details. With instant fault alerts, issues can be identified and resolved proactively, reducing downtime and ensuring system reliability



## **Emergency Lighting Dashboard**

The all-new Zoneworks HIVE System Health Dashboard provides a comprehensive, real-time view of your emergency lighting system, including battery performance and fitting age profiles. With clear pass/fail indicators and failure reasons, users can quickly identify issues, track trends, and proactively plan maintenance and future investments, ensuring compliance and system reliability at a glance.



### **NEW** Live Drawings

The all-new Live Floor Plans feature in Zoneworks HIVE provides a real-time visual overview of emergency and general lighting on your building's floor plans. Automated placement ensures accuracy, while clickable fittings display live status updates with color-coded indicators for easy monitoring.

Simplify maintenance, compliance, and control—all in one view.

The reporting functionality provides everything you need at the push of a button from faulty fittings, maintenance log and full test results.



Fitting detail and test history



## Effortless Set-Up & Commissioning with Zoneworks HIVE

A Faster, Simpler, and More Efficient Setup

Commissioning emergency lighting systems has never been easier. Zoneworks HIVE eliminates complex infrastructure, reduces setup time, and automates network creation - allowing installers to get the system up and running faster than ever. And now with the addition HIVE Combine, commissioning general lighting is just as easy.

#### **Simple Set-Up & Commissioning Process**

#### 1. Install & Power Up the HIVE Devices



- No additional networking cables, routers, or controllers required.
- Wireless Dynamic Self-Managed (DSM) Meshing enables fittings to automatically detect and connect to each other.
- · Reduces commissioning time by eliminating manual device pairing.

#### 2. Commission the RF Controller



- One RF controller can manage up to 1,000 fittings with unlimited fittings per system.
- Simply turn on the controller and it will automatically communicate with the network.
- · No manual configuration of networking or data points is required.

#### 3. Create the Logbook & Finalise System setup



- Fitting registers can be uploaded instantly, saving time and reducing errors.
- The system is ready for real-time monitoring, testing, and compliance reporting via a smartphone, tablet, or PC.

#### Introducing Paperless Commissioning in Zoneworks HIVE



Paperless Commissioning is a cloud-based process that streamlines device registration and setup during commissioning, eliminating manual paperwork. Installers enter device details via a mobile-friendly web link, which syncs to the cloud in real time, ensuring faster setup, improved accuracy, and secure, remote access—making commissioning quicker, more reliable, and fully digital.



Zoneworks HIVE offers multiple methods to commission the system to streamline the process for different buildings and project types.

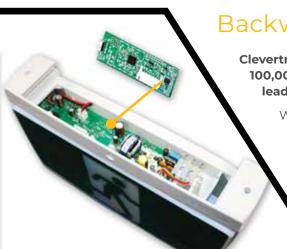
#### Commissioning structured to suit your site



## **Upgrading** your **existing Zoneworks system** to HIVE

An investment in a Clevertronics Zoneworks system is an investment for life. Every new Zoneworks system is backwards compatible with previous generations that allows for a seamless upgrade pathway for all our end user clients to accommodate refurbishments like tenancy refits, building additions, or simply migration to our latest technology as fittings fail through natural attrition.

To upgrade an existing Zoneworks site to HIVE, simply add an HIVE controller and add or replace fittings when required under regular maintenance. Software updates are free and Clevertronics provides commissioning support to migrate your existing Zoneworks system and HIVE into one front end interface for ongoing testing, reporting & compliance management.



Backwards compatible HIVE nodes

Clevertronics LP & L10 battery technology combined with 100,000hour luminaires means your installed fittings have industry leading service life.

With our engineered backwards compatible HIVE nodes there is no need to discard functioning emergency lights to access the benefits of the Zoneworks HIVE as part of your upgrade project. The Zoneworks HUNI Card [HIVE Upgrade Node Interface] is a plug-and-play solution that links the existing evacuation luminaire into the HIVE platform. This process can happen in bulk or over time to build a complete HIVE system to maximise the life of your investment in lithium fittings.

## Seamless experience between new and existing Zoneworks systems

A single hybrid front-end Zoneworks interface allows existing clients to control both the existing and new generation of Zoneworks in one location, without jumping between interfaces or windows.

