









# **C** Clevertronics









# Contents

About Clevertronics	4-9
Key Product Selection Criteria	10-1
Ranges	12-17
CLP Premium	12
L10 Nanophosphate®	14
Testing & Monitoring Systems	18-36
Clevertest Plus System	20
Zoneworks® XT HIVE	24
DALI	36
Case Studies	38-43
Clevertest Plus System	38
Zoneworks® XT HIVE	40
L10 Nanophosphate®	42
Products	44-173
Exits	44
Dynamic Exit Signage	78
Emergency Lights	88
Circulars & Bulkheads	118
Linears	128
Emergency Modes of Operation	136
Chemical Resistance Table	137

# Our Vision

To be known as the most reliable and trusted emergency lighting company in the world.

# Our Mission

To make emergency lighting easy by designing world-class products that are supported with unrivalled expertise and customer service.



# We make Emergency Lighting easy.

Our mission to make emergency lighting easy continues to drive us to develop the best outcome for all stakeholders. With our dedicated research and development teams, Clevertronics is positioned to continue its leadership position in emergency lighting solutions.

Whether you're a specifier, facility manager, end user, or electrical contractor, our goal is to ensure that we understand your needs and assist you in delivering the outcomes you're after.

Clevertronics has built a global reputation for our innovation and leadership in emergency lighting over the past twenty years. Our recent release of the latest Zoneworks XT HIVE system is a major game changer, simplifying every step of the emergency lighting process and, most importantly, reducing the total cost of compliance.

However, what I am most proud of is the culture of customer care that exists throughout the entire company. Our customers remain our main priority, and our goal is to deliver you the highest level of product quality, service and support.

We look forward to sharing our continued success with you.

Tony. Tool

Tony Todaro Managing Director and Owner



Clevertronics is an Australian emergency lighting specialist that operates across Australia, New Zealand and the United Kingdom.

About Clevertronics

About Clevertronics

# We are the home of Emergency Lighting

Clevertronics is an Australian emergency lighting specialist that operates across Australia, New Zealand and the United Kingdom. Our head office located in Melbourne features state-of-the-art product development and manufacturing to support the continuing growth of the business.



#### We Embrace and Lead Innovation

Innovation features in many parts of our business, including luminaire design and functionality, world-class monitoring systems, and also how we support customers to learn, source, install and manage emergency lighting. One of the key innovations that revolutionised the emergency lighting market was the release of our L10 Lithium Nanophosphate range. Traditional emergency lighting maintenance costs have been expensive to manage due to poor battery life, resulting in noncompliance.

However, the introduction of the L10 Nanophosphate range increased luminaire lifetimes from four years to twelve years, resulting in over 80% maintenance savings compared to the available alternatives and a massive improvement in building compliance.

#### **Our Systems**

Managing the compliance of emergency lighting is critical and to do this effectively Clevertronics developed a world-leading automatic monitoring and testing system in Zoneworks XT HIVE.

The Zoneworks platform is installed and operational across 2500 sites around Australia, New Zealand and the UK. All Zoneworks systems are backed by a complimentary Advantage Lifetime Support program designed to help the building owner and maintenance contractor manage ongoing emergency lighting and associated costs.

# Our Unique Capabilities

We design, prototype and test all our luminaires and systems from our new state-of the-art head office in Melbourne, Australia. Our research and product development area consists of photometric laboratories, thermal testing chambers and long-term elevated temperature test rooms which assist us in releasing product to market in a fast and effective manner. We have manufacturing capabilities in Melbourne and Shanghai, catering to high volume and specialised requirements.

#### **Our Expertise**

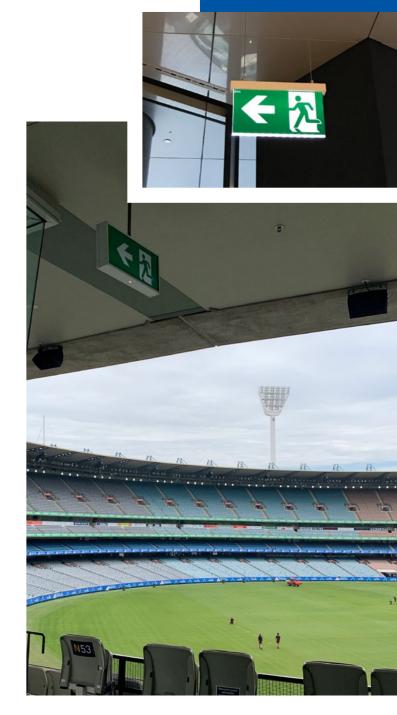
Our extensive expertise in understanding emergency lighting standards and application requirements has resulted in 1000's of specialised luminaires being designed and manufactured for installation in projects like tunnels, heritage buildings, places of interest, harsh environments, stadia, rail infrastructure and many other applications. If you have a challenging application, we will be excited to create a solution for you.

#### **Our Projects**

Clevertronics has supported our customers in the process of installing and upgrading emergency and exit lighting in thousands of small, medium and large sized facilities across Australia, New Zealand and the UK. All projects are given the support they require no matter what size. Customer satisfaction is of utmost importance to the Clevertronics team.

We are proud to be installed in many global landmark facilities including the Sydney Opera House, Melbourne Cricket Ground, Optus Stadium and Westminster Abbey as well as major hospitals, shopping centres, universities, correctional facilities and high-rise developments.

When you are installing or upgrading emergency lighting, you want the process to be easy, and Clevertronics delivers on this every time.



About Clevertronics

# Our Emergency Lighting Solutions

Clevertronics have a wide range of exit, emergency, circulars, bulkheads and linears to satisfy various applications and industries. Whether you require architectural, weatherproof, low temperature, or a custom luminaire for a specific requirement, we are here to support you. All our luminaires are tested and comply with BS EN 60598-2-22 standards.



#### **The Clevertronics Project Advantage**

Many projects require custom designed product, finishes or specific performance requirements. Our team of product and system engineers lead the emergency lighting world in many areas and are ready to apply that expertise to your project.

#### **Experts in Engineering a Solution**

Clevertronics has in-house thermal and photometric testing facilities which enables us to test and evaluate custom products and retro-fit conversions prior to any formal certification. Clevertronics can manage the official testing and approval process for third party fit-outs if required.



Our full product offering is extensive. We have two dedicated ranges, CLP and L10 spanning all emergency, exit and linear luminaires. All ranges are available with testing options including Clevertest Plus, Zoneworks XT HIVE, and DALI. This is supplemented by the ability to build custom project specific fittings and conversion of 3rd party fittings where required.







#### We have offices located in Australia, New Zealand and the UK

Our office in London has dedicated customer service and technical resources ready to support you on your next emergency lighting project or enquiry.



Clevertronics Head Office in Melbourne, Australia.

Key Product Selection Criteria

# Key Product Selection Criteria

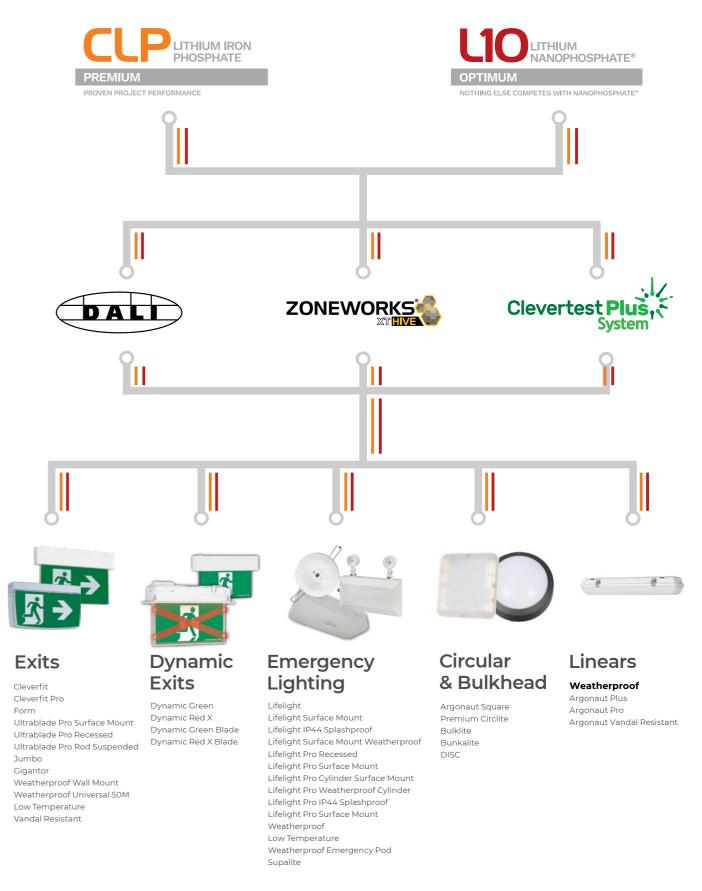
Select Your Range

Select Test Option

- · ClevertestPlus System
- · Zoneworks XT HIVE
- · DALI

Select Type & Style

- Exits
- Dynamic Exit Signage
- Emergency Lighting
- Circular & Bulkheads
- Linears



Ranges

# Selecting the Right Lithium Powered Product

There are many types of batteries used in emergency lighting and it is important to understand the strengths and weaknesses of each battery chemistry to ensure you can get maximum value from your product.

Older battery technology such as Sealed Lead Acid, Nickel Metal Hydride and Nickel Cadmium provide inferior performance and carry significant environmental impacts compared to Lithium Iron Phosphate (LiFePO<sub>4</sub>) batteries.



- Australia's No1 selling emergency lighting range
- Over 50% maintenance savings vs NiCd
- Standard Clevertest Plus

The CLP range is the proven project performer that combines Lithium Iron Phosphate battery technology with premium electronics and LED technology.

Available with Zoneworks® and DALI® testing options.



- Lowest total ownership cost
- 50% longer battery life vs any other lithium product
- · 60% maintenance savings vs any other lithium product
- Over 80% maintenance savings vs NiCd
- Standard Clevertest Plus

Nothing else competes with L10 Nanophosphate®, due to the structure of the Nanophosphate chemistry enabling higher power, increased abuse tolerance and longer life compared to other Lithium Iron Phosphate offerings.

Available with Zoneworks® and DALI® testing options.

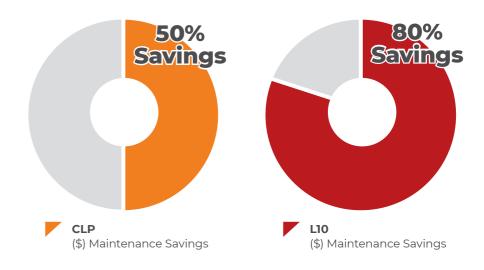
# Comparisons\*



\*Based on 30°C external ambient temperature, continuous operation

# Range cost of ownership\*





<sup>\*</sup>Exit and emergency fittings are replaced when either battery or PCB fails

Ranges Ranges

# L10 Lithium Nanophosphate®

#### The first and only Nanophosphate® powered product on the market

- · Lowest total ownership cost
- · 50% longer battery life vs any other lithium product
- · 60% maintenance savings vs any other lithium product
- · Standard Self Test





#### The L10 advantage

Clevertronics were global pioneers when they launched the L10 Nanophosphate range of products in 2012 incorporating Lithium Nanophosphate® battery technology which was the world's first lithium powered product on the market. The L10 range has proven to be a significant influence on the market due to the incredible maintenance savings that have been realised. The range is comprehensive and covers Exit and Emergency luminaires as well as a full range of Linears so you can ensure the facility can take full advantage of the savings available.

Since launch, over one million L10 Nanophosphate fittings have been installed into 100's of sites across the UK, Australia and NZ including, Melbourne Cricket Ground, Perth Children's Hospital, Barangaroo Reserve, Legacy Way Tunnel, Etihad Stadium, NHS and City of Oxford College, and on-site real world results are exceeding bench-test performance predictions by a significant margin. Clevertronics Zoneworks XT HIVE monitoring system provides unprecedented visibility into on-site product and maintenance performance, which assists facility managers in achieving compliance and helps Clevertronics in our drive for further innovation.

#### **Testing and Development**

Together with over ten years of bench-testing data at elevated temperatures and on-site "torture testing" with specific trial-site partners, Clevertronics has cemented its position as the world leader in lithium powered emergency lighting with its L10 range powered by Nanophosphate technology.

To understand the challenges of incorporating an LFP battery into an Emergency light and why long term testing and making it work in harmony with the total product is vital to ensure long term reliability, Michael Duce - National Systems and Engineering Manager from Clevertronics, provided some insight. "When we were embarking on this project, we knew the reliability of the product was centred around the impact heat has on the components inside emergency luminaires, so we put significant resources into redesigning products to place batteries away from heat sources. In the case of linear luminaires, we developed a thermally isolated section or POD at the end of the linear to house the LFP battery, and the emergency LED light source."

Testing was rigorous and Michael and his Australian-based team spent over two years testing the product before it was released on the market in 2012. Michael adds further details about managing the project.

"The second challenge was to ensure we could incorporate the battery into the various range of fittings. Our customers needed a complete range of Emergency, Exits and Linear fittings for their projects and to realise the 80% plus maintenance savings from the L10 range we needed to deliver the entire range as a package. This was challenging from an engineering perspective due to the massive scale of the development task given the large number of different products in our range. It meant that we had to structure the development team to work on several product families concurrently and work very closely with the Production Team to ensure a smooth transition to full-scale production. To see the results now provides great satisfaction especially being the global innovators."



"When we were embarking on this project, we knew the reliability of the product was centred around the impact heat has on the components inside emergency luminaires, so we put significant resources into redesigning products to place batteries away from heat sources."





Ranges Ranges

# So what is Lithium Nanophosphate?

Nanophosphate® is a registered trademark for a Lithium Iron
Phosphate battery technology that maximises the performance of the
standard technology. The three main areas where Lithium
Nanophosphate has distinct advantages over other Lithium Iron
Phosphate batteries are listed below.







Power – Nanophosphate is a positive electrode material of remarkable rate capability, critical to high power systems. High power products are able to pulse at discharge rates as high as 100°C and deliver superior power by weight or volume in a cost-effective solution. With their low impedance and thermally conductive design, high power cells can be continuously discharged at a 35°C rate, a marked improvement over other rechargeable battery alternatives, and have consistent power over a wide state of charge (SOC) range.

Safety – Safety begins with chemistry and Nanophosphate is stable chemically, which provides the foundation for safe systems while meeting the most demanding customer requirements. Multiple layers of protection are employed at the chemistry, cell and system level to achieve an energy storage solution with superior safety and abuse tolerance compared to metal oxide lithium-ion chemistries.

Life - Nanophosphate technology delivers exceptional calendar and cycle life. At low rates our cells can deliver thousands of cycles at 100% depth of discharge (DOD), a feat unmatched by most commercial lithium ion cells. Even when cycled at 10°C discharge rates, cells deliver in excess of 1,000 full DOD cycles. Not only does the technology retain its energy, it also retains its power capability. Not all lithium-ion technologies behave the same. The nanoscale structure of the Nanophosphate chemistry, for example, enables battery systems with higher power, increased abuse tolerance, longer life and the greater ability to maintain consistent power over a wide range of state-of-charge (SOC) as compared with competing lithium-ion and other chemistries. Understanding the fundamental chemical differences between Nanophosphate and other technologies is necessary to develop a complete and accurate assessment of the optimal advanced battery system that will deliver the best performance for a given application.



#### L10 Nanophosphate Lithium Battery

The Lithium Iron Phosphate battery technology has been available for over 15 years. However, significant technological breakthroughs in the early-2000s by leading manufacturers of these cells has provided the advanced properties which now sees this as the battery technology of choice for such applications as electric cars, emergency lighting, power drills, and computers. The L10 Nanophosphate range utilises a Lithium Iron Phosphate battery that has significant improvements due to the Nanophosphate advantage.

At Clevertronics, we also believe that when comparing different emergency lighting products, it is important to ensure the technology is comparable as not all emergency lighting powered with Lithium Iron Phosphate batteries will perform at the same level. It is, therefore, critical to ask to see the performance from actual site results to give you the complete story.

There's a real difference when the results



What emergency lighting compliance system is right for me?



Clevertest Plus (CTP) system is suitable for the simplest and smallest of sites, right through to medium and large installations where compliance and low ownership costs are important. The CTP system replaces the manual testing of emergency lighting, with self test fittings and includes the CleverSparky Electronic log book app for your phone and PC.



Zoneworks XT HIVE is the most advanced emergency lighting system in the world.
Utilising Dynamic self-managed meshing allows the simplest RF backbone set up for any site.

Every Zoneworks XT HIVE system is backed by the Clevertronics Advantage Lifetime Support program which is designed to help the building owner and maintenance contractor manage the health of the system at no additional cost.

#### What emergency lighting compliance system is right for me?

	MANUAL	CTP SYSTEM	ZONEWORKS XT HIVE
Simple Fitting Installation	✓	✓	✓
RF Controller			✓
Automatic Testing		✓	✓
Automatic Results Collection			$\checkmark$
Auto Faulty Fittings Report		✓	$\checkmark$
Electronic Reports		✓	$\checkmark$
Electronic Maintenance Log		✓	$\checkmark$
Network or Cloud Access Reports		$\checkmark$	$\checkmark$
Precise Test Time Configuration			$\checkmark$
Remote System Access and Configuration			$\checkmark$
BMS Integration			$\checkmark$
Real-Time Site Alerts			$\checkmark$
Dynamic Self-Managed Meshing Capabilities			✓
ALS Lifetime Support			$\checkmark$







# Clevertest Plus, The lowest cost emergency lighting system on the market

The Clevertest Plus (CTP) system is designed to provide building owners and electrical contractors with a costeffective and thorough means of managing emergency lighting.



The Clevertest Plus System will provide more accurate testing by ensuring no fittings are missed during a logbook test.

Despite our connected world, the vast majority of new installs continue with manually tested fittings and paper-based compliance reports which are time-consuming, inefficient, often inaccurate and difficult to access. To overcome these issues, the Clevertest Plus System brings automatic testing, site management and compliance reporting to the mobile world; your accurate site information will now be available where you want it and when you want it.

#### **Features and Benefits of the Clevertest Plus System**

- · Fittings automatically perform a 1-minute function test every month, and a 180-minute test annually
- · Does not require a test switch at the switchboard
- · No need for a data cable, wireless connection or centralised PC
- · Complies with BS EN 62034 and BS 5266-8 automatic testing requirements
- · Compliance reporting available instantly on phone or web portal
- · No need for any paper-based log book
- · Provides an accurate diagnosis of lamp, battery or control gear for each faulty fitting
- · Manage multiple sites under one account.

# What do I need for the Clevertest Plus System?

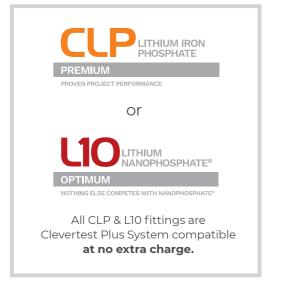






Download the testing app, CleverSparky® from the App store or Google Play.







The Clevertest Plus System (CTP) allows you to manage Emergency Lighting compliance with ease, saving you time and money.

# Step 1

**Activate the CTP self-test** function on each luminaire and put fitting into test.

# Step 2

Use the CleverSparky mobile app or the CleverSparky web interface to build your site database.



At the fitting or At the breaker





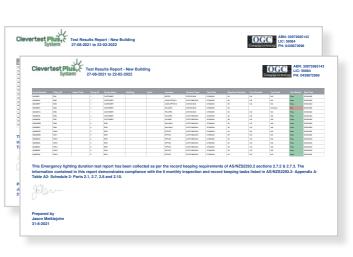
# Step 3

Use Quick Collect to rapidly gather the test results or scan a fitting to see detailed test or fault information.



# Step 4

Instantly produce detailed and professional compliance reports, customised with a business logo and digital signature.





Download from the **App Store or Google Play** 





Download the testing app, CleverSparky® from the App store or Google Play.

**Download the Guide** Download the CTP System operation guide at clevertronics.co.uk



Zoneworks is the world's most advanced emergency lighting system with over 1,500 sites installed globally.

The introduction of Zoneworks XT HIVE has redefined the way emergency lighting is designed, installed and managed, making it the most advanced system on the market

Zoneworks XT HIVE reduces the backbone hardware requirements to a single RF controller and adds dynamic self-managed meshing technology to make your emergency lighting simpler, faster and easier than ever before.