This creates a more seamless experience for clients with no separation between emergency lighting - allowing for staged upgrades or new HIVE additions on sites using our powerline platforms.

Trusted across many industries

## **Upgrading** your site to **HIVE** from **scratch**

Previous emergency lighting system upgrades were costly and complex due to the required backbone and cabling requirements. With Zoneworks HIVE's simple backbone and Dynamic Self-Managed (DSM) meshing system, all sites, regardless of manufacturer, can now be easily upgraded cost-effectively.

Here are some signs you might need to consider an upgrade:

- Your facilities management team are struggling to stay on top of testing and maintenance requirements
- · Your team isn't sure how your system works because training and support is minimal
- · You're not sure if your building is compliant, and there's no log of the testing or maintenance
- · Your costs to manage, maintain, and test your system are high and going up over time
- · Your lamps and batteries are an older style that needs replacing every year or so

HIVE progressive upgrades don't add any significant upfront cost to your emergency lighting maintenance budget as it only requires the small investment of a HIVE controller. As the existing fittings fail and need replacement, HIVE compatible fittings are installed as a progressive upgrade throughout the site. This process ensures you are only using the maintenance budget to achieve the upgrade. Depending on the health of the existing fittings, you will likely have a fully operational HIVE site within a few years.

Only one HIVE fitting and controller is required to start you on a better emergency lighting compliance journey.

Are you interested in understanding more about an upgrade at your site?

Contact Clevertronics for a site audit, demonstration and cost analysis report.

Heavy Industry Warehouse & Distribution

## HIVE COMBINE

Until now, those looking to meet energy compliance, functionality, and reporting requirements for car parks and stairwells had to choose between

- Basic on/off sensors without any additional functionality or reporting
- 2. A complex lighting control system requiring additional infrastructure, installation, and ongoing maintenance expenses.

In many cases, due to these factors, a system approach is never taken due to the complexity and costs, leaving these key areas with a lack of adequate functionality and reporting.





Finally, a solution has arrived to provide the required functionality and reporting in Car Parks, Stairwells and back-of-house areas.

Additional HIVE Combine functionality now comes standard with Zoneworks HIVE at no additional cost.

ZONEWORKS IIVE COMBINE

## What is HIVE Combine?

HIVE Combine is a lighting management system that utilises the existing Zoneworks HIVE system to provide energy consumption, occupancy sensing and system health through an easy-to-use and data-rich dashboard.

This allows for the optimal configuration of lighting outcomes in your car parks, stairwells, and back-of-house areas to save you money whilst providing a safer and desired outcome for users.

The easy-to-use Zoneworks HIVE Combine interface provides all the required functionality settings to configure the lighting outcomes across the Car Park, Stairwells, Back of House and Plant Room areas.



- Energy consumption
  - Occupancy sensing
- System health

Is available through an easy-to-use and data-rich dashboard

## Functionality includes



Presence Detection



Absence Detection



Wall Switching



Bank Switching



Group Linking - Neighboring



Group Linking - Corridor hold



**Timed Events** 



Data Rich Dashboards







### **Unmatched Simplicity**

The Zoneworks Emergency Lighting platform has continuously evolved and is a trusted solution that has been successfully installed in over 4000+ facilities over the past 15 years.

The update to Zoneworks HIVE was a game-changer as it reduced the backbone to one single controller for 1,000 fittings and introduced dynamic self-managed meshing to make design, installation, commissioning and management simpler than ever before.

Adding lighting control to Zoneworks HIVE for areas such as car parks, stairwells, plant rooms, and back-of-house provides a seamless compliance approach. One system and no additional cost.





## How does HIVE Combine solve the problem?

#### The **HIVE Combine** solution

With Clevertronics supplying general and emergency battens and luminaires into these areas, it became apparent that a solution utilising the existing HIVE network would greatly help simplify lighting management in building areas where complexity and financial constraints made it difficult to justify.

With Zoneworks HIVE, you not only get the market leading emergency lighting testing and monitoring system but now lighting control functionality that can cover the key areas of car parks, stairwells and back of house areas at no additional cost.

With the addition of HIVE Combine to the Zoneworks platform, meeting compliance with advanced lighting functionality and system health has never been easier.





Adding lighting control to Zoneworks HIVE for areas such as car parks, stairwells, plant rooms, and back-of-house provides a seamless compliance and energy management approach.







### Stairwell application

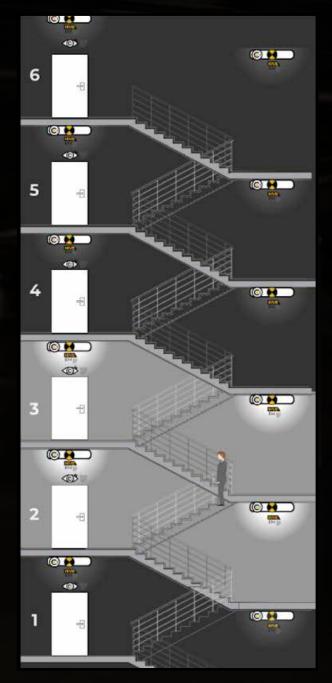
Lighting Management in a stairwell is achieved very easily using HIVE Combine. The following scenario outlines an example of group control.

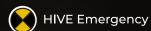
#### **Group Control Example**

All luminaires in this example are emergency HIVE Combine enabled, using stand-alone motion sensors or sensors built into the luminaire at the entry door. Presence on entry turns the landing and half-landing luminaires on and simultaneously turns on the luminaires at the level above and below.

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As the occupant moves down the stairs, the level below is turned on, and the upper levels dim and turn off as they time out. This type of grouping can be configured in countless ways depending on the requirements of the building. HIVE Combine makes this control easy and is more effective than basic sensors in every fitting.





# Flexible lighting control outcomes based on building requirements

### Car Park application

The above scenarios outline two solutions which are described as bank switching control and individual control.



#### **Bank Switching Example**

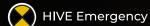
Involves stand-alone or integral HIVE sensors to activate banks of luminaires upon presence detection on entry. Every second driveway luminaire is a HIVE Combine emergency luminaire with integrated sensor to also detect presence and dim to a set level after timing elapses.



#### —— Individual Control Example

All luminaires and sensors are HIVE Combine enabled. The luminaires can be set up in groups as required to be triggered by presence detection and/or timed events. Energy and luminaire health information available for every individual luminaire in addition to dashboard views.