- · If you are designing an emergency lighting system, it is simpler
- · If you are installing and commissioning emergency lighting, it is faster
- · If you are managing emergency lighting, it is easier

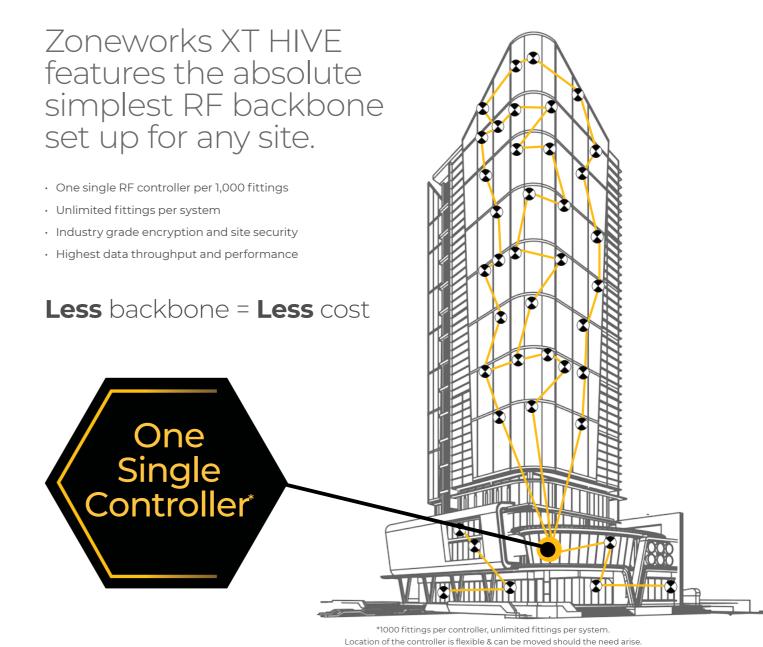
Zoneworks XT HIVE will continue to be supported by a team of Advantage Lifetime Support specialists that ensure each system is looked after for its lifetime at no additional cost. It's just what we do.



Design, Install, Commissioning, Testing & Maintenance



Installation & Operation



# Zoneworks XT HIVE is simple because you DON'T NEED to purchase & install:

- Additional Routers
- Additional Controller
- Additional Repeaters
- Additional Networking Cable
- Additional Couplers
- Additional Data Points
- Data Cable Between Fittings
  - Additional Extenders



# Dynamic Self-Managed (DSM) Meshing

• Every fitting self-discovers other fittings around it to form "colonies" that dynamically build the network

These colonies only communicate with each other and will not interfere with other wireless networks, even if they are on the same frequency

- Maximising the efficiency of the overall network
- · Minimising commissioning and system management time

 $\frac{1}{2}$ 

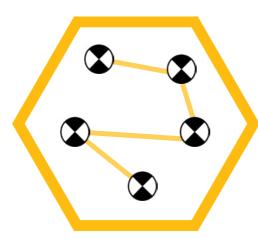
# ZONEWORKS

# Zoneworks XT HIVE Backbone & Connectivity

Zoneworks XT HIVE is fast, simple and smart, allowing you to save time and costs across design, installation, commissioning and testing.

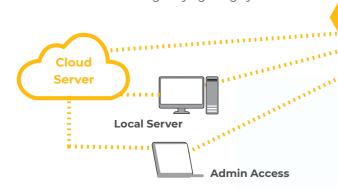
# 1. Automatically Mesh Devices

Once HIVE fittings are installed and powered up they automatically create a network by self-discovering others around them using dynamic self-managed meshing (DSM Meshing), saving valuable commissioning time.



# 2. Enable the Controller

Switch on the controller to provide access and control of the emergency lighting system.





The fitting register can now be easily uploaded and a smartphone or tablet can be used to perform local fitting diagnostics and identification.







The MAD (Mobile Access Device) is a portable access tool (as small as a smartphone) that enables service technicians a mobile field connection to the XT HIVE network using a smart phone or tablet app.



RF Mobile Access Device to Fittings

......

Bluetooth to Smart Device



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# Security

The method used by the HIVE controllers to achieve this outcome is via a unique encryption key. Following the initial commissioning, the fittings are then issued an encryption key; either globally across the entire site or on a controller-by-controller basis.

In the same way that bees join a colony, once the encryption key is applied to the HIVE emergency fittings and the controller, a segregated community of Zoneworks XT HIVE emergency light fittings is established, and the members of this HIVE will only communicate with their fellow members, ignoring any others within range.

New members can only be added to this community by the issue of the site's unique encryption key. This key can be changed by the client if or as required.





The HIVE controller(s) and fittings also provide 3 levels of RF network security – Message Integrity, Message Confidentially (encryption) and Node Authenticity.



# Message Integrity

Each message is appended with an OMAC1 Message Integrity Code.

Making sure the message content was not interfered with during transmission.



# Message Confidentiality

Every message is encrypted with AES128 CTR mode using a message specific nonce.

Ensuring the message is encrypted in such a way that if it could be heard or intercepted the message could not be understood.



# Node Authenticity

Network signalling messages are encrypted and appended with an OMAC1 Message Integrity Code (MIC). Nodes without the correct encryption & MIC key pair cannot join the network.

Making sure that received data can be trusted.



# Security at the Controller and Server

#### **Industry standard:**

- $\cdot$  SSH for file transfer
- ·HTTPS
- · Secure Socket Layer for MQTT

Trusted across many industries

Government & Defence



Data Centres



Infrastructure & Transport



Operation & Reporting

Zoneworks XT 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 detail and history: Including monthly function tests and full duration tests.

# Flexible Site and User Management

Allows organisations with large sites or multiple locations to put one controller at each address to centrally manage all their emergency lighting systems from one place, including gathering compliance test results without needing to attend the sites in person.

A feature named "Site Group Access" enables facility managers to grant specific access to users across different parts of the network. For example, they might have an agreement with different local contractors to provide emergency lighting maintenance for different locations. The building manager can give them access to the system, but they'll only see the parts that are relevant to their location.

This feature coupled with Active Directory Integration allows system administrators to manage users more effectively.

# **Hosting Options**

While the Zoneworks XT platform can be housed locally, clients may instead choose to access Zoneworks XT Cloud Hosting, making it the practical choice for installations where there are no dedicated building management facilities. All that is required is an internet connection to the local XT HIVE RF controller and you are set to go.

# Simpler Commissioning

Multiple installers can work efficiently together at different locations to create the master register, ready for managing compliance testing for the site. The Zoneworks App lets maintenance personnel manage multiple sites, including control of access to the system for additions or changes as required.

# Sensitive Areas that Can't Utilise Wireless Platforms

Zoneworks XT HIVE has the solution if an RF network isn't suitable for selected rooms or areas that are shielded from all RF interference due a specialist function, or a requirement for specific luminaires. These may include high-security facilities, emergency services control rooms, hazardous area lighting, or hospital MRI rooms.

Adding a Hive2Wired bridge outside of the sensitive zone enables a Zoneworks connection using a (Non-RF) wired communication link into the shielded area and includes the fittings in the same system.

# **Building Management Systems** Integration

The Zoneworks XT management software includes the capability to integrate with 3rd party Integrated Building Management Systems platforms. This allows for the integration of the emergency lighting information into a single, consolidated building management system, alongside other building services including general lighting, ventilation, security, access, and more.

We offer integration with 3rd party Building Management Systems on several levels:

- a) Low Level via voltage free contacts that provide system alarm and fault indications.
- b) High Level via a Direct Structured Query Language (SQL) database access where all information
- associated with each emergency light fitting can be obtained (no additional cost).
- c) High Level via REST API or MQTT interfaces that work with multiple supervisory systems, including Integrated Building Management Systems (IBMS).

Clevertronics can provide a "System view" for the BMS integrator to access only the relevant information for each site.

# Upgrading your site to XT HIVE from scratch

Previous emergency lighting system upgrades were costly and complex due to the required backbone and cabling requirements. With Zoneworks XT HIVE's simple backbone and RF 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

XT 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, XT 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 XT 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.





# Trusted across many industries

Residential & Hotels



# Security No Interference

# Warehouse & Distribution

# Technical Overview

**Fittings** per controller

Up to 1000.

**Fittings** per system

Unlimited.

High data throughput Ultra fast data network enabling real-time analytics and response. Status and test result request times for a 1000 fitting network are an average of 1 second, or less per fitting.

Network Commissioning The RF network builds itself automatically (unattended) resulting in a dramatic reduction in site commissioning time - Clevertronics can deliver a fully commissioned network faster.

Bluetooth Connectivity

Smart devices (IOS & Android) can connect locally via our mobile access device.

Compatibility

Supports Zoneworks Powerline and RF controllers.

Configuration

Internal (external antennas by exception only on a limited range of products).

**Product Availability** 

L10 & CLP Exits, Emergency Luminaires & Linears.

Fittings **Product Code**  Add suffix '-HVG' to the part number of L10 & CLP Exits, Emergency Luminaires & Linears.

XT HIVE fittings use high grade network security protocols to ensure that they only communicate within their site and will not interact with any device outside of the commissioned group.

XT HIVE networks operates at 2.4Ghz, specifically designed to operate in environments alongside other RF systems, even those using the same frequency band including Wi-Fi, Mobile Phones, Bluetooth, and other wireless communication streams. It has proven performance in various environments including hospitals, retail, distribution centres, power stations, data centres, transport hubs and televised stadiums.

Heritage





# Your Partner in Compliance

With the Zoneworks XT HIVE platform, Clevertronics also includes ongoing support through our complimentary Advantage Lifetime Support (ALS) 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 standard 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.

Complimentary Lifetime Support

Trusted across many industries

Retail & Commercial

# How can we help you?



System Health Check

Once you complete the testing, we assist with interpreting results

Optimisation

We can provide expert support to assist with optimising the system

Training

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

Software

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

Contact

ou will always have a dedicated point of contact to answer your emergency lighting suestions



Medical & Health



Education





# DALI Registered

Clevertronics manufactures a range DALI registered emergency and exit luminaires.

DALI, the open protocol supported by all the major lighting manufacturers, enables digital dimming, individual luminaire control, lamp and ECG status feedback and emergency test and monitoring – all over a robust and simple wiring solution.



#### What is DALI

Digital Addressable Lighting Interface or more widely known as DALI is an open data and communication protocol that is defined under the IEC 62386 international standard. Part 202 of the standard specifies a protocol and test procedures for the control by digital signals of electronic control gear for use on a.c. or d.c. supplies, associated with self-contained emergency lighting. Clevertronics DALI luminaires are all fully compliant with IEC 62386-202 and are registered on the DIIA product database.

#### **DALI Integration**

By integrating emergency luminaires with the DALI lighting control system the same wiring and networking infrastructure can be utilised to monitor and test the emergency and exit luminaires. The DALI standard enables dimmable ballasts, emergency fittings and controllers from various manufacturers to be used in a single control system providing a flexible digital lighting system for designers, installers, facility managers and end-users. The DALI lighting control system and the software module for the emergency lighting is supplied by the lighting control system provider. Commissioning and addressing of the luminaires including the emergency lighting is also carried out by the lighting control system provider or systems integrator.

#### STANDARDS AND COMPLIANCE

The Clevertronics range of DALI Registered emergency and exit luminaires have been designed in accordance to:
IEC 62386-202

#### Clevertronics and DALI

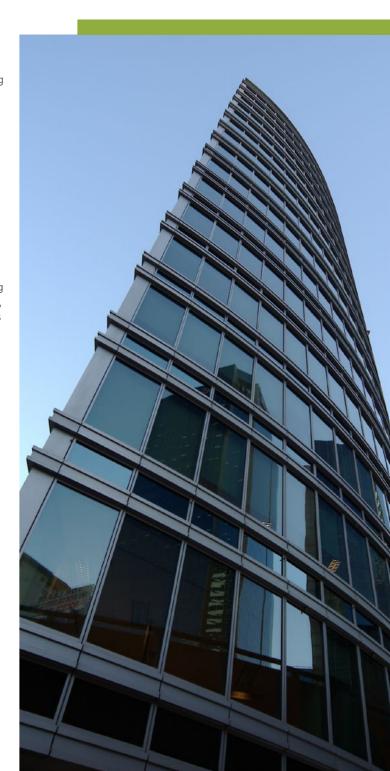
Each DALI emergency and exit luminaire incorporates a DALI plugin node module making the replacement of fittings simple without the need to re-address the new fitting. All Clevertronics DALI emergency and exit luminaires can be supplied with industry standard leads and connectors making installation to structured cabling quick and simple.

#### **Clevertronics Support**

Product and application support is always available for installers and integrators using Clevertronics DALI luminaires on a project. With dedicated project services and engineering teams based around Australia and New Zealand, we provide a high level of support for all projects and can provide technical advice, remote or on-site assistance at Clevertronics discretion.

#### **DALI Product Range**

Our extensive CLP Premium and L10 Nanophosphate ranges are available with DALI.





Salas Securi Malhauma Mis

**Coles Group Melbourne VIC** 

Coles Group has broken new ground in emergency and exit lighting by achieving best in class compliance thanks to a hugely successful partnership between its facilities management company CityFM and emergency and exit lighting specialists Clevertronics. Clevertest Plus self-testing fittings, combined with the innovative CleverSparky app, means Coles customers and staff are 100% safe and CityFM can generate a compliance report at the push of a button.

As one of the world's largest privately-owned facilities management companies, employing over 13,000 people with divisions across five continents, CityFM has an outstanding reputation for providing facilities management solutions to some of the world's biggest companies. In Australia, CityFM's expertise is proven by their longstanding contract with the Coles Group, Australia's second largest retailer, who have placed all 800 of their supermarkets in the company's care.

#### Challenges

One of the most important aspects of CityFM's service offering is maintaining compliant emergency and exit lighting systems in accordance with emergency lighting standards. As defective emergency lighting is a serious public safety issue, when it came to deciding who to trust to help them uphold their legal obligations, it is not surprising that CityFM turned to Clevertronics. National Regional Technical Manager for CityFM, Hector Bright, explains why:

"Right at the core of the success and longevity of the CityFM and Coles Group relationship is

CityFM's ability to innovate consistently across the full-service offering. Within this, emergency and exit lighting is pivotal and it is my job to make sure the best and most reliable products are installed," he says. "We chose

Clevertronics as our emergency and exit lighting partner because they were, and are, the most innovative company working in that space."

Clevertronics holds an estimated 50% market share in Australia and New Zealand across small, medium and large installations. Although all new Coles stores are automatically specified with Clevertronics Zoneworks (the gold standard emergency and exit lighting system), for existing stores a full retrofit is not always economically feasible.

"Doing a full retrofit with Zoneworks in our older stores was not possible, but we knew we had to do something to improve the emergency and exit lighting and maintenance approach. The manual method was no longer serving us. In fact, we increasingly recognised compliance risks associated with it," continues Bright. The manual system that Bright is referring to is a single point test and maintenance regime that has been in place for many years. It involves a technician walking around the store physically checking the fittings, making sure they stay illuminated for the required duration and recording the data in a paper logbook.

Solution

Product Support Manager for Clevertronics, Jason Meiklejohn, explains why this is far from the best approach. "We found huge variability in the way data was being recorded and managed. The whole regime made proving compliance quite difficult. In addition, the large population of legacy NiCad and fluorescent fittings installed in stores are reaching their end of life leading to high failure rates as well as high maintenance and energy costs."

Bright agrees. "There is no doubt that the single point test and maintenance regime is a pretty clunky way of doing things. It's not only time-consuming, and therefore costly, but must be done out of hours and, most seriously, is open to error and omissions. If it's not 100% correct, this creates a huge compliance risk for the business if a fault should occur and data is found to be missing or wrong."

With huge fines at stake, should an audit identify a problem, not to mention the safety risk to customers and staff, Bright engaged the team at Clevertronics to figure out a more time and cost-effective solution.

#### Results

The result is Clevertest Plus (CTP) System which has recently become operational in a concept Coles store called Middle Park in Queensland. Clevertronics National Accounts Manager, Graeme Smith, says it is incredibly gratifying to see the culmination of the four-year CTP product innovation journey finally come to life.

"Although we are scheduled to roll CTP out to all 600 of the older stores, Hector Bright was keen to get one store fully operational so we could easily demonstrate the benefits. We identified Middle Park Coles as the perfect place to showcase the system because 80% of the emergency and exit lighting fittings had already been replaced with Clevertronics CLP, which all have self-testing as a standard feature," explains Smith.

Bright says he is thrilled with the results. "We have programmed the system to self test every six months, as per our compliance obligations and, at that point, all the technician has to do is check each fitting to see if the LED is displaying a pass or fail indication. They capture the data electronically as they go using CleverSparky, then upload the data to the cloud for internal or, fully compliant, external auditing. It's brilliant."

"It has been a great learning curve for us, has improved safety and removed the compliance risks. In fact, it has set a new benchmark by going above and beyond the

There is no doubt the new CTP system will reduce labour costs, eliminate errors and give uniformity to the data collection process. In addition, Bright says it helps with forward maintenance. "If the fitting does display a failed test result, meaning there is an error, you can scan the fitting with your phone to automatically identify the issue, or just view the way the LED flashes to see what is required to fix it. We then electronically log the maintenance request,"

Smith is also happy with how the project has evolved. "It's win-win-win. For CityFM, for Coles and for Clevertronics. It has been a great learning curve for us, has improved safety and removed the compliance risks. In fact, it has set a new benchmark by going above and beyond the standard," he notes.

Having successfully demonstrated the concept store, the project is swiftly progressing towards the end goal, which is to have all single point Coles stores fully installed with CTP fittings and all data migrated onto CleverSparky.

"This will really drive efficiency gains giving us what I call 'more for less,'" continues Bright. "It has been great to work with Clevertronics on the project. Our aim has always been to get the best product for the right price with the right support, and all of that combined equals Clevertronics."

"We chose Clevertronics as our emergency and exit lighting partner because they were, and are, the most innovative company working in that space."



Australian Embassy issues emergency lighting overhaul at Australia House in London. Australia House is a listed century old heritage building in the heart of the City of Westminster, London. Over its long life, Australia House has had numerous refurbishments and 'fit outs' creating multiple layers of complex emergency lighting solutions.

Due to the challenging nature of the project, international consultancy WSP engaged Clevertronics and together created a solution that consisted of two main elements:

- 1. Assess and ensure the life safety lighting met the current standards for safe egress during an emergency
- 2. Simplify and modernise the way the emergency lighting system was tested, maintained and operated Being such a fundamental part of the building's operation, the project was separated into phases based on priority areas within the building.

The first phase consisted of replacing and upgrading the main egress and staircase emergency and exit lighting, as well as other high traffic areas. The second phase included additional egress areas and the rest of the building.

"Australia House has had numerous refurbishments and 'fit outs' creating multiple layers of complex emergency lighting solutions."

#### **Challenges**

Due to the building's age and complexity the major challenges of the project were the 'unknown elements' that could not be assessed effectively until the contractors were on site. A good example of this was understanding the existing routes taken by cable submains and final circuits to luminaires, many of which could not be ascertained without intrusive surveys.



#### **Solution & Result**

The Clevertronics system, was carefully chosen and linked to meet the clients' challenges. First and foremost, a top priority was given to provide sufficient lighting to cover all egress areas causing minimal disruption to the building when replacing the existing emergency lighting system.

To 'link' the system together, Zoneworks XT HIVE wireless mesh was chosen due to its continual monitoring and automatic testing of the emergency luminaires ensuring continued ongoing compliance. An additional benefit of using the wireless Zoneworks HIVE meant less hardware, cabling and commissioning. This was enthusiastically welcomed as additional high risk and intrusive works can equal high cost and delays.

Australia House is eligible for the Clevertronics Advantage Lifetime Support (ALS) program, as are all installed Clevertronics Zoneworks HIVE systems, therefore Australia House will receive free support for their HIVE system for the lifetime of the installation. ALS is made possible, in part, due to our

L10 Lithium Nanophosphate products, which has unrivalled warranty and have been engineered with a 12+ service life in mind. (See website for details of our ALS Program). This project is a crowning achievement by all parties involved. 400 plus emergency luminaires have been installed, commissioned, and tested. Full training has been deployed to the client and facility manager to ensure that they are able to confidently use their new HIVE testing system. As Jason Li of WSP says, "We've had great responses and feedback from the team with regards to the ease and simplicity of the Zoneworks XT HIVE interface. With a few clicks, the team can now automate scheduled tests of the luminaires on a consistent monthly basis and plan for a yearly 3hr test. Better still, they can visually assess the performance of the system as the installation completely simplifies the overall management of each luminaire."



Continuing, Jason describes "In the past this would have taken days to inspect each month at great difficulty and expense due to the nature of the building. Now being automated, it directly reduces labour time and costs and any likelihood of human error. This single, easily manageable, emergency lighting system is the future and is certainly something we will be using more of."

"This single, easily
manageable, emergency
lighting system is the future
and is certainly something we
will be using more of"







Marvel Stadium is a 52,000 seat multi-purpose facility designed to cater for major sporting and entertainment events, as well as social, business and private functions. The venue hosts as many as 80 arena sports and entertainment events and 600 non-event day functions annually in its 15 different function spaces.

In 2012, Honeywell was tasked with reviewing the Emergency and Exit Lighting within the stadium. With the existing system reaching the end of its serviceable life the maintenance costs which were already high had reached a level which was not sustainable at \$1,083,000 in costs over a 7 year period.

#### Marvel Stadium after 8 years



- 2,756 exit & emergency light fittings
- 93.51% Lithium battery capacity
- 33 total faults
- 1 battery fail



**OPTIMUM** 

NOTHING ELSE COMPETES WITH NANOPHOSPHATE®

#### **Challenges**

With the stadium receiving such a high level of foot traffic, Emergency & Exit escape lighting is of utmost importance and the quality and performance of the emergency lighting is critical to ensure compliance is always achieved. Emergency and exit lighting also represented a major ongoing maintenance and energy cost for the stadium, and as time passed these costs grew exponentially as products had failed.

The biggest challenge was to firstly achieve 100% compliance and ensure safety for the customers and staff at the stadium and ensure the reliability could be improved and therefore reduce the overall maintenance costs over a 7 year period.

#### Solution

Following the consideration of various options, Honeywell was introduced to the Clevertronics L10 Nanophosphate® Lithium powered lighting range which had just been launched after 12 months of extensive testing. The Honeywell Victoria TAM Operations Manager who was managing the project said "The L10 Lithium"

range is the way of the future. I believe the move away from NiCd batteries will be quite swift as building owners and facility managers become aware of the numerous advantages that L10 product offers. The added advantage of low environmental impact and also less waste through longer replacement intervals also makes it a far more sustainable technology compared to existing practice." In September 2012, the installation of 2,756 Clevertonics L10 Nanophosphate® exit and emergency lighting fittings and a Zoneworks computer monitoring system began and was commisioned in early 2013. Honeywell estimated that switching from traditional Ni-Cd fittings to the Clevertronics L10 Nanophosphate® fittings would see its total energy and maintenance costs for emergency lighting reduced from \$1,083,830 to \$178,867 over a seven-year period, representing a saving of 83.5% which was beyond expectations before the project began.

#### **Results**

Results in August 2020 has shown that the average capacity of the L10 Nanophosphate fittings are at 93.51%, with an average run time of 178 minutes (90 minutes is the required time) after 8 years in service.

This indicates that the L10 batteries are on track to exceed the expected design life of the L10 product by a significant margin.

The site has now delivered the maintenance and energy savings estimated at the time of installation and continues to provide the site with the lowest cost emergency lighting solution on the market.

"The L10 Lithium range is the way of the future. I believe the move away from NiCd batteries will be quite swift as building owners and facility managers become aware of the numerous advantages that L10 product offers."

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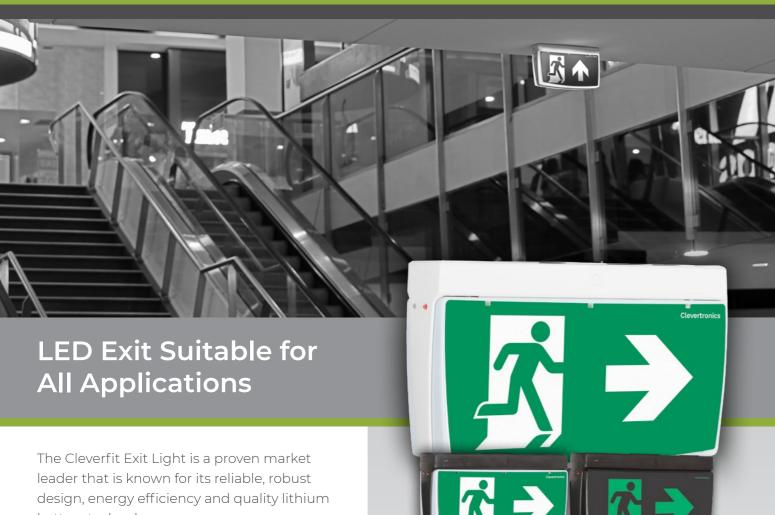


#### **EXITS**

Cleverfit Exit Light	46	Low Temperature Exit Light	64
Cleverfit Pro Exit Light	48	Vandal Resistant Exit Light	66
Form Exit Light	50		
Ultrablade Pro Surface Mount Exit Light	54		
Ultrablade Pro Recessed Exit Light	56		
Ultrablade Pro Rod Suspended Exit	58		
Jumbo LED Exit Light	60		
Weatherproof Exit Light	62		

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# **CLEVERFIT EXIT LIGHT**



battery technology.

The Cleverfit Exit Light can be either wall or ceiling mounted with directional decals for single and double-sided applications provided in each box.

## **Applications**



Office Buildings



Car Parks

Factories



Retail Outlets



Theatres





# **Features and Benefits**















- · Tested to BS EN 60598-2-22
- · Compliant to EN1838 and ISO7010
- · Low standby power consumption
- · Wall and ceiling mount with easy slide connect
- · Can be rod or chain suspended
- · All directional decals in one box
- · Lithium Iron Phosphate or Nanophosphate® battery
- DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible
- · Theatre version available

# **CLEVERFIT EXIT LIGHT**

ORDERING INFORMATION		CLP	L10		
	Standard - White	CCFLED	LCFLED		
ART#	Standard - Black	CCFLED-BLK	LCFLED-BLK		
d/S	Clevertest Plus System Compatible	Yes			
OPTIONS	DALI	CCFLED-DALI	LCFLED-DALI		
TEST	Zoneworks® XT Hive	CCFLED-HVG	LCFLED-HVG		
	Theatre Version	CCFLED-TH	LCFLED-TH		
Ca	rton Quantity	5 pieces			
We	eight - single (carton)	1.8kg	(9kg)		
Dir	mensions (L x W x H)	355mm x 80r	mm x 215mm		
Dir	rectional Options	All Directional Inserts Included (Excluding Theatre Versions)			
Directional Options (Theatre Only)		Add Suffix to Part No, Double Sided -DS , Left Arrow -RI	L, Right -RR, Up -RU, Down -RD. eg CCFLED-TH-DS-RD		

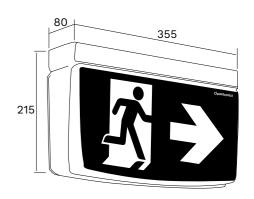
POWER, LAMPS AND BATTERY	CLP	L10	
Power Consumption (Standby / Max)	3.7W / 4.9W	2.5W / 4.5W	
Lamp(s)	100,000 Hour LEDs		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®	
Voltage (V) / Capacity (mAh)	3.2V/3200mAh 3.3V/2500mAh		
Charging Method	Intelligent Current Limited Constant Voltage		

TECHNICAL SPECIFICATIONS	CLP	L10
Operating Mode	Maintained	
Voltage (V) Frequency (Hz)	220-240V (50Hz)	
Construction- Body / Diffuser	ABS/I	PC
Viewing Distance	30m	
Mounting Type	Wall & Ceiling (Single	e & Double Sided)
Operating Temperature	0°C to 40°C	
IP Rating (IP)	IP20 (Weatherproof Version Available)	

ACCESSORIES	CLP	L10
Cantilever Bracket	CLVRBRT-CF-WP	CLVRBRT-CF-WP
Wireguard (Wall Mount)	2530050	2530050
Wireguard (Ceiling Mount)	2530110	2530110

LUMINAIRE CLASSIFICATION	CLP				L10			
Without Automatic Testing	X	1	AG	180	×	1	AG	180
With Automatic Testing	X	1	AFG	180	×	1	AFG	180

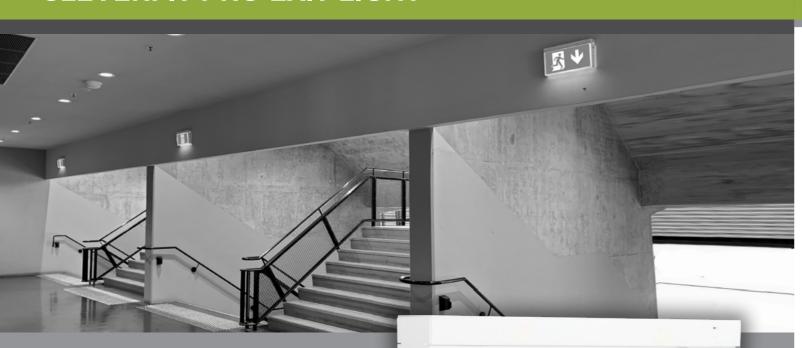
PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



Dimensions (mm)

The product details described in this document are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. The reserve the right to change product design, specifications are considered as a supplication of the document and the right to change product design are considered as a supplication of the document are current as a supplicatior materials (Specifications) as part of our continuous improvement program. Please confirm the applicable Specifications at the time of placing your order.

# **CLEVERFIT PRO EXIT LIGHT**



Modern and Slimline Architectural Exit

The Cleverfit Pro Exit Light offers a practical solution in a slimline, architecturally pleasing design.

The tamper resistant cover makes it possible to include all diffuser combinations in one box for single or double sided applications.

### **Applications**



Office Buildings



Theatres



Shopping Centres



Retail Outlets



Apartments





# **Features and Benefits**









- · Can be rod or chain suspended
- · All directional decals in one box
- Lithium Iron Phosphate or Nanophosphate® battery
- DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible
- · Theatre version available

# **CLEVERFIT PRO EXIT LIGHT**

OR	DERING INFORMATION	CLP	L10	
	Standard - White	CCFPRO	LCFPRO	
PART#	Standard - Black	CCFPRO-BLK	LCFPRO-BLK	
/ SN	Clevertest Plus System Compatible	Yes	Yes	
ОРТЮ	DALI	CCFPRO-DALI	LCFPRO-DALI	
TEST	Zoneworks® XT Hive	CCFPRO-HVG	LCFPRO-HVG	
	Theatre Version	CCFPRO-TH	LCFPRO-TH	
Cai	ton Quantity		5	
We	ight - Single (Carton)	2.5kg	g (13.0kg)	
Dir	nensions (L x W x H)	L x W x H) 367mm x 72mm x 214mm		
Dir	ectional Options	All Directional Inserts Included (Excluding Theatre Versions)		
Dir	ectional Options (Theatre Only)	s (Theatre Only)  Add Suffix to Part No, Double Sided -DS , Left Arrow -RL, Right -RR, Up -RU, Down -RD. eg CCFPRO-TH-DS-		

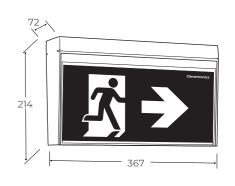
POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	3.7W / 4.8W 3.9W / 4.8W			
Lamp(s)	100,000 Hour LED			
Battery	Lithium Iron Phosphate Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V/3200mAh 3.3V/2500mAh			
Charging Method	Intelligent Current Limited Constant Voltage			

TECHNICAL SPECIFICATIONS	CLP	L10	
Operating Mode	Maintained		
Voltage (V) Frequency (Hz)	220-240	220-240V(50Hz)	
Construction - Body / Diffuser	PC-ABS/PC		
Viewing Distance	30m		
Mounting Type	Wall & Ceiling (Single & Double Sided)		
Operating Temperature	0°C to 40°C		
Ingress Protection Rating (IP)	IP20		

ACCESSORIES	CLP	L10
Cantilever Bracket	CLVRBRT-CFPRO	CLVRBRT-CFPRO
Wireguard (Wall Mount)	2530050	2530050
Wireguard (Ceiling Mount)	2530110	2530110

LUMINAIRE CLASSIFICATION		CLP				Lìo				
Without Automatic Testing	×	1	AG	180	Х	1	AG	180		
With Automatic Testing	×	1	AFG	180	X	1	AFG	180		

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



Dimensions (mm)

The product details described in this document are current as at the version date of the document. We reserve the right to change product design, specifications or materials (Specifications) as part of our continuous improvement program. Please confirm the applicable Specifications at the time of placing your order.

# **FORM EXIT LIGHT**



size optimised anodised aluminium frame, the Form is a versatile architectural solution available in multiple configurations including wall, ceiling, recessed, or suspended rod or cable mounting. Designed for simplified installation and maintenance, it also features our industry leading 'One-Box' solution that allows easy changing of directional decals as required.

## **Applications**



Office Buildings





Shopping Centres

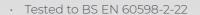




Retail outlets

Apartments

### **Features and Benefits**







- · Optional escape route illumination
- · Surface or recessed mount
- · Low standby power consumption
- · Up to IP42 Ingress Protection (Surface Wall Mount)
- · Lithium Iron Phosphate or Nanophosphate® battery
- · DALI and Zoneworks test options available
- · Clevertest Plus System compatible

# **FORM EXIT LIGHT - WALL MOUNT**

OI	RDERING INFORMATION	CLP	L10	CLP	L10	
Mo	ounting Configuration	Wall Mour	nt - Surface	Wall Mount - Recessed		
0	Standard	FORM-20-SM-WM-LP	FORM-20-SM-WM-L10	FORM-20-REC-WM-LP	FORM-20-REC-WM-L10	
N T N	Clevertest Plus System Compatible	Y	es	Ye	es .	
IONS	DALI	FORM-20-SM-WM-LP-DALI	FORM-20-SM-WM-L10-DALI	FORM-20-REC-WM-LP- DALI	FORM-20-REC-WM-L10- DALI	
EST OPT	Zoneworks® XT Hive	FORM-20-SM-WM-LP-HVG	FORM-20-SM-WM-L10-HVG	FORM-20-REC-WM-LP-HVG	FORM-20-REC-WM-L10- HVG	
-	Escape Route Illumination	'Yes (Add '-ESC' to end of product codes above)				
Ca	arton Quantity			1		
W	eight - Single (Standard)	0.5	5kg	0.7kg		
Di	mensions (L x W x H)		mm - Blade Assembly 01mm - Body / Box	220mm x 18mm x 110mm - Blade Assembly 200mm x 52mm x 90mm - Body / Box		
Di	rectional Options	All Directional Inserts Included				

POWER, LAMPS AND BATTERY	CLP L10		CLP	L10			
Power Consumption (Standby / Max)*		1.2W / 3.3W					
Lamp(s)*		170,000 Hour LEDs					
Battery Type	Lithium Iron Phosphate	Lithium Nanophosphate®	Lithium Iron Phosphate	Lithium Nanophosphate®			
Battery Configuration		Inte	gral				
Voltage (V) / Capacity (mAh)	3.2V / 1100mAh	3.3V / 2500mAh	3.2V/1100mAh	3.3V / 2500mAh			
Charging Method	Intelligent Current Limited Constant Voltage						

<sup>\*</sup> Please refer to the specific product datasheet for actual power consumption and lamp life

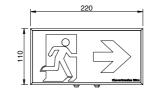
TECHNICAL SPECIFICATIONS	CLP	L10	CLP	L10		
Operating Mode		Maintained				
Voltage (V) Frequency (Hz)		220-240V (50Hz)				
Construction - Blade Assembly		Anodised Aluminium Frame & Polycarbonate Housing				
Construction - Body / Box	Polycar	bonate	PCM Sheet Metal			
Viewing Distance		20	)m			
Operating Temperature		0°C to	0 40°C			
Ingress Protection Rating (IP)	IP.	42	IP:	20		
IImpact Rating (IK)	IKO3					

LUMINAIRE CLASSIFICATION	CLP		L10		CLP		L10	
Without Automatic Testing	Х	1	AG	180	X	1	AG	180
With Automatic Testing	Х	1	AFG	180	×	1	AFG	180

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)

#### **SURFACE MOUNT**

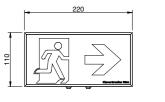
#### WALL MOUNT - SURFACE





#### **RECESSED**

#### WALL MOUNT - RECESSED





# **FORM EXIT LIGHT - CEILING MOUNT**

ORDERING INFORMATION	CLP	L10	CLP	L10	
Mounting Configuration	Ceiling Mount - Surface	(Single & Double Sided)	Ceiling Mount - Recessed	d (Single & Double Sided)	
Standard	FORM-20-SM-CM-LP	FORM-20-SM-CM-L10	FORM-20-REC-CM-LP	FORM-20-REC-CM-L10	
Clevertest Plus System Compatible		Y	es		
DALI	FORM-20-SM-CM-LP-DALI	FORM-20-SM-CM-L10-DALI	FORM-20-REC-CM-LP-DALI	FORM-20-REC-CM-L10- DALI	
Zoneworks® XT Hive	FORM-20-SM-CM-LP-HVG	FORM-20-SM-CM-L10-HVG	FORM-20-REC-CM-LP-HVG	FORM-20-REC-CM-L10-HVG	
Escape Route Illumination		Yes (Add '-ESC' to end o	of product codes above)		
Rod Suspended*	FORM-20-SM-CM-RS-LP	FORM-20-SM-CM-RS-L10	FORM-20-REC-CM-RS-LP	FORM-20-REC-CM- RS-L10	
Cable Suspended*	FORM-20-SM-CM-CS-LP	FORM-20-SM-CM-CS-L10	FORM-20-REC-CM- CS-LP	FORM-20-REC-CM- CS-L10	
Cable Suspended - Remote Gear*	FORM-20-SM-CM-CS- REM-LP	FORM-20-SM-CM-CS- REM-L10	FORM-20-REC-CM-CS- REM-LP	FORM-20-REC-CM-CS- REM-L10	
Flag Mount Bracket Available*	Yes	Yes	-	-	
Carton Quantity			1		
Weight - Single (Standard)	3.0	Bkg	0.7	7kg	
Dimensiona // V W V I I		mm - Blade Assembly 45mm - Body / Box	220mm x 18mm x 110mm - Blade Assembly 228mm x 63mm x 55mm - Body / Box 245mm x 85mm - Cover Plate		
Dimensions (L X W X H)		5mm Ø Rod 4mm Ø Cable	1500mm x 5mm Ø Rod 1500mm x 1.4mm Ø Cable 230mm x 65mm - Cut Out		
Directional Options		All Directional I	nserts Included		
*Escape Route Illumination not available					

POWER, LAMPS AND BATTERY	CLP	L10	CLP	L10			
Power Consumption (Standby / Max)*		1.2W/3.3W					
Lamp(s)*	170,000 Hour LEDs						
Battery Type	Lithium Iron Phosphate	Lithium Nanophosphate®	Lithium Iron Phosphate	Lithium Nanophosphate®			
Battery Configuration		Inte	gral				
Voltage (V) / Capacity (mAh)	3.2V / 1100mAh	3.3V/2500mAh	3.2V/1100mAh	3.3V / 2500mAh			
Charging Method	Intelligent Current Limited Constant Voltage						

<sup>\*</sup>Please refer to the specific product datasheet for actual power consumption and lamp life

TECHNICAL SPECIFICATIONS	CLP	L10	CLP	L10		
Operating Mode	Maintained					
Voltage (V) Frequency (Hz)	220-240V (50Hz)					
Construction - Blade Assembly	Anodised Aluminium Frame & Polycarbonate Housing					
Construction - Body / Box	Powder Coated Cast Aluminum PCM Sheet Metal					
Viewing Distance		20	m			
Operating Temperature		0°C to	40°C			
Ingress Protection Rating (IP)	IP20					
IImpact Rating (IK)	IKO3					

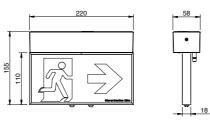
LUMINAIRE CLASSIFICATION	CLP		L10		CLP		L10	
Without Automatic Testing	X	1	AG	180	×	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)

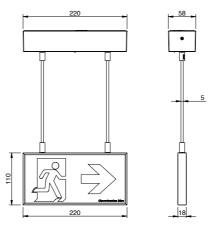
# **FORM EXIT LIGHT - CEILING MOUNT**

#### **SURFACE MOUNT**

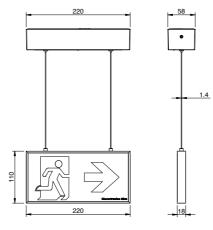
#### CEILING MOUNT - SURFACE



#### CEILING MOUNT - SURFACE ROD SUSPENDED



# CEILING MOUNT - SURFACE CABLE SUSPENDED

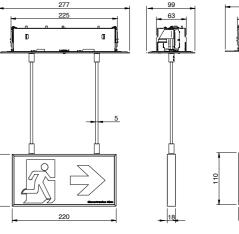


#### **RECESSED**

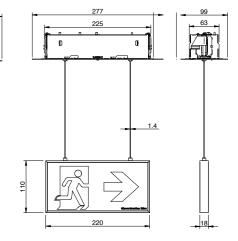


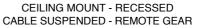


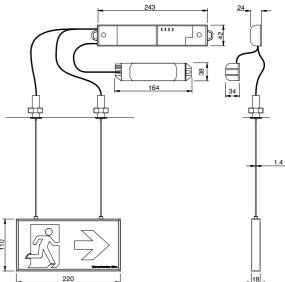
#### CEILING MOUNT - RECESSED ROD SUSPENDED



# CEILING MOUNT - RECESSED CABLE SUSPENDED

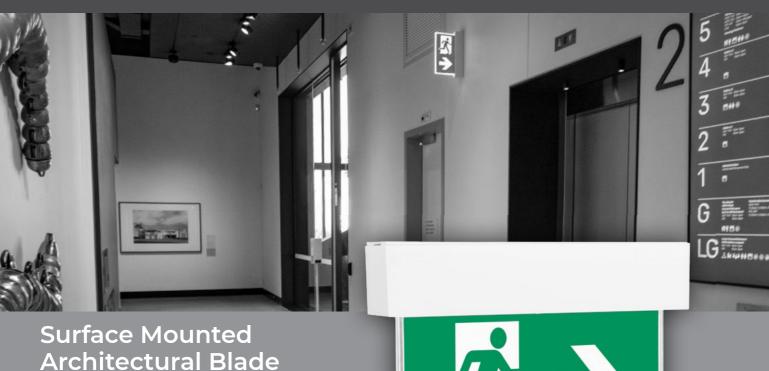






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# **ULTRABLADE PRO SURFACE MOUNT EXIT LIGHT**



The Ultrablade Pro Surface Mount Exit Light is designed to satisfy architectural requirements in applications where a higher level of sophistication is required.