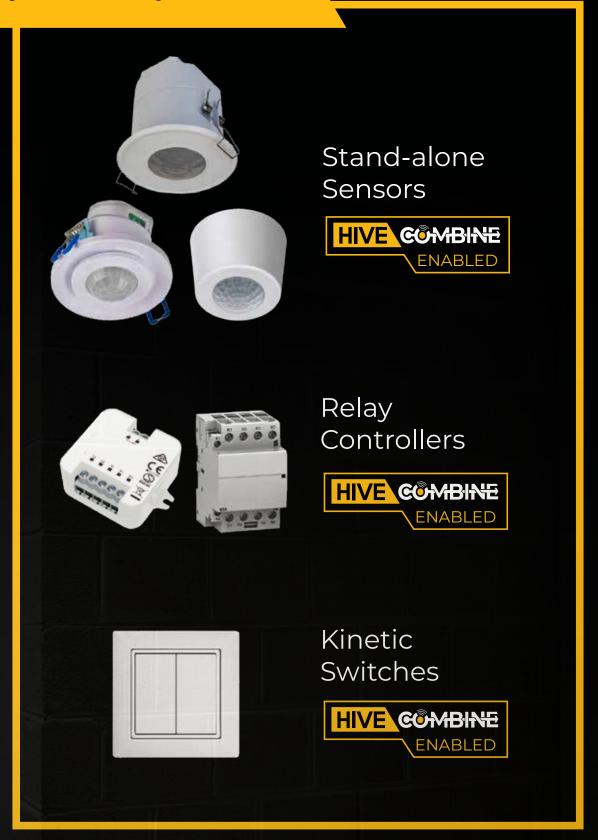


#### System **Products**



## System Components & Peripherals

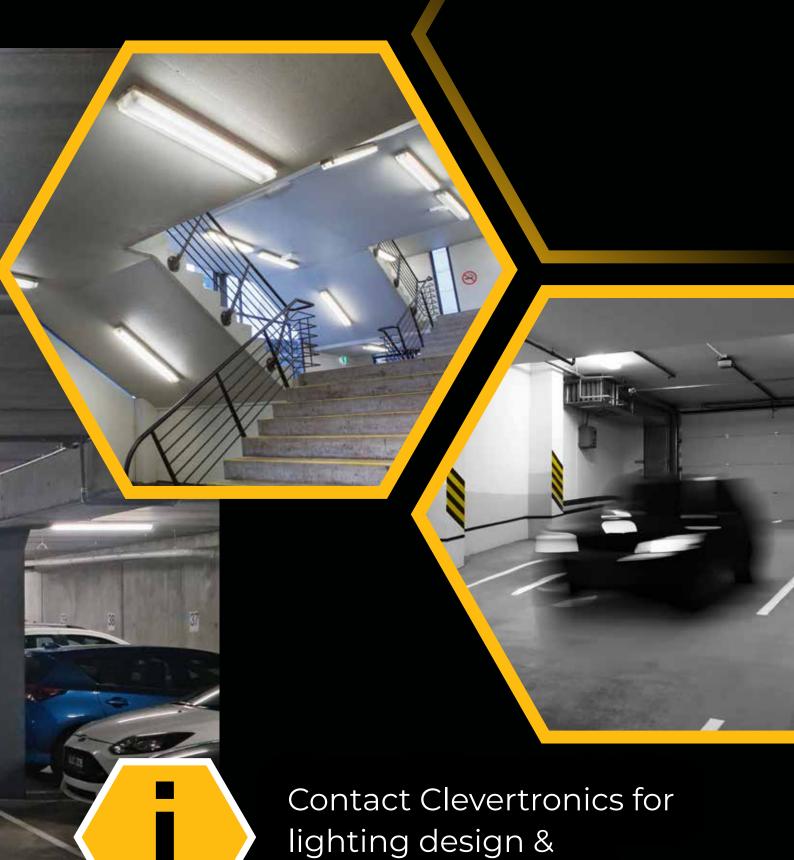
### System Peripherals



# HIVE COMBINE



## **Contact Clevertronics**



further information.





# Your Partner in Compliance & Lighting Control

With the Zoneworks HIVE platform, Clevertronics also includes ongoing support through our complimentary Lifetime Technical Support (LTS) program. This service is designed to help the building owner & maintenance contractor manage the on-going health for the life of the system.

Emergency lighting is regarded as a life-saving device, and therefore, it should always in working order. Compliance with the standards can be costly, especially if the products and operating systems regularly fail.

Many emergency lighting companies finish their involvement on your project once the product has been supplied. However, at Clevertronics we know that on-going support is important to contractors and building owners.







## How else we can help you

System Health Check Once you complete the testing, we assist with interpreting results

System Optimisation

We can provide expert support to assist with optimising your emergency lighting and lighting control system

**User Training** 

Periodic training is provided to ensure the user is confident with operating the system

**Complimentary Software** 

Complimentary software upgrades are installed to ensure your system is always up to date

Dedicated Support Contact

You will always have a dedicated point of contact to answer your emergency lighting questions

## **Technical Overview**

	Zoneworks HIVE	HIVE Combine							
System Function	Emergency lighting testing & monitoring	Intelligent lighting control for energy efficiency							
Key Applications	All commercial buildings requiring automated emergency lighting compliance	Car parks, stairwells, back-of-house areas, and spaces needing automated lighting control							
Network Type	HIVE RF Network with DSM Meshing, reducing infrastructure nee								
System Scalability Commissioning	Up to 1,000 fittings per RF controller, unlimited system-wide expansion								
Commissioning Process	Self-configuring RF (DSM Meshing) network, significantly reducing site commissioning time, delivering a fully commissioned system faster and more efficiently								
Bluetooth Connectivity	Smart devices (IOS & Android) can connect locally via our mobile access device								
Real-time Monitoring	Emergency lighting system monitoring, compliance tracking and health	Energy use and occupancy							
Security Features	AES128 CTR encryption, OMAC1 Message Integrity, unique encryption keys								
User Access Control	Site Group Access for tailored system permissions								
Live Floor Plans	Visual representation of fittings & system health								
Lighting Control Functions	n/a	Presence/Absence Detection, Wall & Bank Switching, Group Linking, Timed Events							
Alternative Solutions for RF-Restricted Areas									
Product Availability	Now	March 2026							

### Notes

## Notes