With the latest lithium battery and LED technology, maintenance and energy costs will be significantly reduced when compared to many alternatives.

## **Applications**

**Exit Light** 



Office Buildings











Retail outlets

Apartments



### **Features and Benefits**

· Compliant to EN1838 and ISO7010

· Low standby power consumption

· Can be rod or chain suspended

· All directional decals in one box

· Tested to BS EN 60598-2-22

· Wall and ceiling mount















 DALI® and Zoneworks® test options available

· Lithium Iron Phosphate or

Nanophosphate® battery

- · Clevertest Plus System compatible
- · Theatre version available

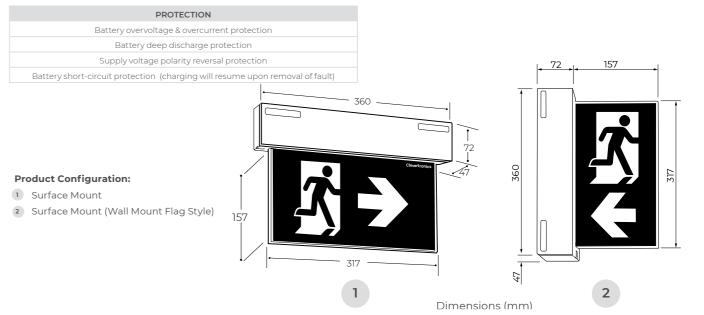
### **ULTRABLADE PRO SURFACE MOUNT EXIT LIGHT**

OR	DERING INFORMATION	CLP	L10			
TEST OPTIONS / PART #	Standard - White	CUBPRO-SM	LUBPRO-SM			
	Standard - Black	CUBPRO-SM-BLK	LUBPRO-SM-BLK			
	Clevertest Plus System Compatible	Yes				
OPTIC	Wall Mount Flag Style	CUBPRO-V	LUBPRO-V			
TEST	DALI	CUBPRO-SM-DALI	LUBPRO-SM-DALI			
	Zoneworks® XT Hive	CUBPRO-SM-HVG	LUBPRO-SM-HVG			
	Theatre Version	CUBPRO-SM-TH	LUBPRO-SM-TH			
Carton Quantity Weight - Single (Carton)  Dimensions (LxWxH)  Directional Options		5				
		1.1kg (5.5kg)				
		317mm x 8.7mm x 157mm - Blade Assembly 360mm x 47mm x 72mm - Base				
		All Directional Inserts Included (Excluding theatre versions)				
Dir	ectional Options (Theatre Only)	Add Suffix to Part No, Double Sided -DS , Left Arrow -RL, I	Right -RR, Up -RU, Down -RD. eg CUBPRO-SM-TH-DS-RL			
<b>D</b>	ectional options (mediae omy)	rad cannot artife, Bodbie slace Bo, Esternion Re,	11g.11 111, op 110, 2011 112 12 12 110 211 111 20			

POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	1.8W/3.9W	1.9W / 4.1W		
Lamp(s)	100,000	Hour LED		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/3200mAh	3.3V/2500mAh		
Charging Method	Intelligent Current Limited Constant Voltage			
Rated Emergency Duration (Mins)	18	30		

TECHNICAL SPECIFICATIONS	CLP	L10
Operating Mode	Maintained	
Voltage (V) Frequency (Hz)	220-240V (50Hz)	
Construction - Body / Diffuser	PC-ABS/PC	
Viewing Distance	30m	
Mounting Type	Wall & Ceiling Mount (Single & Double Sided)	
Operating Temperature	0°C to 40°C	
IP Rating (IP)	IP	20

LUMINAIRE CLASSIFICATION		CLP			L10			
Without Automatic Testing	X	1	AG	180	X	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180



# **ULTRABLADE PRO RECESSED EXIT LIGHT**



Scratch resistant, fingerprint free decals and a reduced halo effect on the diffuser completes the visual appeal of the Ultrablade Pro Recessed Exit Light.

### **Applications**

Galleries



Office Buildings



Retail outlets Apartments



**Shopping Centres** 





#### **Features and Benefits**

· Compliant to EN1838 and ISO7010

Low standby power consumption

· All directional decals in one box

Tested to BS EN 60598-2-22

· Wall and ceiling mount

· Lithium Iron Phosphate or

Nanophosphate® battery















available · Clevertest Plus System compatible

· DALI® and Zoneworks® test options

· Theatre version available

# **ULTRABLADE PRO RECESSED EXIT LIGHT**

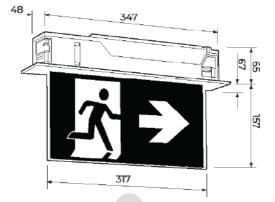
ORDERING INFORMATION		CLP	L10			
PART#	Standard - White	CUBPRO	LUBPRO			
	Standard - Black	CUBPRO-BLK	LUBPRO-BLK			
	Clevertest Plus System Compatible	Yes	Yes			
OPTIONS/	Wall Mount Flag Style	CUBPRO-V	LUBPRO-V			
TEST O	DALI	CUBPRO-DALI	LUBPRO-DALI			
_	Zoneworks® XT Hive	CUBPRO-HVG	LUBPRO-HVG			
	Theatre Version	CUBPRO-TH	LUBPRO-TH			
Carton Quantity		5				
Weight - single (carton)		1.1kg (5.5kg)				
Dimensions (L x W x H)		317mm x 8.7mm x 157mm - Blade Assembly 385mm x 67mm - Cover Plate 350mm x 48mm - Ceiling Cutout				
Directional Options		All Directional Inserts Included (Excluding Theatre Versions)				
Dir	ectional Options (Theatre Only)	Add Suffix to Part No, Double Sided -DS , Left Arrow -RL, I	Right -RR, Up -RU, Down -RD. eg CUBPRO-SM-TH-DS-RL			

POWER, LAMPS AND BATTERY	CLP	L10	
Power Consumption (Standby / Max)	1.8W/3.9W	1.9W / 4.1W	
Lamp(s)	100,000	Hour LED	
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®	
Voltage (V) / Capacity (mAh)	3.2V/3200mAh	3.3V/2500mAh	
Charging Method	Intelligent Current Limited Constant Voltage		
Rated Emergency Duration (mins)	180		

TECHNICAL SPECIFICATIONS	CLP	L10
Operating Mode	Maint	ained
Voltage (V) Frequency (Hz)	220-240	V (50Hz)
Construction - Body / Diffuser	PC-ABS/PC	
Viewing Distance	30m	
Mounting Type	Single and Double Sided	
Operating Temperature	0°C to 40°C	
IP Rating (IP)	IP	20

LUMINAIRE CLASSIFICATION		C	LP		L10			
Without Automatic Testing	Χ	1	AG	180	Х	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180

PROTECTION	
Battery overvoltage & overcurrent protection	
Battery deep discharge protection	
Supply voltage polarity reversal protection	
Battery short-circuit protection (charging will resume upon removal of fault)	





#### **Product Configuration:**

- 1 Recessed (Standard)
- 2 Recessed (Wall Mount Flag Style)

# **ULTRABLADE PRO ROD SUSPENDED EXIT LIGHT**



ceiling heights where required.

## **Applications**



Office Buildings



Galleries



Theatres



Apartments

Retail Outlets

Shopping Centres



#### **Features and Benefits**

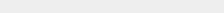














· Clevertest Plus System compatible

· Theatre version available













# **ULTRABLADE PRO ROD SUSPENDED EXIT LIGHT**

	Lic					
ORDERING INFORMATION	ROD SUSPENDED (SURFACE MOUNT)	ROD SUSPENDED (RECESSED)				
Standard - White	LUBPRO-SM-RS	LUBPRO-RS				
# 분 Standard - Black 성	LUBPRO-SM-RS-BLK	LUBPRO-RS-BLK				
Clayartast Dlus Systam Compatible	Yes	S				
DALI	LUBPRO-SM-RS-DALI	LUBPRO-RS-DALI				
Zoneworks® XT Hive	LUBPRO-SM-RS-HVG	LUBPRO-RS-HVG				
Theatre Version	LUBPRO-SM-RS-TH	LUBPRO-RS-TH				
Carton Quantity	1	1				
Weight - Single (Carton)	1.5kg					
Dimensions (L x W x H)	Blade Assembly: 317mm x 8.7mm x 157mm Ceiling Mount Control Gear Enclosure: 360mm x 47mm x 72mm Rod Length: 1500mm	Blade Assembly: 317mm x 8.7mm x 157mm Recessed Control Gear Enclosure: 347mmx 48mm x 65mm Cover Plate: 385mm x 67mm Rod Length: 1500mm				
Directional Options	All Directional Inserts Included	All Directional Inserts Included (Excluding Theatre Versions)				
Directional Options (Theatre Only)	Add Suffix to Part No, Double Sided -DS , Left Arrow -RL, Right -RR, Up -RU, Down -RD. eg CUBPRO-SM-RS-TH-DS					
POWER, LAMPS AND BATTERY	L10					
Power Consumption (Standby / Max)	1.4W/3.7W					
Lamp(s)	100,000 Hours					
Battery	Lithium Nano	Lithium Nanophosphate®				
Voltage (V) / Capacity (mAh)	3.3V / 250	3.3V / 2500mAh				
Charging Method	Intelligent Current Limi	ted Constant Voltage				

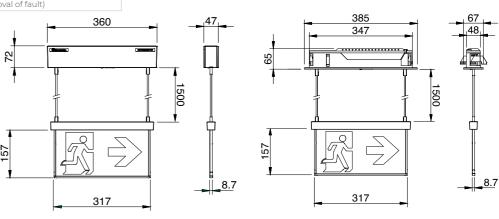
TECHNICAL SPECIFICATIONS	L10
Operating Mode	Maintained
Voltage (V) (Frequency (Hz))	220-240V (50Hz)
Construction	PC/ABS Body with PC Diffuser
Viewing Distance	30m
Operating Temperature	0°C to 40°C
Ingress Protection Rating (IP)	IP20

PROTECTION	
Battery overvoltage & overcurrent protection	
Battery deep discharge protection	
Supply voltage polarity reversal protection	
Battery short-circuit protection (charging will resume upon removal of fault)	

LUMINAIRE CLASSIFICATION		L10	)	
Without Automatic Testing	X	1	AG	180
With Automatic Testing	X	1	AFG	180

#### **Product Configuration:**

- 1 Rod Suspended (Surface Mount)
- 2 Rod Suspended (Recessed)





Ceiling hole cut-out = 350mm x 48mm Dimensions (mm)



# **JUMBO LED EXIT LIGHT**



# Jumbo Exit for Larger Viewing Distances

The Jumbo Led Exit Light caters for 50m viewing distance applications by using a 250mm high pictograph.

Featuring a robust steel housing with slide-in diffusers and backplates for single and double-sided configurations, the Jumbo Led Exit Light is easy to install as a wall or ceiling mounted exit.

## **Applications**



Warehouses

Factories



Car Parks



Stadiums



Halls



Train Stations







# **Features and Benefits**

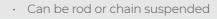


















· Clevertest Plus System compatible

# JUMBO LED EXIT LIGHT

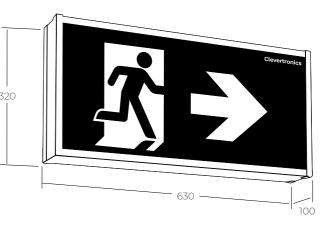
ORDERING INFORMATION		CLP	L10			
PART #	Standard	CJELED-50	LJELED-50			
_	Clevertest Plus System Compatible	Yes	Yes			
OPTIONS	DALI	CJELED-50-DALI	LJELED-50-DALI			
Zoneworks® XT Hive		CJELED-50-HVG	LJELED-50-HVG			
Carton Quantity		1				
Weight		7.3kg				
Dimensions (L x W x H)		630mm x 100mm x 320mm				
Directional Options		All Directional Inserts Included in the Box				

POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	3.2W/5.6W			
Lamp(s)	100,000 Hour LED			
Battery Type	Lithium Iron Phosphate Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V/6400mAh	3.3V/5000mAh		
Charging Method	Intelligent Current Lin	nited Constant Voltage		

TECHNICAL SPECIFICATIONS	CLP	L10		
Operating Mode	Maintained			
Voltage (V) (Frequency (Hz))	220-240V (50Hz)			
Construction - Body / Diffuser	Powder Coated Metal / Acrylic			
Viewing Distance	50m			
Mounting Type	Wall and Ceiling Single and Double Sided			
Operating Temperature	0°C to 40°C			
Ingress Protection Rating (IP)	IP20			

LUMINAIRE CLASSIFICATION		CLP				LIC	)	
Without Automatic Testing	Χ	1	AG	180	×	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



Dimensions (mm)

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# **WEATHERPROOF EXIT LIGHT**



# **Applications**



Schools

Factories



Car Parks



Stadiums

Public Amenities



Warehouses





#### **Features and Benefits**









- · All directional decals in one box
- Lithium Iron Phosphate or Nanophosphate® battery
- DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible
- · Theatre version available

# **WEATHERPROOF EXIT LIGHT**

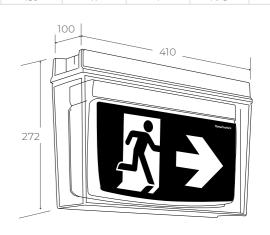
ORDERING INFORMATION		CLP	L10			
	Standard - White	CWELED	LWELED			
PART#	Standard - Black	CWELED-BLK	LWELED-BLK			
		Y	Yes			
OPTIONS	DALI	CWELED-DALI	LWELED-DALI			
TEST	Zoneworks® XT Hive	CWELED-HVG	LWELED-HVG			
	Theatre Version	CWELED-TH	LWELED-TH			
Са	rton Quantity	4				
We	eight - single (Carton)	2.8kg (11.2kg)				
Dimensions (L x W x H)		410mm x 100mm x 272mm				
Directional Options		All Directional Inserts Included (Excluding Theatre Versions)				
Directional Options (Theatre Only)		Add Suffix to Part No, Double Sided -DS , Left Arrow -RL, Right -RR, Up -RU, Down -RD. eg CWELED-TH-DS-RD				

POWER, LAMPS AND BATTERY	CLP	L10	
Power Consumption (Standby/Max)	3.7W / 4.9W	3.6W / 4.5W	
Lamp(s)	100,000 Hours LEDs		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®	
Voltage (V) / Capacity (mAh)	3.2V/1500mAh 3.3V/2500mAh		
Charging Method	Intelligent Current Lim	nited Constant Voltage	

TECHNICAL SPECIFICATIONS	CLP	L10		
Operating Mode	Maintained			
Voltage (V) Frequency (Hz)	220-240V(50Hz)			
Construction	Cleverfit Inside Glass Reinforced Nylon Base and PC Cover			
Viewing Distance	30m			
Mounting Type	Wall and Ceiling (Single and Double Sided)			
Operating Temperature	0°C to 40°C			
Ingress Protection Rating (IP)	IP66/67			
Impact Rating (IK)	IK10			

ACCESSORIES		C	LF			LIC		
Cantilever Bracket		CLVBRT-CF-WP						
LUMINAIRE CLASSIFICATION		CLP L10				)		
Without Automatic Testing	X	1	AG	180	Х	1	AG	180
With Automatic Tocting	V	1	ΛEC.	190		1	AEC:	190

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



Dimensions (mm)

# **LOW TEMPERATURE EXIT LIGHT**



designed for cool room and freezer applications where the temperature can drop to -40°C. The range consists of IP66/67 exits that include lithium battery technology which ensures significant maintenance savings compared to other alternatives.

Integral battery luminaires perform in temperatures between -25°C to +40°C. Remote gear luminaires perform in temperatures between -40°C to +40°C.

## **Applications**



Cool Rooms



Food Processing





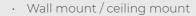
Alpine Regions



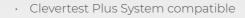
## **Features and Benefits**











· Rated to -40°C with remote control gear















# LOW TEMPERATURE EXIT LIGHT

ORDERING INFORMATION	L10		
Product Configuration	Universal Mount with Integral Gear ①	Universal Mount with Remote Enclosed Gear ◯ ②	
Operating Temperature	-25°C TO 40°C	-40°C TO 40°C (EXIT) 0°C TO +40°C (REMOTE CONTROL GEAR)	
* Standard	LWEPRO-FZR	LWELED-IPREM	
Zoneworks® XT Hive	LWEPRO-FZR-HVG	LWELED-HVG-IPREM	
Clevertest Plus System Compatible	No	Yes	
Directional Options	All Directional Inserts Included		
Carton Quantity	1		
Weight - Single (Carton)	3.4kg	4.8kg	
Dimensions ( L X W X H) - Exit	410mm x 100mm x 272mm	410mm x 100mm x 272mm	
Dimensions ( L X W X H) - Remote Enclosed Gear	-	380mm x 190mm x 130mm	

POWER, LAMPS AND BATTERY	L10			
Power Consumption (Standby / Max)	1.4W/3.5W 3.6W/4.6W			
Lamp(s)	100,000 Hours LED			
Battery	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.3V/5000mAh 3.3V/2500mAh			
Charging Method	Intelligent Current Limited Constant Voltage			

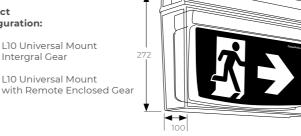
TECHNICAL SPECIFICATIONS	L10		
Operating Mode	Maintained		
Voltage (V) (Frequency (Hz))	240V AC (50HZ)		
Construction - Body / Diffuser	Exit: PC/ABS Body with PC Diffuser / Enclosure PC Clear Cover, Glass Reinforced Nylon Base		
Viewing Distance	30m		
Ingress Protection Rating (IP)			
Impact Rating (IK)	IK10		

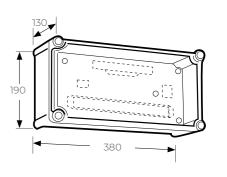
LUMINAIRE CLASSIFICATION	L10			
Without Automatic Testing	X	1	AG	180
With Automatic Testing	X	1	AFG	180

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)

#### Product Configuration: 1 L10 Universal Mount Intergral Gear

1 2 L10 Universal Mount







Dimensions (mm)



# **VANDAL RESISTANT EXIT LIGHT**



The Clevertronics Vandal Resistant Exit Light is a high impact exit that utilises the Cleverfit Pro Exit Light within a powder coated steel IK12 enclosure that is electrically isolated for ease of maintenance.

It provides an effective solution for prisons, correction facilities, train stations and other applications where impact resistance may be required.

### **Applications**



Public Amenities



Stadiums



Car Parks



Train Stations

Schools

Correctional Facilities

# **Features and Benefits**

· Compliant to EN1838 and ISO7010

· Wall, ceiling and flag mount

DALI® and Zoneworks® test

options available · Clevertest Plus System

compatible

· All directional decals in one box

· Lithium Nanophosphate® battery

options

















# **VANDAL RESISTANT EXIT LIGHT**

		L10			
DERING INFORMATION	CEILING MOUNTED	WALL MOUNTED	FLAG MOUNTED		
Standard	LVELED-CM	LVELED-WM	LVELED-FM		
Clevertest Plus System Compatible	Yes				
DALI	LVELED-CM-DALI	LVELED-WM-DALI	LVELED-FM-DALI		
Zoneworks® XT Hive	LVELED-CM-HVG	LVELED-WM-HVG	LVELED-FM-HVG		
ton Quantity	1				
ight	6.6kg				
nensions (L x W x H)	425mm x 100mm x 270mm				
ectional Options	All Directional Inserts Included				
WER, LAMPS AND BATTERY		L10			
wer Consumption (Standby / Max)	3.6W/5.6W				
mp(s)	100,000 hours				
ttery	Lithium Nanophosphate®				
tage (V) / Capacity (mAh)		3.3V/2500mAh			
	Clevertest Plus System Compatible  DALI	Standard  Clevertest Plus System Compatible  DALI  LVELED-CM-DALI  Zoneworks® XT Hive  LVELED-CM-HVG  ton Quantity  eight  nensions (L x W x H)  ectional Options  WER, LAMPS AND BATTERY  wer Consumption (Standby / Max)  mp(s)  ttery	CEILING MOUNTED  Standard  LVELED-CM  LVELED-WM  Clevertest Plus System Compatible  Yes  DALI  LVELED-CM-DALI  LVELED-WM-DALI  Zoneworks® XT Hive  LVELED-CM-HVG  LVELED-WM-HVG  Ton Quantity  1  6.6kg  mensions (L x W x H)  425mm x 100mm x 270mm  All Directional Inserts Included  WER, LAMPS AND BATTERY  WER Consumption (Standby / Max)  mp(s)  100,000 hours  Lithium Nanophosphate®		

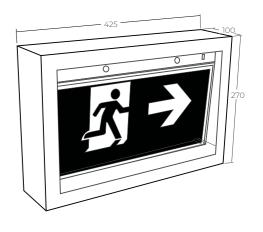
TECHNICAL SPECIFICATIONS	L10
Operating Mode	Maintained
Voltage (V) (Frequency (Hz))	220-240V (50Hz)
Construction	Cleverfit Pro Inside Powder Coated Metal Frame and PC Diffuser
Viewing Distance	30m
Operating Temperature	0°C to 40°C
Ingress Protection Rating (IP)	IP20
Impact Rating (IK)	IK12 (Wall and Ceiling Mounted), IK10 (Flag Mounted)

Intelligent Current Limited Constant Voltage

LUMINAIRE CLASSIFICATION	L10			
Without Automatic Testing	X	1	AG	180
With Automatic Testing	×	1	AFG	180

PROTECTION	
Battery overvoltage & overcurr	ent protection
Battery deep discharge p	rotection
Supply voltage polarity revers	sal protection
Battery short-circuit protection (charging will	resume upon removal of fault)

Charging Method



Dimensions (mm)

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CleverEVAC

#### **DYNAMIC EXIT SIGNAGE**

CleverEVAC Dynamic Green Exit	70
CleverEVAC Dynamic Red X Exit	72
CleverEVAC Dynamic Green Blade Exit	74
ClaverEVAC Dynamic Ded Y Rlade Evit	76

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# **CleverEVAC DYNAMIC GREEN EXIT LIGHT**



# The Dynamic Green mode is activated upon a loss

of mains power. It can also be triggered either by a 24VDC or a voltage free open/close signal from the fire detection or other building safety system.

The SoundEscape™ option which combines the audible locatable sound technology including voice announcements is available with the Dynamic Green Exit Light.

## **Suitable for Most Applications**



Office Buildings



Stadiums





Schools



Shopping Centres



Theatres



Airports



Transit Centres

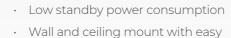




### **Features and Benefits**















- · Weatherproof option available
- · Theatre version available

















# CleverEVAC DYNAMIC GREEN EXIT LIGHT

OI	RDERING INFORMATION	CLP	CLP W/SOUNDESCAPE	L10	L10 W/SOUNDESCAPE
	Standard - Running Man Right	DYGC-CP-RR	DYGC-CP-RR-SND	DYGL-CP-RR	DYGL-CP-RR-SND
0	- Running Man Left	DYGC-CP-RL	DYGC-CP-RL-SND	DYGL-CP-RL	DYGL-CP-RL-SND
PART	- Running Man Up	DYGC-CP-RU	DYGC-CP-RU-SND	DYGL-CP-RU	DYGL-CP-RU-SND
SNC	- Running Man Down	DYGC-CP-RD	DYGC-CP-RD-SND	DYGL-CP-RD	DYGL-CP-RD-SND
OPTIC	Zoneworks® XT Hive	Yes		Yes	
TEST	Theatre Version Option	Yes	-	Yes	-
	Weatherproof Option	Yes	-	Yes	-
W	eight - Single	2.0kg	2.4kg	2.0kg	2.4kg
Di	imensions (L x W x H)	367mm x 214mm x 72mm	446mm x 214mm x 72mm	367mm x 214mm x 72mm	446mm x 214mm x 72mm

\*-NO denotes a Normally Open signal from the fire system. Normally Closed -NC also available. For additional variants please refer to the Clevertronics Product Guide or website.

POWER, LAMPS AND BATTERY	CLP	CLP W/ SOUNDESCAPE	L10	L10 W/ SOUNDESCAPE		
Power Consumption (Standby / Max)	3.1 W / 7.5 W	4.0 W / 10.0 W	3.1 W / 7.5 W	4.0 W / 10.0 W		
Lamp(s)	100,000	100,000 Hour LEDs		100,000 Hour LEDs 100,000 Hour		Hour LEDs
Battery	Lithium Iron Phosphate	Lithium Iron Phosphate & Nickel Cadmium (Sounder Unit)	Lithium Nanophosphate®	Lithium Nanophosphate® & Nickel Cadmium (Sounder Unit)		
Voltage (V) / Capacity (mAh)	3.3V/3200mAh	3.2V 3200mAh / 3.6V 600mAh (Sounder Unit)	3.3V/2500mAh	3.3V 5000mAh / 3.6V 600mAh (Sounder Unit)		
Charging Method	Intelligent Current Limited Constant Voltage		Intelligent Current Lin	nited Constant Voltage		

TECHNICAL SPECIFICATIONS	CLP	CLP W/ SOUNDESCAPE	L10	L10 W/ SOUNDESCAPE								
Operating Mode		Maintained – Dynamic modes activated on VF/24V input trigger & capable of being activated in power-on & battery-backed mode.  Normally open (NO) version – Dynamic Green and Sound activated (turned on) when contact interface is closed.  Normally Closed (NC) also available.										
Voltage (V) Frequency (Hz)		220-240V (50Hz)										
Construction- Body/Diffuser		PC/ABS Body with PC Diffuser										
Viewing Distance		30m										
Mounting Type		Wall & Ceiling (Single & Double Sided) Wall & Ceiling (Single Sided /w SoundEscape)										
Operating Temperature		0°C to 40°C										
IP Rating (IP)		IP20										

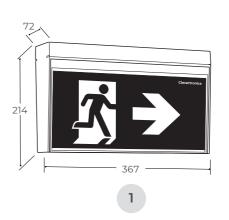
LUMINAIRE CLASSIFICATION	CLP			CLP W/ SOUNDESCAPE			L10			L10 W/ SOUNDESCAPE						
Without Automatic Testing	X	1	AG	180	X	1	AG	180	X	1	AG	180	X	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180	X	1	AFG	180	X	1	AFG	180

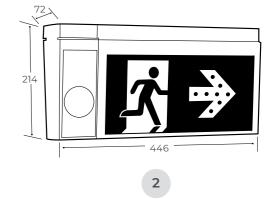
#### Product Configuration:





Dimensions (mm)





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# **CleverEVAC DYNAMIC RED X EXIT LIGHT**



intuitive and effective in demonstrating negative enforcement.

The Dynamic Red X mode is triggered either by a 24VDC or voltage free open/close signal from the fire detection or other building safety system. The Dynamic Red X Exit Light also has the Dynamic Green mode built in. to accommodate different fire and evacuation scenarios. The use of the Red X must be designed and documented by a fire safety engineer.

### **Suitable for Most Applications**

Shopping Centres

Airports & Transit

Heritage Buildings

Theatres



Office Buildings



Stadiums







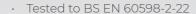
Schools







#### **Features and Benefits**







- · Wall and ceiling mount with easy slide connect
- · Lithium Iron Phosphate or Nanophosphate® battery
- · Capable of positive re-enforcement Dynamic Green
- · Zoneworks® XT Hive compatible
- · Weatherproof option available
- · Theatre version available



Built in Dynamic GREEN function.











#### CleverEVAC DYNAMIC RED X EXIT LIGHT

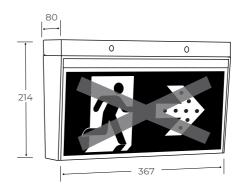
ORDERING INFORMATION	CLP	L10		
Standard - Running Man Right	DYRC-CP-RR	DYRL-CP-RR		
- Running Man Left	DYRC-CP-RL	DYRL-CP-RL		
- Running Man Up#	DYRC-CP-RU	DYRL-CP-RU		
- Running Man Down#	DYRC-CP-RD	DYRL-CP-RD		
- Running Man Down"  Zoneworks® XT Hive	Yes	Yes		
Theatre Version Option	Yes	Yes		
Weatherproof Option	Yes	Yes		
Weight	2.0kg	2.0kg		
Dimensions (L x W x H)	367mm x 214mm x 80mm	367mm x 214mm x 80mm		

 $<sup>^{</sup>st}$  -NO denotes a Normally Open signal from the fire system. Normally Closed -NC also available.

POWER, LAMPS AND BATTERY	CLP L10				
Power Consumption (Standby / Max)	1.5 W/8.0 W				
Lamp(s)	100,000 Hour LEDs				
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V / 6400mAh	3.3V / 5000mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

TECHNICAL SPECIFICATIONS	CLP	L10					
Operating Mode	contact and capable of being activated	Maintained – Sequencing inward green LEDs or illuminated Red X with side flashing Red LED's on closing of the VF/2 contact and capable of being activated in power-on and battery-backed mode.  Normally open (NO) version – Dynamic Green or illuminated Red X when contact interface is closed.					
Voltage (V) Frequency (Hz)	220-24	220-240V (50Hz)					
Construction - Body/Diffuser	PC/ABS Body	PC/ABS Body with PC Diffuser					
Viewing Distance	3	30m					
Mounting Type		gle & Double Sided) Sided /w SoundEscape)					
Operating Temperature	0°C t	0 40°C					
IP Rating (IP)		220					

LUMINAIRE CLASSIFICATION		CLP				L10				
Without Automatic Testing	×	1	AG	180	Х	1	AG	180		
With Automatic Testing	×	1	AFG	180	×	1	AFG	180		



Dimensions (mm)

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# **CleverEVAC DYNAMIC GREEN BLADE EXIT LIGHT**



Research by the Fire Safety Engineering Group (FSEG) found that people often didn't notice static exit signage, whereas significantly more people noticed dynamic exit signage. This led to the development of the CleverEVAC Dynamic Green Blade Exit Light.

The Dynamic Green mode is activated upon a loss of mains power. It can also be triggered either by a 24VDC or a voltage free open/close signal from the fire detection or other building safety system.

The sophisticated look and design of the Dynamic Green Blade Exit Light will satisfy all architectural requirements for a premium recessed or surface mount exit.

#### **Suitable for Most Applications**



Office Buildings



Theatres

Schools



Stadiums





Shopping Centres



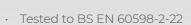
Airports & Transit







#### **Features and Benefits**









in non-dynamic mode



Theatre version available















#### CleverEVAC DYNAMIC GREEN BLADE EXIT LIGHT

ORDERING INFORMATION		CLP RECESSED	CLP CEILING MOUNT	CLP WALL MOUNT	L10 RECESSED	L10 CEILING MOUNT	L10 WALL MOUNT		
	Standard - Running Man Right	DYGC-UP-RR	DYGC-UP-CM-RR	DYGC-UP-WM-RR	DYGL-UP-RR	DYGL-UP-CM-RR	DYGL-UP-WM-RR		
	- Running Man Left	DYGC-UP-RL	DYGC-UP-CM-RL	DYGC-UP-WM-RL	DYGL-UP-RL	DYGL-UP-CM-RL	DYGL-UP-WM-RL		
	- Running Man Up	DYGC-UP-RU	DYGC-UP-CM-RU	DYGC-UP-WM-RU	DYGL-UP-RU	DYGL-UP-CM-RU	DYGL-UP-WM-RU		
PTION	- Running Man Down	DYGC-UP-RD	DYGC-UP-CM-RD	DYGC-UP-WM-RD	DYGL-UP-RD	DYGL-UP-CM-RD	DYGL-UP-WM-RD		
	Zoneworks® XT Hive	Yes							
	Theatre Version Option	Yes							
ìâ	arton Quantity	1							
V	eight - Single (Carton)	2.0kg							
Οi	mensions (L x W x H)	385mm x 67mm x 257mm	391mm x 90m	m x 257mm	385mm x 67mm x 257mm	491mm y 90mm y			

\* for additional variants please refer to the Clevertronics Product Guide or website.

POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	3.1 W/7.5 W	3.1 W / 7.5 W		
Lamp(s)	100,000 Hour LEDs	100,000 Hour LEDs		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/6400mAh	3.2V/5000mAh		
Charging Method	Intelligent Current Limited Constant Voltage	Intelligent Current Limited Constant Voltage		

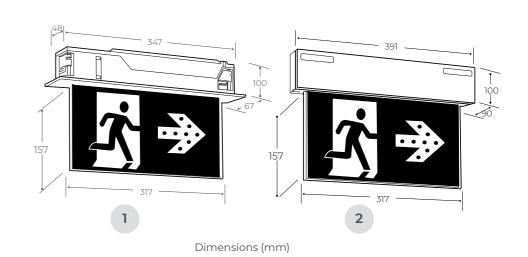
TECHNICAL SPECIFICATIONS	CLP	L10				
Operating Mode		ted on VF/24V input trigger & capable of being activated in attery-backed mode				
Voltage (V) Frequency (Hz)	220-240V (50Hz)					
Construction - Body/Diffuser	PC/ABS Body with PC Diffuser					
Viewing Distance	30m					
Mounting Type		face Mount Options, ed, Double-Sided				
Operating Temperature	0°C	C to 40°C				
IP Rating (IP)	IP20					

LUMINAIRE CLASSIFICATION	CLP			L10					
Without Automatic Testing	X	1	AG	180	×	1	AG	180	
With Automatic Testing	X	1	AFG	180	X	1	AFG	180	

#### Product Configuration:

1 Recessed

2 Ceiling/Wall Mount



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# CleverEVAC DYNAMIC RED X BLADE EXIT LIGHT



Built in Dynamic GREEN function.

#### be intuitive and effective in demonstrating negative enforcement. The sophisticated look and design of the blade will satisfy all architectural requirements **Features and Benefits** and is available as a recessed or surface mount.

- · Tested to BS EN 60598-2-22
- · Compliant to EN1838 and ISO7010 in non-dynamic mode
- · Low standby power consumption
- · Lithium Iron Phosphate or Nanophosphate® battery
- · Negative enforcement options
- · Capable of Positive Re-enforcement Dynamic Green
- · Zoneworks® XT Hive compatible
- · Theatre version available















#### Office Buildings Theatres Schools





the Fire Safety Engineering Group (FSEG) research to

The Red X mode is triggered either by a 24VDC or

is also built in, to accommodate different fire and

evacuation scenarios. The use of the Red X must be

designed and documented by a fire safety engineer.

**Suitable for Most Applications** 

voltage free open/close signal from the fire detection or other building safety system. The Green mode







# CleverEVAC DYNAMIC RED X BLADE EXIT LIGHT

ORDERING INFORMATION		CLP RECESSED	CLP CEILING MOUNT	CLP WALL MOUNT	L10 RECESSED	L10 CEILING MOUNT	L10 WALL MOUNT		
	Standard - Running Man Right	DYRC-UP-RR	DYRC-UP-CM-RR	DYRC-UP-WM-RR DYRL-UP-RR		DYRL-UP-CM-RR	DYRL-UP-WM-RR		
	- Running Man Left	DYRC-UP-RL	DYRC-UP-CM-RL	DYRC-UP-WM-RL	DYRL-UP-RL	DYRL-UP-CM-RL	DYRL-UP-WM-RL		
PTIONS/P	- Running Man Up	DYRC-UP-RU	DYRC-UP-CM-RU	DYRC-UP-WM-RU	DYRL-UP-RU	DYRL-UP-CM-RU	DYRL-UP-WM-RU		
	- Running Man Down	DYRC-UP-RD	DYRC-UP-CM-RD	DYRC-UP-WM-RD	DYRL-UP-RD	DYRL-UP-CM-RD	DYRL-UP-WM-RD		
3	Zoneworks® XT Hive	Yes							
	Theatre Version Option	Yes							
Cá	arton Quantity	1							
W	eight - Single (Carton)	2.0kg							
Dimensions (L x W x H)		385mm x 67mm x 257mm	391mm x 90mm x 257mm		385mm x 67mm x 257mm	391mm x 90m	m x 257mm		

<sup>\*</sup> for additional variants please refer to the Clevertronics Product Guide or website.

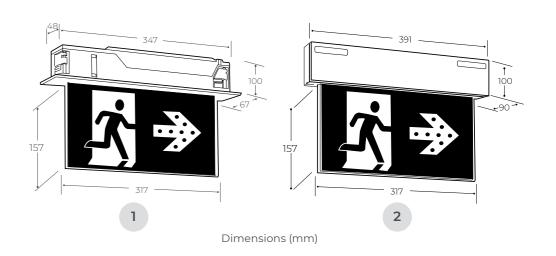
POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	1.7 W/8.7 W	1.7 W/8.7 W		
Lamp(s)	100,000 Hour LEDs	100,000 Hour LEDs		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/9600mAh	3.3V/7500mAh		
Charging Method	Intelligent Current Limited Constant Voltage	Intelligent Current Limited Constant Voltage		

TECHNICAL SPECIFICATIONS	CLP	L10				
Operating Mode	<b>Maintained</b> – Sequencing inward green LEDs or illuminated Red X with side flashing red LED's activated on VF/24V input trigger & capable of being activated in power-on & battery-backed mode					
Voltage (V) Frequency (Hz)	220-240V (50Hz)					
Construction - Body/Diffuser	PC/ABS body with PC Diffuser					
Viewing Distance	30m					
Mounting Type	Recessed, Surface Mount Options, Single-Sided					
Operating Temperature	0°C to 40°C					
IP Rating (IP)	IP20					

LUMINAIRE CLASSIFICATION		CLP			L10			
Without Automatic Testing	X	1	AG	180	×	1	AG	180
With Automatic Testing	X	1	AFG	180	X	1	AFG	180

#### Product Configuration:

- 1 Recessed
- 2 Ceiling/Wall Mount



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# **EMERGENCY**LIGHTING

#### **EMERGENCY LIGHTING**

felight Recessed Emergency Luminaire	80
felight Surface Mount Emergency Luminaire	82
felight IP44 Splashproof Recessed Emergency Luminaire	84
felight Weatherproof Surface Mount Emergency Luminaire	86
felight Pro Recessed Emergency Luminaire	88
felight Pro Surface Mount Emergency Luminaire	90
felight Pro Surface Mount Cylinder Emergency Luminaire	92
felight Pro IP44 Splash-proof Weatherproof Recessed Emergency Luminaire	94
felight Pro Weatherproof Surface Mount Emergency Luminaire	96
ow Temperature Emergency	98
upalite Flood Emergency Luminaire	100

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### LIFELIGHT RECESSED EMERGENCY LUMINAIRE



Each product is supplied with a 145mm adaptor plate to enable an easy retrofit installation.

### **Applications**



Office Buildings



Apartments



Schools



Retail Outlets





### **Features and Benefits**











- DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible













#### LIFELIGHT RECESSED EMERGENCY LUMINAIRE

OF	RDERING INFORMATION	CLP	L10			
#	Standard - White	CLIFE	LLIFE			
PART	Standard - Black	CLIFE-BLK	LLIFE-BLK			
Clevertest Plus System Compatible		Y	es			
POPTIONS	DALI	CLIFE-DALI	LLIFE-DALI			
TEST	Zoneworks® XT Hive	CLIFE-HVG	LLIFE-HVG			
Са	rton Quantity	10 pieces				
VV6	eight -Single (Carton)	0.8kg (9.7kg)				
Di	mensions (L x W x H) - Control Pack	232mm x 51mm x 42mm				
Dir	mensions - Head Diameter	95mm				
Dir	mensions - Adaptor plate	145mm				
Ce	iling Hole Cut-Out	85mm				
Mi	nimum Ceiling Depth	120	mm			

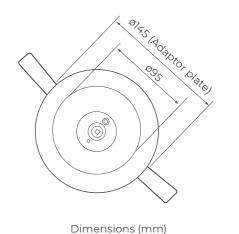
POWER, LAMPS AND BATTERY	CLP	L10				
Power Consumption (Standby / Max)	1.4W / 4.7W	1.0W / 4.2W				
Lamp(s)	1x LED					
Battery	Lithium Iron Phosphate Lithium Nanophosphate®					
Voltage (V) / Capacity (mAh)	3.2V/3200mAh	3.3V/2500mAh				
Charging Method	Intelligent Current Limited Constant Voltage					

LUMINAIRE CLASSIFICATION		C	LP		L10				
Without Automatic Testing	Х	0	AD	180	X	0	AD	180	
With Automatic Testing	X	0	ADF	180	×	0	ADF	180	

		1 LUX SPACING TABLE AND MOUNTING HEIGHTS										
	Escape Routes 1 Lux min. along centre line											
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	10.5	10.1	10.5	10.1	4.5	4.4	4.5	4.4				
3	11.3	10.3	11.3	10.3	4.2	4.4	4.2	4.4				
4	11.4	10.9	11.4	10.9	4.6	4.4	4.6	4.4				
5	11.6	11.1	11.6	11.1	4.4	4.1	4.4	4.1				

		0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS									
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array										
CEILING	Axial S	l Spacing Transverse Spacing	Axial to Wall		Transverse to Wall						
MOUNTING HEIGHT (M)	-	<b>—</b>	I∢	<b>→</b>	<b>←→</b> —		<b>←→</b>				
	CLP	L10	CLP	L10	CLP	L10	CLP	L10			
2.7	11	11	11	11	3.5	3.7	3.5	3.7			
3	11	11.5	11	11.5	4	3.8	4	3.8			
4	13	12.9	13	12.9	4	3.9	4	3.9			
5	14	13.9	14	13.9	4.5	4	4.5	4			

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



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### LIFELIGHT SURFACE MOUNT EMERGENCY LUMINAIRE



The Lifelight Surface Mount Emergency Luminaire is a sleek polycarbonate luminaire that features market-leading lithium battery technology and energy efficient LEDs.

The Lifelight delivers lower maintenance and energy costs and continues to lead the way in a variety of emergency lighting applications.

### **Applications**



Office Buildings





Retail Outlets

Apartments





#### **Features and Benefits**











- · DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible





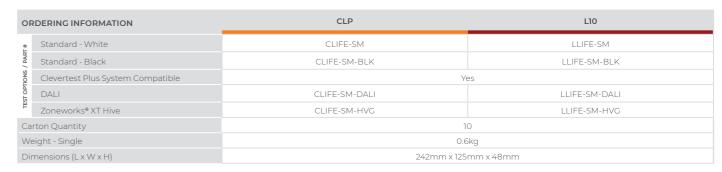








#### LIFELIGHT SURFACE MOUNT EMERGENCY LUMINAIRE



POWER, LAMPS AND BATTERY	CLP	L10			
Power Consumption (Standby / Max)	1.3W/3.0W	1.3W/3.0W			
Lamp(s)	1xLED				
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V/3200mAh	3.3V/2500mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

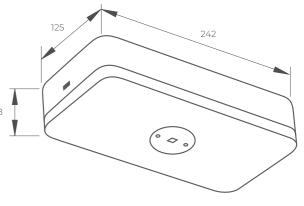
TECHNICAL SPECIFICATIONS	CLP	L10					
Operating Mode	Non-Ma	Non-Maintained					
Voltage (V) Frequency (Hz)	220-240V (50Hz)						
Operating Temperature	0°C to 40°C						
IP Rating (IP)	IP	20					

LUMINAIRE CLASSIFICATION		C	LP		L10				
Without Automatic Testing	Χ	0	AD	180	X	0	AD	180	
With Automatic Testing	X	0	ADF	180	×	0	ADF	180	

		1 LUX SPACING TABLE AND MOUNTING HEIGHTS										
		Escape Routes 1 Lux min. along centre line										
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	10.8	10.6	10.8	10.6	3.3	3.5	3.3	3.5				
3	11.2	10.9	11.2	10.9	3.8	3.2	3.8	3.2				
4	11.8	11.5	11.8	11.5	3.3	3.6	3.3	3.6				
5	12.1	11.7	12.1	11.7	3.0	3.4	3.0	3.4				

Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array			0.5 LU	IX SPACIN	G TABLE A	AND MOU	NTING HE	IGHTS			
Spacing		Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array									
27 11.2 10.9 11.2 10.9 3.7 2.2 3.7 2.2	MOUNTING	Axial Spacing				Axial to Wall		Transverse to Wall		48	
27 11.2 10.9 11.2 10.9 3.7 2.2 3.7 2.2		•	-					<b>7</b>			
		CLP	L10	CLP	L10	CLP	L10	CLP	L10		
3 11.8 11.6 11.8 11.6 3.7 2.5 3.7 2.5	2.7	11.2	10.9	11.2	10.9	3.7	2.2	3.7	2.2		
	3	11.8	11.6	11.8	11.6	3.7	2.5	3.7	2.5		
4 13.2 12.5 13.2 12.5 3.9 2.7 3.9 2.7	4	13.2	12.5	13.2	12.5	3.9	2.7	3.9	2.7		
5 14.3 14.2 14.3 14.2 3.3 2.5 3.3 2.5	5	14.3	14.2	14.3	14.2	3.3	2.5	3.3	2.5		

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)
Kit box (enclosure) of lamp controlgear provides protection against accidental contacts with live parts



Dimensions (mm)

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# LIFELIGHT IP44 SPLASHPROOF RECESSED EMERGENCY LUMINAIRE



Each product is supplied with a 145mm adaptor plate to enable an easy retrofit installation.

#### **Applications**



Bathrooms

Schools





Aquatic Centres



Public Amenities







#### **Features and Benefits**









- DALI<sup>®</sup> and Zoneworks<sup>®</sup> test options available
- · Clevertest Plus System compatible
- · Supplied with additional corridor lens













# LIFELIGHT IP44 SPLASHPROOF RECESSED EMERGENCY LUMINAIRE

DERING INFORMATION	CLP	L10		
Standard - White	CLIFE-RECSP	LLIFE-RECSP		
Standard - Black	CLIFE-RECSP-BLK	LLIFE-RECSP-BLK		
Clevertest Plus System Compatible	Y	es		
DALI	CLIFE-RECSP-DALI	LLIFE-RECSP-DALI		
Zoneworks® XT Hive	CLIFE-RECSP-HVG	LLIFE-RECSP-HVG		
ton Quantity	10 Pieces			
eight - Single (Carton)	0.8kg (9kg)			
mensions (L x W x H)	232mm X 51mm X 42mm (Control Pack) 95mm Head Diameter			
	Standard - Black Clevertest Plus System Compatible DALI	Standard - White  Standard - Black  CliFE-RECSP-BLK  Clevertest Plus System Compatible  DALI  Zoneworks® XT Hive  cton Quantity  pight - Single (Carton)  CLIFE-RECSP-HVG  10 Piece		

POWER, LAMPS AND BATTERY	CLP	L10				
Power Consumption (Standby / Max)*	1.4W / 4.7W	1W / 4.2W				
Lamp(s)	Single LED	Single LED				
Lens	Fitted with Area Lens. Additional Corridor Lens in Box†					
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®				
Voltage (V) / Capacity (mAh)	3.2V/3200mAh	3.3V/2500mAh				
Charging Method	Intelligent Current Limited Constant Voltage					

TECHNICAL SPECIFICATIONS	CLP	L10			
Operating Mode	Non-Maintained				
Voltage (V) (Frequency (Hz))	240V AC; 50Hz				
Operating Temperature	0°C to 40°C				
Ingress Protection Rating (IP) (Parts Below Ceiling)	IP44				
Ingress Protection Rating (IP) (Parts Above Ceiling)	IP20				

With Automat	tic Testing			X		0	ADF	18	30	X		0
		1 LUX SPA	CING TABLE	E AND MOU	NTING HE	IGHTS					PROTE	CTION
			Escape R	outes 1 Lux n	nin.				В	attery overvo	oltage &	overcurre
		along ce		en fitted wit		lens)				Battery c	leep dis	charge pr
CEILING	Axial Spaci	ng	Transverse Spacing	Axial	to Wall	Transver	se to Wall		(	Supply voltag	ge polari	ty revers
MOUNTING HEIGHT (M)	<b>-</b> →	-	_ ← → [	<b>/</b>	<b>—</b>		<b>←</b> ▶		Battery s	hort-circuit p		on (charg of fault)
	CLP I	L10 C	LP L10	CLP	L10	CLP	L10					

3.8

9.5

4.7

		0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS										
	Lu	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array (when fitted with area lens)										
CEILING MOUNTING HEIGHT (M)	Axial S	pacing	Trans Spa ■			o Wall	Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	11.1	10.7	11.1	10.7	5.8	3.8	5.4	3.8				
3	12.1	11.6	12.1	11.6	5.8	3.7	5.8	3.7				
4	15.3	14.9	15.3	14.9	5.4	4.7	5.4	4.7				
5	17.2	17.1	17.2	17.1	3.4	1.5	3.4	1.5				

†For further inform	ation on the corrido	r lens please contac	t Clevertronics
I OI IUI CIICI II II OI II I	idilott off the confido	i ici is picase coritae	, C CIC VCI LI OI IICS.

LUMINAIRE CLASSIFICATION

Without Automatic Testing

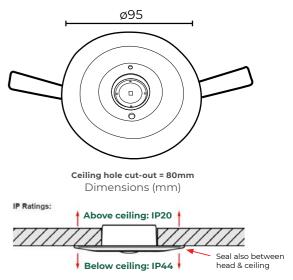
23.0

24.2

22.5

19.3

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



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# LIFELIGHT WEATHERPROOF SURFACE MOUNT EMERGENCY LUMINAIRE



The Lifelight Weatherproof Surface Mount Emergency Luminaire is a sleek weatherproof polycarbonate luminaire that features market leading lithium battery technology and energy efficient LEDs.

The Lifelight Surface Mount IP65 includes options for both open area and escape evacuation applications.

#### **Applications**



Bathrooms









Public Amenities

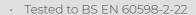
Aquatic Centres

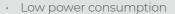






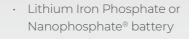
#### **Features and Benefits**











· Clevertest Plus System compatible





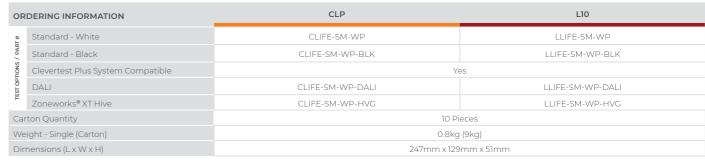








# LIFELIGHT WEATHERPROOF SURFACE MOUNT EMERGENCY LUMINAIRE



POWER, LAMPS AND BATTERY	CLP	L10			
Power Consumption (Standby / Max)	1.0W	/4.2W			
Lamp(s)	1x1	ED			
Lens	Fitted with Area Lens. Add	itional Corridor Lens in Box†			
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V/3200mAh 3.3V/2500mAh				
Charging Method	Intelligent Current Limited Constant Voltage				

TECHNICAL SPECIFICATIONS	CLP	L10			
Operating Mode	Non-Maintained				
Voltage (V) Frequency (Hz)	220-240V (50Hz)				
Operating Temperature	0°C to 40°C				
IP Rating (IP)	IP65				

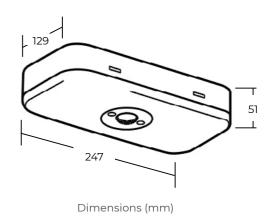
LUMINAIRE CLASSIFICATION		CLP				L10			
Without Automatic Testing	×	0	AD	180	X	0	AD	180	
With Automatic Testing	X	0	ADF	180	X	0	ADF	180	

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS									
		Escape Routes 1 Lux min. along centre line (when fitted with corridor lens)								
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall			
	CLP	L10	CLP	L10	CLP	L10	CLP	L10		
2.7	23.0	19.4	-	-	9.7	5.8	-	-		
3	24.2	19.3	-	-	9.5	5.8	-	-		
4	22.5	17.3	-	-	4.7	3.8	-	-		
5	18.8	14.3	-	-	3.9	3.8	-	-		

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS							
	Lu	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array (when fitted with area lens)						
CEILING MOUNTING HEIGHT (M)	Axial S	pacing		sverse cing	Axial t	o Wall	Transvers	se to Wall
	CLP	L10	CLP	L10	CLP	L10	CLP	L10
2.7	11.1	10.7	11.1	10.7	5.8	3.8	5.4	3.8
3	12.1	11.6	12.1	11.6	5.8	3.7	5.8	3.7
4	15.3	14.9	15.3	14.9	5.4	4.7	5.4	4.7
5	17.2	17.1	17.2	17.1	3.4	1.5	3.4	1.5

<sup>†</sup>For further information on the corridor lens please contact Clevertronics.

PROT	ECTION
Battery overvoltage &	overcurrent protection
Battery deep dis	scharge protection
Supply voltage polar	rity reversal protection
Battery short-circuit protection (charge	ging will resume upon removal of fault)
	r provides protection against accidental vith live parts



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### LIFELIGHT PRO RECESSED EMERGENCY LUMINAIRE



# **Applications**





Showrooms

Theatres

Retail Outlets



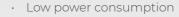




#### **Features and Benefits**







· Spring clips for easy installation



· DALI® and Zoneworks® test options available

· Clevertest Plus System compatible

· Round or square head











#### LIFELIGHT PRO RECESSED EMERGENCY LUMINAIRE

ORDERING INFORMATION	CL	р	L10				
* Standard - White	CLIFE-PRO	CLIFE-PRO-SQ	LLIFE-PRO	LLIFE-PRO-SQ			
Standard - Black	CLIFE-PRO-BLK	CLIFE-PRO-SQ-BLK	LLIFE-PRO-BLK	LLIFE-PRO-SQ-BLK			
Clevertest Plus System Compatible		Υ	es				
Clevertest Plus System Compatible DALI	CLIFE-PRO-DALI	CLIFE-PRO-SQ-DALI	LLIFE-PRO-DALI	LLIFE-PRO-SQ-DALI			
Zoneworks® XT Hive	CLIFE-PRO-HVG	CLIFE-PRO-SQ-HVG	LLIFE-PRO-HVG	LLIFE-PRO-SQ-HVG			
Carton Quantity	10 Pieces						
Weight - single (carton)	0.8kg (9.7kg)						
Dimensions (L x W x H) - Control Pack		232mm x 40mm x 40mm					
Dimensions - Head	ø60mm	60mm x 60mm	ø60mm	60mm x 60mm			
Dimensions - Adaptor Plate	ø95mm	-	ø95mm	-			
Ceiling Hole Cut-Out	ø51mm	51mm x 51mm	ø51mm	51mm x 51mm			
Minimum Ceiling Depth		200mm					

POWER, LAMPS AND BATTERY	CLP	L10		
Power Consumption (Standby / Max)	0.4W/2.7W	0.4W/3.6W		
Lamp(s)	2x	LED		
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®		
Voltage (V) /Capacity (mAh)	3.2V/6400mAh	3.3V/5000mAh		
Charging Method	Intelligent Current Limited Constant Voltage			

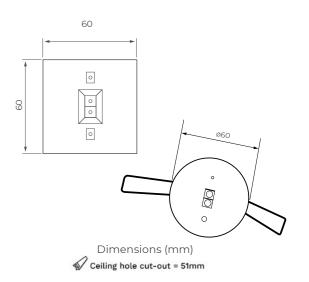
TECHNICAL SPECIFICATIONS	CLP	L10	
Operating Mode	Non-Maintained		
Voltage (V) Frequency (Hz)	220-240V (50Hz)		
Operating Temperature	0°C to 40°C		
IP Rating (IP)	IP20		

LUMINAIRE CLASSIFICATION	CLP				LI	0		
Without Automatic Testing	Х	0	AD	180	Х	0	AD	180
With Automatic Testing	X	0	ADF	180	×	0	ADF	180

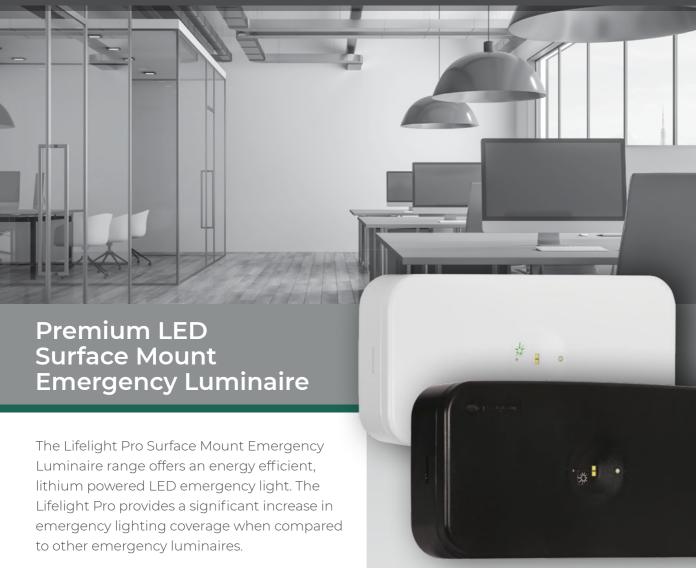
	1 LUX SPACING TABLE AND MOUNTING HEIGHTS							
			Es		es 1 Lux m entre line	in.		
CEILING MOUNTING HEIGHT (M)	Axial S	pacing	Spa	verse cing	Axial t	o Wall	Transvers	se to Wall
	CLP	L10	CLP	L10	CLP	L10	CLP	L10
2.7	13.2	13.0	13.2	13.0	4.1	4.4	4.1	4.4
3	13.7	13.4	13.7	13.4	5.0	4.4	5.0	4.4
4	14.9	14.5	14.9	14.5	4.9	4.4	4.9	4.4
5	15.6	15.2	15.6	15.2	5.0	4.5	5.0	4.5

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS							
		Open			5 Lux min. ed in a reg		re area	
CEILING MOUNTING HEIGHT (M)	Axial S	pacing	Trans Spa	verse cing	Axial t	o Wall	Transvers	se to Wall
	CLP	L10	CLP	L10	CLP	L10	CLP	L10
2.7	13.5	13.4	13.5	13.4	3.6	3.7	3.6	3.7
3	14.2	14.0	14.2	14.0	2.9	3.2	2.9	3.2
4	16.1	15.9	16.1	15.9	4.0	3.3	4.0	3.3
5	17.7	17.4	17.7	17.4	4.2	3.6	4.2	3.6

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



#### LIFELIGHT PRO SURFACE MOUNT EMERGENCY LUMINAIRE



Suitable in a variety of applications the Lifelight Pro will provide outstanding performance and will reduce installation and maintenance costs.

### **Applications**



Office Buildings



Galleries



Apartments



Theatres

Showrooms

Retail outlets





#### **Features and Benefits**



- · Tested to BS EN 60598-2-22
- Low power consumption
- · Lithium Iron Phosphate or Nanophosphate® battery
- · DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible











#### LIFELIGHT PRO SURFACE MOUNT EMERGENCY LUMINAIRE

ORDERING INFORMATION	CLP	L10		
# Standard - White	CLIFE-PRO-SM	LLIFE-PRO-SM		
Standard - Black	CLIFE-PRO-SM-BLK	LLIFE-PRO-SM-BLK		
Clevertest Plus System Compatible	Yes			
DALI	CLIFE-PRO-SM-DALI	LLIFE-PRO-SM-DALI		
Zoneworks® XT Hive	CLIFE-PRO-SM-HVG	LLIFE-PRO-SM-HVG		
Carton Quantity	10 Pieces			
Weight - Single	0.7kg	0.7kg		
Dimensions (L x W x H)	242mm x 125mm x 48mm			

POWER, LAMPS AND BATTERY	CLP	L10	
Power Consumption (Standby / Max)	0.4W/3.6W	0.4W/3.6W	
Lamp(s)	2×L	ED	
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®	
Voltage (V) / Capacity (mAh)	3.2V / 6400mAh	3.3V/5000mAh	
Charging Method	Intelligent Current Limited Constant Voltage		

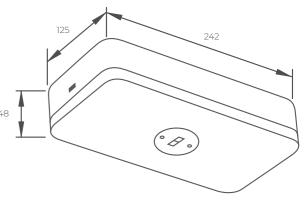
TECHNICAL SPECIFICATIONS	CLP	L10	
Operating Mode	Non-Maintained		
Voltage (V) Frequency (Hz)	220-240V (50Hz)		
Operating Temperature	0°C to 40°C		
IP Rating (IP)	IP20		

LUMINAIRE CLASSIFICATION		C	LP		L10				
Without Automatic Testing	Х	0	AD	180	×	0	AD	180	
With Automatic Testing	X	0	ADF	180	X	0	ADF	180	

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS									
Escape Routes 1 Lu along centre lir										
CEILING MOUNTING HEIGHT (M)	Axial Spacing			Transverse Spacing Axial to Wall		o Wall	Transvers	se to Wall		
	CLP	L10	CLP	L10	CLP	L10	CLP	L10		
2.7	12.5	12.1	12.5	12.1	5.25	5.2	5.2	<b>L10</b> 5.2		
2.7										
	12.5	12.1	12.5	12.1	5.25	5.2	5.2	5.2		

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS								
Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array							re area		
CEILING MOUNTING HEIGHT (M)	Axial S	pacing		sverse cing	Axial t	o Wall	Transvers	se to Wall	4
	CLP	L10	CLP	L10	CLP	L10	CLP	L10	
2.7	12.0	12.5	12.0	12.5	4.5	4.7	4.5	4.7	
3	13.0	13.4	13.0	13.4	5.0	4.6	5.0	4.6	
4	15.0	15.0	15.0	15.0	5.5	4.9	5.5	4.9	
5	17.0	16.4	17.0	16.4	5.5	5.0	5.5	5.0	

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault
Kit box (enclosure) of lamp controlgear provides protection against accidental contacts with live parts



Dimensions (mm)

#### LIFELIGHT PRO SURFACE MOUNT CYLINDER EMERGENCY LUMINAIRE



compared to many existing emergency lights on the market.

Suitable in a variety of applications the Lifelight Pro Surface Mount Cylinder will provide outstanding performance and reduce installation and maintenance costs.



Office Buildings





**Apartments** 



Retail Outlets



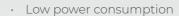
Theatres





#### **Features and Benefits**









· Clevertest Plus System compatible













# LIFELIGHT PRO SURFACE MOUNT CYLINDER EMERGENCY LUMINAIRE



POWER, LAMPS AND BATTERY	CLP L10				
Power Consumption (Standby / Max)	0.4W/2.7W				
Lamp(s)	2×LED				
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V / 6400mAh	3.3V/5000mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

TECHNICAL SPECIFICATIONS	CLP	L10			
Operating Mode	Non-Maintained				
Voltage (V) Frequency (Hz)	220-240	220-240V (50Hz)			
Operating Temperature	0°C to	0°C to 40°C			
IP Rating (IP)	IF	20			

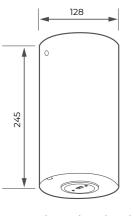
ACCESSORIES	CLP	L10			
Wall Mount Bracket White	2740045				
Wall Mount Bracket Black	2740048				

LUMINAIRE CLASSIFICATION		C	LP		L10					
Without Automatic Testing	Х	0	AD	180	Х	0	AD	180		
With Automatic Testing	X	0	ADF	180	X	0	ADF	180		

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS											
		Escape Routes 1 Lux min. along centre line										
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	13.2	13.0	13.2	13.0	4.1	4.4	4.1	4.4				
3	13.7	13.4	13.7	13.4	5.0	4.4	5.0	4.4				
4	14.9	14.5	14.9	14.5	4.9	4.4	4.9	4.4				
4 5	14.9 15.6	14.5 15.2	14.9 15.6	14.5 15.2	4.9 5.0	4.4 4.5	4.9 5.0	4.4 4.5				

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS									
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array									
CEILING MOUNTING HEIGHT (M)	Axial S	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall		
	CLP	L10	CLP	L10	CLP	L10	CLP	L10		
2.7	13.5	13.4	13.5	13.4	3.6	3.7	3.6	3.7		
3	14.2	14.0	14.2	14.0	2.9	3.2	2.9	3.2		
4	16.1	15.9	16.1	15.9	4.0	3.3	4.0	3.3		
	17.7	17.4	17.7	17.4	4.2	3.6	4.2	3.6		

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)
Kit box (enclosure) of lamp controlgear provides protection against accidental contacts with live parts



Dimensions (mm)

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# LIFELIGHT PRO IP44 SPLASH-PROOF RECESSED EMERGENCY LUMINAIRE



will provide outstanding performance and reduce installation and maintenance costs.

#### **Applications**



Bathrooms





Aquatic Centres



Public Amenities







#### **Features and Benefits**

· Supplied with additional corridor lens for escape evacuation applications DALI® and Zoneworks® test options

· Clevertest Plus System compatible

· Tested to BS EN 60598-2-22

· IP44 splash-proof head

available

· Lithium Iron Phosphate or Nanophosphate battery















# LIFELIGHT PRO IP44 SPLASH-PROOF RECESSED EMERGENCY LUMINAIRE

OF	RDERING INFORMATION	CLP	L10			
#	Standard - White	CLIFE-PRO-RECSP	LLIFE-PRO-RECSP			
/ PART	Standard - Black	CLIFE-PRO-RECSP-BLK	LLIFE-PRO-RECSP-BLK			
TIONS	Clevertest Plus System Compatible	,	Yes .			
ESTOP	DALI	CLIFE-PRO-RECSP-DALI	LLIFE-PRO-RECSP-DALI			
۳	Zoneworks® XT Hive	CLIFE-PRO-RECSP-HVG	LLIFE-PRO-RECSP-HVG			
Са	rton Quantity	10 Pieces				
We	eight - Single (Carton)	0.8kg (9kg)				
Dir	mensions (L x W x H)	232mm X 51mm X 42mm (Control Pack) 60mm Head Diameter				
*D	ue to small head & ceiling cut out, access from behi	nd/above ceiling is required for installation.				

POWER, LAMPS AND BATTERY	CLP	L10
Power Consumption (Standby / Max)*	0.4W / 2.7W	0.4W / 2.7W
Lamp(s)	Dual LED	Dual LED
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®
Voltage (V) / Capacity (mAh)	3.2V / 6400mAh	3.3V / 5000mAh
Charging Method	Intelligent Current Limit	ed Constant Voltage

TECHNICAL SPECIFICATIONS	CLP	L10			
Operating Mode	Non-Maintained				
Voltage (V) (Frequency (Hz))	240V AC; 50Hz				
Operating Temperature	0°C to 40°C				
Ingress Protection Rating (IP) (Parts Below Ceiling)	IP44				
Ingress Protection Rating (IP) (Parts Above Ceiling)	IP20				

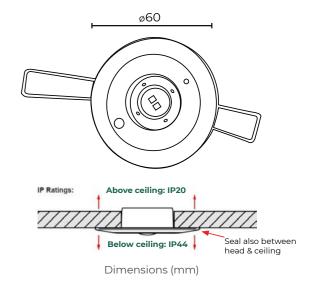
LUMINA	LUMINAIRE CLASSIFICATION		C	LP		L10				
Without	Automatic Testing	Х	0	AD	180	X	0	AD	180	
With Aut	tomatic Testing	X	0	ADF	180	X	0	ADF	180	

		1 LUX SPACING TABLE AND MOUNTING HEIGHTS										
	Escape Routes 1 Lux min. along centre line											
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	14.9	14.8	14.9	14.8	5.5	5.3	5.5	5.3				
3	15.9	15.8	15.9	15.8	6.0	5.3	6.0	5.3				
4	18.4	18	18.4	18	5.9	5.1	5.9	5.1				
5	18.6	17.6	18.6	17.6	5.2	4.5	5.2	4.5				

		0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS										
CEILING MOUNTING HEIGHT (M)	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array											
	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	11.3	11.2	11.3	11.2	5.5	3.8	5.5	3.8				
3	12.4	12.1	12.4	12.1	4.5	4.7	4.5	4.7				
4	15.8	15.7	15.8	15.7	7.0	6.0	7.0	6.0				
5	19.0	18.9	19.0	18.9	7.2	5.8	7.2	5.8				

<sup>†</sup>For further information on the corridor lens please contact Clevertronics

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Rattery short-circuit protection (charging will resume upon removal of fault)



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# LIFELIGHT PRO WEATHERPROOF SURFACE MOUNT EMERGENCY LUMINAIRE



IP65 ingress protection in a small and sleek polycarbonate housing that is easy to install.

With market-leading lithium battery technology and energy efficient LEDs, the Lifelight Pro Weatherproof Surface Mount delivers lower maintenance and energy costs.

#### **Applications**



Bathrooms



Schools







Aquatic Centres

Public Amenities

#### **Features and Benefits**











· Clevertest Plus System compatible

· IP65











### LIFELIGHT PRO WEATHERPROOF SURFACE MOUNT **EMERGENCY LUMINAIRE**

0	RDERING INFORMATION	CLP	L10			
#	Standard - White	CLIFE-PRO-SM-WP	LLIFE-PRO-SM-WP			
7	Standard - Black	CLIFE-PRO-SM-WP-BLK	LLIFE-PRO-SM-WP-BLK			
	Clevertest Plus System Compatible	Ye:	S			
	DALI	CLIFE-PRO-SM-WP-DALI	LLIFE-PRO-SM-WP-DALI			
	Zoneworks® XT Hive	CLIFE-PRO-SM-WP-HVG	LLIFE-PRO-SM-WP-HVG			
26	arton Quantity	10 Pieces				
Weight - Single		0.8kg				
D	imensions (L x W x H)	247mm x 129r	mm x 51mm			

POWER, LAMPS AND BATTERY	CLP L10						
Power Consumption (Standby / Max)	0.4W / 2.7W						
Lamp(s)	2×L	2×LED					
Lens	Dual I	ED					
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®					
Voltage (V) / Capacity (mAh)	3.2V/6400mAh 3.3V/5000mAh						
Charging Method	Intelligent Current Limited Constant Voltage						

TECHNICAL SPECIFICATIONS	CLP	L10					
Operating Mode	Non-Maintained						
Voltage (V) Frequency (Hz)	220-24(	220-240V (50Hz)					
Operating Temperature	0°Ct	o 40°C					
IP Rating (IP)	IF	IP65					
Impact raing (IK)	II-	(08					

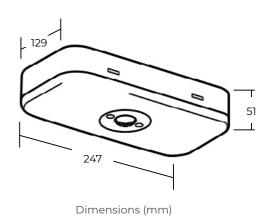
LUMINAIRE CLASSIFICATION		С	LP		L10				
Without Automatic Testing	×	0	AD	180	Χ	0	AD	180	
With Automatic Testing	X	0	ADF	180	X	0	ADF	180	

		1 LUX SPACING TABLE AND MOUNTING HEIGHTS										
	Escape Routes 1 Lux min. along centre line											
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Spa	Transverse Spacing		Axial to Wall		Transverse to Wall				
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	14.9	14.8	14.9	14.8	5.5	5.3	5.5	5.3				
3	15.9	15.8	15.9	15.8	6.0	5.3	6.0	5.3				
4	18.4	18	18.4	18	5.9	5.1	5.9	5.1				
5	18.6	17.6	18.6	17.6	5.2	4.5	5.2	4.5				

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS											
		Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array										
CEILING MOUNTING HEIGHT (M)	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall					
	CLP	L10	CLP	L10	CLP	L10	CLP	L10				
2.7	11.3	11.2	11.3	11.2	5.5	3.8	5.5	3.8				
3	12.4	12.1	12.4	12.1	4.5	4.7	4.5	4.7				
4	15.8	15.7	15.8	15.7	7.0	6.0	7.0	6.0				
5	19.0	18.9	19.0	18.9	7.2	5.8	7.2	5.8				

†For further information on the corridor lens plea	se contact Clevertronics.
--	---------------------------

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)
Kit box (enclosure) of lamp controlgear provides protection against accidental contacts with live parts



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# **LOW TEMPERATURE EMERGENCY**



The range comprises of an integrated option that is rated for -25°C and a remote control gear option that will handle -40°C.

Both options are constructed with polycarbonate enclosures and are rated IP66/67.

#### **Applications**



Cool Rooms

Freezers



Food Processing

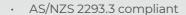


Alpine Regions





#### **Features and Benefits**









· Clevertest Plus System compatible











# LOW TEMPERATURE EMERGENCY

ORDERING INFORMATION		CLP 0 🕄	L10 2	
PTIONS / PART#	Standard	CLIFE-PRO-WP-IPREM	CLIFE-PRO-WP-IPREM LLIFE-PRO-WP-IPREM	
	Clevertest Plus System Compatible	Yes	Yes	-
	DALI	CLIFE-PRO-WP-DALI-IPREM LLIFE-PRO-WP-DALI-IPREM		-
TEST	Zoneworks® XT Hive	CLIFE-PRO-WP-HVG-IPREM	LLIFE-PRO-WP-HVG-IPREM	LWPLIFE-PRO-FZR-HVG
Cai	ton Quantity			
We	ight - Single (Carton)	1.4	3.5kg	
Dir	nensions (L x W x H) - Control Pack	232mm x 40	380mm x 190mm x 130mm	
Dir	nensions (L x W x H) - Head	122mm x 120	122mm x 120mm x 75mm	

POWER, LAMPS AND BATTERY	CLP ① ③	L10 <b>① ③</b>	L10 2			
Power Consumption (Standby / Max)	0.4W / 2.7W	0.4W / 4.7W	0.4W / 2.7W			
Lamp(s)	Dual LED (Life	etime Warranty on the Lamp Head and L	oom Assembly)			
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®	Lithium Nanophosphate®			
Voltage / Capacity (mAh)	3.2V / 6400mAh	3.3V/5000mAh	3.3V / 10Ah			
Charging Method	Intelligent Current Limited Constant Voltage					

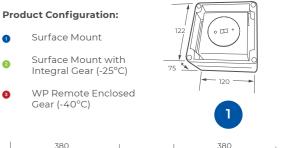
TECHNICAL SPECIFICATIONS	CLP <b>① ③</b>	L10 <b>① ③</b>	L10 2				
Operating Mode	Non-Maintained						
Voltage (V) (Frequency (Hz))	240V AC (50HZ)						
Operating Temperature	-40°C	-40°C to 40°C					
Ingress Protection Rating (IP)	IP6	IP66/67					
Impact Rating (IK)	IK08						

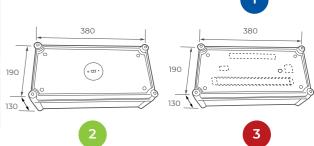
LUMINAIRE CLASSIFICATION		CLP 0 3			L10 🛈 🕄			L10 2				
Without Automatic Testing	X	0	AD	180	Х	0	AD	180	X	0	AD	180
With Automatic Testing	X	0	ADF	180	X	0	ADF	180	X	0	ADF	180

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS									
	Escape Routes 1 Lux min. along centre line									
CEILING MOUNTING HEIGHT (M)			overse Axial t		o Wall	Transverse to Wall				
	CLP	L10	CLP	L10	CLP	L10	CLP	L10		
2.7	<b>CLP</b> 10.5	10.1	<b>CLP</b> 10.5	10.1	<b>CLP</b> 4.5	<b>L10</b> 4.4	<b>CLP</b> 4.5	<b>L10</b> 4.4		
2.7										
	10.5	10.1	10.5	10.1	4.5	4.4	4.5	4.4		

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS									
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array									
CEILING MOUNTING HEIGHT (M)	Axial S	Axial Spacing		Transverse Spacing		Axial to Wall		Transverse to Wall		
	CLP	L10	CLP	L10	CLP	L10	CLP	L10		
2.7	11.0	11.0	11.0	11.0	3.5	3.7	3.5	3.7	19	
3	11.0	11.5	11.0	11.5	4.0	3.8	4.0	3.8	] .	
4	13.0	12.9	13.0	12.9	4.0	3.9	4.0	3.9	13	
5	14.0	13.9	14.0	13.9	4.5	4.0	4.5	4.0		

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection





Dimensions (mm)

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# **SUPALITE FLOOD EMERGENCY LUMINAIRE**



# **Applications**



Warehouses



Schools



Car Parks



Sports Facilities



Railway Stations



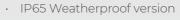


#### **Features and Benefits**









- · Low power consumption
- LED lamps
- · 320-640 lumen options
- · Lithium Iron Phosphate or Nanophosphate® battery
- · DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible

# **SUPALITE FLOOD EMERGENCY LUMINAIRE**

OI	RDERING INFORMATION	CLP	CLP WEATHERPROOF	L10	L10 WEATHERPROOF
#	Standard - White	CFLLED	CWFLED	LFLLED	LWFLED
PART	Standard - Black	CFLLED-BLK	CWFLED-BLK	LFLLED-BLK	LWFLED-BLK
SNOL	Clevertest Plus System Compatible		es		
rest opi	DALI	CFLLED-DALI	CWFLED-DALI	LFLLED-DALI	LWFLED-DALI
μ	Zoneworks® XT Hive	CFLLED-HVG	CWFLED-HVG	LFLLED-HVG	LWFLED-HVG
Ca	arton Quantity	10	1	10	1
W	eight - Single (Carton)	1.4kg (15.2kg)	3.6kg	1.4kg (15.2kg)	3.6kg
Di	mensions (L x W x H)	282mm x 64mm x 225mm	380mm x 130mm x 310mm	282mm x 64mm x 225mm	380mm x 130mm x 310mm

POWER, LAMPS AND BATTERY	CLP	CLP W/PROOF	L10	L10 W/PROOF		
Power Consumption (Standby / Max)	0.4W / 2.7W	1.0W / 5.4W	0.4W / 2.7W	1.0W / 5.4W		
Lamp(s)		2 x LED Heads				
Lumen Output (Per Head / Total)	155lm / 310lm	320lm / 640lm	185lm / 320lm	300lm / 600lm		
Battery	Lithium Iron	n Phosphate	Lithium Nanophosphate®			
Voltage / Capacity (mAh)	3.2V / 6400mAh	6.4V / 3200mAh	3.3V/5000mAh	6.6V/2500mAh		
Charging Method	Intelligent Current Limited Constant Voltage					

TECHNICAL SPECIFICATIONS	CLP	CLP W/PROOF	L10	L10 W/PROOF			
Operating Mode	Non-Maintained 220-240V(50Hz)						
Voltage (V) (Frequency (Hz))							
Operating Temperature	0°C to 40°C	0°C to 40°C	0°C to 40°C	0°C to 40°C			
Ingress Protection Rating (IP)	IP20	IP65	IP20	IP65			

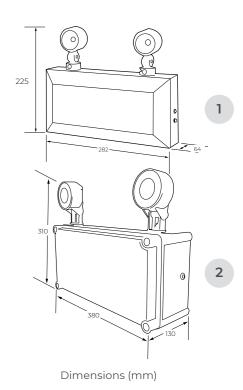
LUMINAIRE CLASSIFICATION	CLP			L10				
Without Automatic Testing	Х	0	AD	180	×	0	AD	180
With Automatic Testing	X	0	ADF	180	X	0	ADF	180

	IP20 -	IP20 - 1 LUX SPACING TABLE AND MOUNTING HEIGHTS			WEATHE	ERPROOF 1	LUX SPACIN	NG TABLE
Escape Routes 1 Lux min. along centre line			Escape Routes 1 Lux min. along centre line					
CEILING MOUNTING HEIGHT (M)	Axial S	Axial Spacing Axial to Wall Axial Sp		Axial to Wall		spacing	Axial t	to Wall
	CLP	L10	CLP	L10	CLP	L10	CLP	L10
4	14.0	14.0	6.4	6.2	17.3	16.9	7.6	7.6
6	17.6	17.6	8.0	7.9	21.3	20.8	9.2	9.2
8	18.6	18.6	8.4	7.9	24.5	24.0	10.0	10.0
10	18.8	18.9	8.2	8.1	27.1	26.6	10.9	10.9
12	18.2	18.3	7.8	7.7	27.4	26.4	10.6	10.6
			PF	ROTECTION	ı			
		Batter	y overvolta	ge & overcu	rrent protect	ion		
		В	attery deep	discharge	protection			
		Supp	ly voltage p	olarity reve	rsal protection	on		
	Battery sh	ort-circuit p	rotection (c	harging wil	l resume up	on removal	of fault)	

#### **Product Configuration:**







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#### **CIRCULARS & BULKHEADS**

Argonaut Square Emergency Luminaire	104
Circlite Luminaire	106
Bulklite Emergency Luminaire	108
Bunkalite Emergency Luminaire	110
Disc Circular LED Luminaire	112

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# ARGONAUT SQUARE EMERGENCY LUMINAIRE



with high/low sensors provides an opportunity to reduce energy costs significantly.

Constructed with a die cast aluminium body and polycarbonate diffuser the Argonaut Square provides a robust and decorative emergency lighting solution.

#### **Applications**



Apartments





Schools



Car Parks



Public Amenities





· IP65 · IK10

LED lamps

· Clevertest Plus System compatible

**Features and Benefits** 

· Tested to BS EN 60598-2-22

· Die cast aluminium body

Microwave sensor option













# **ARGONAUT SQUARE EMERGENCY LUMINAIRE**

OF	DERING INFORMATION	CI	_P	MAINS		
#LW	Standard - White	ARGOSQ-LP	ARGOSQ-SEN-LP	ARGOSQ	ARGOSQ-SEN	
VS / PA	Clevertest Plus System Compatible	Yes	Yes		-	
ОРТЮ	DALI	ARGOSQ-LP-DALI	ARGOSQ-SEN-LP-DALI	-	-	
TEST	Zoneworks® XT Hive	ARGOSQ-LP-HVG	ARGOSQ-SEN-LP-HVG	-	-	
Ca	rton Quantity	4				
We	eight - single (carton)	3.5kg (14.5kg)	3.5kg (14.5kg)	3.0kg (12.5kg)	3.0kg (12.5kg)	
Dir	mensions (L x W x H)	321mm x 321mm x 97mm				

POWER, LAMPS AND BATTERY	С	CLP		MAINS		
Power Consumption (Standby / Max)	0.4W / 24.2W	0.4W / 24.3W	21.2W	3.1W / 21.6W		
Lamp(s)		LED Module, 4000K (L70/B50 Ta 40°C; Reported >60,000hr, Projected 205,000hr)				
Total Lumen Output	324	3242lm		2lm		
Voltage (V) /Capacity (mAh)	3.3V / 64	3.3V/6400mAh		-		
Battery	Lithium Iron	Lithium Iron Phosphate		-		
Charging Method	Intelligent Current Lin	Intelligent Current Limited Constant Voltage		-		

TECHNICAL SPECIFICATIONS	CLP	MAINS		
Operating Mode	Maintained	Non-Emergency		
Voltage (V) (Frequency (Hz))	220-240V (50Hz)			
Operating Temperature	0°C to 40°C			
Ingress Protection Rating (IP)	IP65			
Impact Rating (IK)	IK	10		

LUMINAIRE CLASSIFICATION	CLP					
Without Automatic Testing	×	1	AD	180		
With Automatic Testing	X	1	ADF	180		

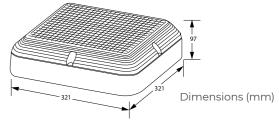
	1 LUX SPACING TABLE AND MOUNTING HEIGHTS						
	Escape Routes 1 Lux min. along centre line						
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing ◀→	Axial to Wall	Transverse to Wall			
	CLP	CLP	CLP	CLP			
2.7	12.6	12.6	4.5	4.5			
3	13.2	13.2	5.0	5.0			
4	14.8	14.8	4.9	4.9			
5	16.0	16.0	5.6	5.6			

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS						
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array						
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall			
	CLP	CLP	CLP	CLP			
2.7	12.9	12.9	2.8	2.8			
3	13.7	13.7	3.4	3.4			
4	15.4	15.4	3.7	3.7			
5	16.4	16.4	3.7	3.7			

	1 LUX SI	1 LUX SPACING TABLE AND MOUNTING HEIGHTS						
	Escape Routes 1 Lux min. along centre line							
WALL MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall				
	CLP	CLP	CLP	CLP				
2.1	-	9.3	-	3.3				
2.4	-	9.5	-	3.3				
3	-	9.8	-	3.3				

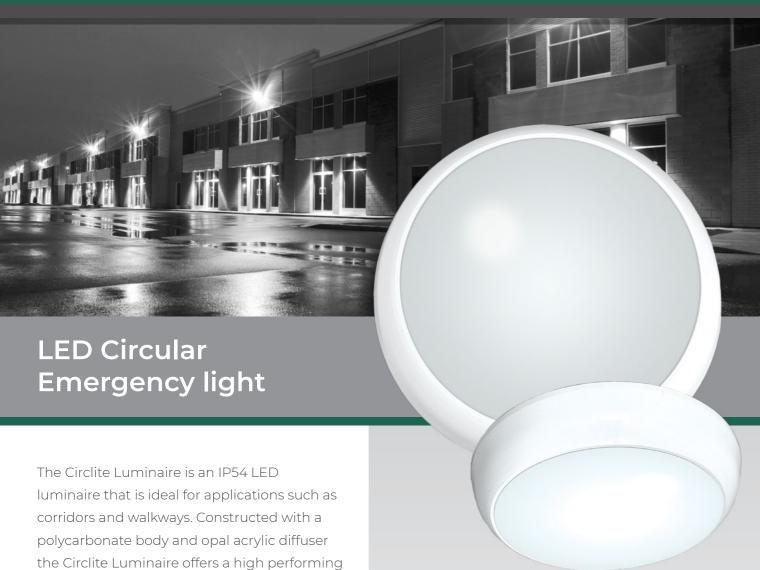
\*Based on 3.3m high passageway - 2.5m wide

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)



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# **CIRCLITE LUMINAIRE**



solution that is energy efficient when combined with motion sensors.

Market leading lithium battery technology will provide significant maintenance savings compared to alternatives.

#### **Applications**



Office Buildings







Schools



Sports Facilities

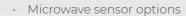
Car Parks



#### **Features and Benefits**









· Large terminal block



· Clevertest Plus System compatible















# **CIRCLITE LUMINAIRE**

ORDERING INFORMATION	CLP	CLP (SENSOR)	MAINS	MAINS (SENSOR)		
# Standard	CCIRC	CCIRC-MS-HL	FCIRC	FCIRC-MS-HL		
Clevertest Plus System Compatible	Ye	Yes		-		
DALI	CIRC-DALI	CCIRC-MS-HL-DALI	-	-		
Zoneworks® XT Hive	CIRC-HVG	CCIRC-MS-HL-HVG	-	-		
Carton Quantity		5	5			
/eight - Single	1.8kg					
Dimensions (Diameter x H)	327mm x 100mm					

POWER, LAMPS AND BATTERY	CLP	CLP (SENSOR)	MAINS	MAINS (SENSOR)
Power Consumption (Standby / Max)	1.4W / 17.3W	7W/18W	13W	15W
Lamp(s) (CCT / Life)		LED Module 4000K/30,000hrs (L70 / B50)		
Nominal Lumen Output	1460lm	1460lm	1460lm	1460lm
Battery	Lithium Iron	Lithium Iron Phosphate  3.2V / 6400mAh  Intelligent Current Limited Constant Voltage		-
Voltage / Capacity (mAh)	3.2V / 64			-
Charging Method	Intelligent Current Lim			-

TECHNICAL SPECIFICATIONS	CLP	MAINS
Operating Mode	Sustained	Non-Emergency
Voltage (V) (Frequency (Hz))	220-240V (50Hz)	
Operating Temperature	0°C to 40°C	
Ingress Protection Rating (IP)	IP54	

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS				
WALL		Escape Rout along ce			
MOUNTING Axial Spacing Trans		Transverse Spacing	Axial to Wall	Transverse to Wall	
ESCAPE ROUTE	<del>-</del>	<b>←→</b>	<b>←→</b> —	<b>←→</b>	
ONLY	CLP	CLP	CLP	CLP	
2.1	8.1	8.1	2.3	2.3	
2.4	8.2	8.2	2.3	2.3	
2.7	8.2	8.2	2.3	2.3	

	1LUX	SPACING TABLE A	1 LUX SPACING TABLE AND MOUNTING HEIGHTS		
			tes 1 Lux min. entre line		
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall	
	CLP	CLP	CLP	CLP	
2.7	11.7	11.7	3.7	3.7	
3	12.1	12.1	3.8	3.8	
4	13.5	13.5	4.5	4.5	
5	14.5	14.5	5.1	5.1	

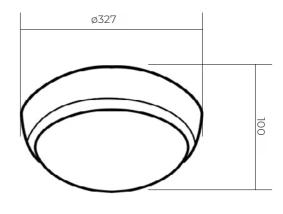
	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS				
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array				
CEILING MOUNTING	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall	
HEIGHT (M)	<b>←→</b>	<b>  ← &gt;  </b>	<b>←→</b> —	<b>←→</b>	
	CLP	CLP	CLP	CLP	
2.7	11.7	11.7	2.3	2.3	
3	12.3	12.3	2.7	2.7	
4	13.7	13.7	2.7	2.7	
5	15.6	15.6	3.6	3.6	

LUMINAIRE CLASSIFICATION		CI	_P	
Without Automatic Testing	X	2	AD	180
With Automatic Testing	X	2	ADF	180

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)

 $\hbox{$^*$Warranty information located at: https://clevertronics.co.uk/productwarranty-statement/}$ 

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Dimensions (mm)

# **BULKLITE EMERGENCY LUMINAIRE**



# **Durable Bulkhead** Luminaire

The Bulklite Emergency Luminaire is a durable and weatherproof IK08 impact rated LED emergency luminaire that can be easily configured to an exit sign using optional directional legends.

Made from UV stabilised polycarbonate and featuring efficient long life LED's and lithium battery power, the Bulklite is designed for robust wall or ceiling applications.

### **Applications**

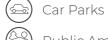


Apartments





Schools



Public Amenities



Sports Facilities



· Directional decals available separately

· IP65

· IK08



options available

· Clevertest Plus System compatible

**Features and Benefits** 

· Tested to BS EN 60598-2-22

· Wall and ceiling mount















# **BULKLITE EMERGENCY LUMINAIRE**

OR	DERING INFORMATION	CLP	L10
PART#	Standard (Non-Maintained)	CBULK	LBULK
	Clevertest Plus System Compatible	Yes	
NS / E	DALI	CBULK-DALI	LBULK-DALI
PTIO	Zoneworks® XT Hive	CBULK-HVG	LBULK-HVG
TEST	Maintained	CBULKM	LBULKM
	Switched Maintained	CBULKM-SA	LBULKM-SA
Ca	rton Quantity		1
W∈	eight - Single (Carton)	2.0	kg
Dir	mensions (L x W x H)	346mm x 132	mm x 86mm
Dir	ectional Options	Available Separately	

POWER, LAMPS AND BATTERY	CLP	L10
Power Consumption (Standby / Max)	0.4W / 4.7W	
Lamp(s)	LED Module 40	000K/30,000hrs
Battery	Lithium Iron Phosphate	Lithium Nanophosphate®
Voltage (V) / Capacity (mAh)	6.4V / 6400mAh	3.3V / 5000mAh
Charging Method	Intelligent Current Limited Constant Voltage	
Rated Emergency Duration (Mins.)	180	

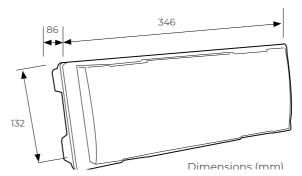
TECHNICAL SPECIFICATIONS	
Operating Mode	Non-Maintained/Maintained/ Switched Maintained
Voltage (V) Frequency (Hz)	220-240V (50Hz)
Operating Temperature	0°C to 40°C
Viewing Distance (Exit Option)	20m
IP Rating (IP)	IP65
Impact Pating (IK)	IK08

LUMINAIRE CLASSIFICATIO	N			
Without Automatic Testing	X	0	AD	180
With Automatic Testing	X	0	ADF	180

EXIT DECALS (AVAILABLE SEPARATELY)		
Up Arrow	BULKLITE-DECAL-RU	
Down Arrow	BULKLITE-DECAL-RD	
Left Arrow	BULKLITE-DECAL-RL	
Right Arrow	BULKLITE-DECAL-RR	

	1 LUX	1 LUX SPACING TABLE AND MOUNTING HEIGHTS				0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS			
	Escape Routes 1 Lux min. along centre line				Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array				
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall	Axial Spacing	Transverse Spacing 【◆◆】	Axial to Wall	Transverse to Wall	
2.7	11.7	11.0	5.0	4.7	12.5	10.2	3.9	4.2	
3	12.1	11.4	5.1	4.8	13.0	10.7	4.1	4.5	
4	13.3	12.7	5.4	5.0	14.7	12.0	5.3	5.7	
5	14.1	12.7	5.6	5.0	16.1	12.9	4.6	4.9	

PROTECTION
Battery overvoltage & overcurrent protection
Battery deep discharge protection
Supply voltage polarity reversal protection
Battery short-circuit protection (charging will resume upon removal of fault)







BULKLITE-DECAL-RU



BULKLITE-DECAL-RD



BULKLITE-DECAL-RR



BULKLITE-DECAL-RL

Maintained and switched maintained

# **BUNKALITE EMERGENCY LUMINAIRE**



apartment blocks. Constructed with a powdercoated steel body and white opal polycarbonate diffuser the Bunkalite Emergency Luminaire provides a decorative solution for both industrial and commercial use.

Market leading lithium battery technology provides lower maintenance costs and LED lamps provide a low standby power rating that will reduce energy costs significantly.

Available in white, black, grey and silver options to suit various environments.

### **Applications**



Apartments



Factories







Sports Facilities

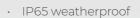
Public Amenities

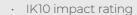
Car Parks

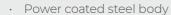


#### **Features and Benefits**











- · Lithium Iron Phosphate battery
- · Microwave sensor option
- DALI® and Zoneworks® test options available
- · Clevertest Plus System compatible















# **BUNKALITE EMERGENCY LUMINAIRE**

ORDERING INFORMATION		CLP	CLP W/ MOTION SENSOR	MAINS	MAINS W/ MOTION SENSOR	
#	Standard - White	CBKLEDS-WHT	CBKLEDS-MS-WHT	FBKLED-WHT	FBKLED-MS-WHT	
/ PAR	Standard - Black	CBKLEDS-BLK	CBKLEDS-MS-BLK	FBKLED-BLK	FBKLED-MS-BLK	
TIONS	Clevertest Plus System Compatible	Yes	Yes	-		
STOP	DALI	CBKLEDS-DALI-WHT	CBKLEDS-MS-DALI-WHT	=		
Ë	Zoneworks® XT Hive	CBKLEDS-HVG-WHT	CBKLEDS-MS-HVG-WHT	-		
Carton Quantity		1				
Weight - Single (Carton)		4.5kg				
Dimensions (D x H)		360mm x 145mm				

POWER, LAMPS AND BATTERY	CLP	CLP W/ MOTION SENSOR	MAINS	MAINS W/ MOTION SENSOR	
Power Consumption (Standby / Max)	1.2W / 21W	1.5W/22W	16W	17W	
Lamp(s)		LED Module 40	000K/50,000hrs		
Total Lumen Output	194	5lm	1945lm		
Battery	Lithium Iror	n Phosphate		-	
Voltage / Capacity (mAh)	3.2V / 64	400mAh		-	
Charging Method	Intelligent Current Lin	nited Constant Voltage		-	

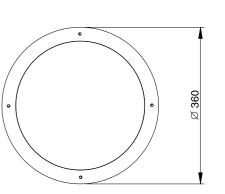
TECHNICAL SPECIFICATIONS	CLP	MAINS	
Operating Mode	Sustained	Non-Emergency	
Voltage (V) (Frequency (Hz))	220-240V (50Hz)		
Operating Temperature	0°C to 40°C		
Ingress Protection Rating (IP)	IP65		
Impact Rating (IK)	IK	00	

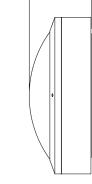
	1 LUX SPACING TABLE AND MOUNTING HEIGHTS					
WALL MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall		
ESCAPE ROUTE	CLP	CLP	CLP	CLP		
2.1	-	63	-	2.4		
2.4	-	6.1	-	2.1		
2.7	-	6.0	-	2.2		

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS					
	E	Escape Routes 1 Lux i	min. along centre lin	е		
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall		
	CLP	CLP	CLP	CLP		
2.7	-	9.1	-	3.6		
3	-	9.4	-	3.8		
4	-	10.2	-	4.0		
5	-	10.6	-	4.1		

	0.5 LUX SPACING TABLE AND MOUNTING HEIGHTS					
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array					
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall		
	CLP	CLP	CLP	CLP		
2.7	10.0	10.0	3.4	3.4		
3	10.5	10.5	3.5	3.5		
4	3.4	3.5	3.6	3.8		
5	3.4	3.5	3.6	3.8		

LUMINAIRE CLASSIFICATION		C	CLP	
Without Automatic Testing	X	2	AG	180
With Automatic Testing	X	2	AFG	180





Dimensions (mm)

\*Warranty information located at: https://clevertronics.co.uk/product-warranty-statement/

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# **DISC CIRCULAR LED LUMINAIRE**



The DISC Circular LED is an IP20, surface mounted round luminaire ideal for stairwells and corridors.

**Emergency Luminaire** 

This round luminaire is assembled on a strong white spun metal base with a UV stabilised opal diffuser for smooth illumination, and includes lithium battery technology which ensures significant maintenance savings compared to other alternatives.

(ᢒ) Car Parks

Sports Facilities

### **Applications**



Office Buildings



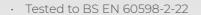
Public Amenities Railway Stations

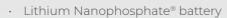


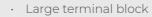


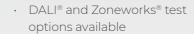


#### **Features and Benefits**









· Clevertest Plus System compatible













# **DISC CIRCULAR LED LUMINAIRE**

OF	RDERING INFORMATION	L10	MAINS
PART#	Standard	LDISC	FDISC
	Carton Quantity		1
IONS	Clevertest Plus System Compatible	Yes	-
ТОР	DALI	LDISC-DALI	-
TEST	Zoneworks® XT Hive	LDISC-HVG	-
W	eight - Single	2.7kg	1.9kg
Dimensions (Diameter x H)		425mm	x 116mm

POWER, LAMPS AND BATTERY	L10	MAINS	
Power Consumption (Standby / Max)	0.9W / 26.7W	23.6W	
Lamp(s) (CCT / Life)	LED Module 4000K/72,000hrs		
Nominal Lumen Output	3094lm	3094lm	
Battery	Lithium Nanophosphate	-	
Voltage / Capacity (mAh)	6.6V / 2500mAh	-	
Charging Method	Intelligent Current Limited Constant Voltage	-	

TECHNICAL SPECIFICATIONS	L10	MAINS
Operating Mode	Maintained	Non-Emergency
Voltage (V) (Frequency (Hz))	220-240	V (50Hz)
Operating Temperature	0°C to	40°C
Ingress Protection Rating (IP)	IP	20

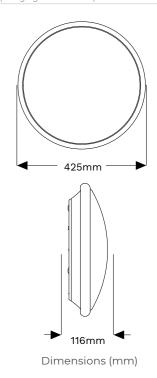
	1 LUX SPACING TABLE AND MOUNTING HEIGHTS						
WALL MOUNTING		Escape Rout along ce	es 1 Lux min. ntre line				
Wall mounted spacings calculated using a 2.5m wide	Axial Spacing	Transverse Spacing	Axial to Wall	Transverse to Wall			
passageway/3m high ceiling.	L10	L10	L10	L10			
2.1	-	8.7	2.8	-			
2.4	-	8.8	2.7	-			
2.7	-	9.0	2.5	-			

	With Automatic Testing	X	1	AD	180
	Without Automatic Testing	X	1	ADF	180
all	P	ROTECTIO	N		
	Battery overvolta	ge & overc	urrent prot	ection:	
	Battery dee	p discharg	e protectio	n	
-	Supply voltage	oolarity rev	ersal prote	ction	
	Battery sh (charging will res				

LUMINAIRE CLASSIFICATION

	1 LUX SPACING TABLE AND MOUNTING HEIGHTS							
	Escape Routes 1 Lux min. along centre line							
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing <b>←→</b>	Axial to Wall	Transverse to Wall				
	L10	L10	L10	L10				
2.7	-	11.9	-	4.4				
2.7	-	11.9	-	4.4				
	- - -		- - -					

	0.5LUX SPACING TABLE AND MOUNTING HEIGHTS							
	Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array							
CEILING MOUNTING HEIGHT (M)	Axial Spacing	Transverse Spacing <b>←→</b>	Axial to Wall	Transverse to Wall				
	L10	L10	L10	L10				
2.7	13.0	12.1	3.4	3.8				
3	13.8	12.6	3.6	4				
4	15.2	14.9	4.3	4.3				
5	17	16.2	3.8	4.5				



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# LINEARS

#### **LED LINEARS**

#### Weatherproof Linears (IP65, IP66)

Argonaut Plus 117
Argonaut Pro 125

Argonaut Vandal Resistant 132

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# **ARGONAUT PLUS WEATHERPROOF LINEAR**



High Spec & Efficiency, Switchable Colour & Dual Output

The Argonaut Plus Weatherproof Linear range is designed for high spec applications requiring ultimate efficiency and longer LED lifetime. Featuring switchable colour and dual output, they adapt to your application requirements with the flick of a switch.

Backed by Clevertronics support, service and warranty, the Linear range is available as a Standard or Emergency CLP or L10 Nanophosphate® with monitoring capabilities including Zoneworks XT Hive, DALI and CTP.

#### **Applications**



Car Parks





Fire Stairs



Corridors



Back of House

### **Emergency Range**

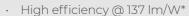




\*1200mm Standard Linear, varies by model

### **Features and Benefits**







- · Switchable Output (varies by model)
- · Long life, energy efficient LED strip module
- · Large terminal block for easy installation
- · Lithium Iron Phosphate or Nanophosphate battery
- · Emergency POD for maximum in-service life and lowest maintenance cost
- · Emergency integral battery option also available















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# ARGONAUT PLUS WEATHERPROOF LINEAR 600MM HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR

OI	RDERING INFORMATION	EMERGI	ENCY (CLP)	EMERGENCY (L10)	MAINS
	Nominal Size	600mm ①	600mm ②	600mm ②	600mm ①
4	Standard	ARGOPLUS-600-LP	ARGOPLUS-600-LPPOD	ARGOPLUS-600-L10POD	ARGOPLUS-600
PART#	DALI Driver	ARGOPLUS-600-DD-LP	ARGOPLUS-600-DD-LPPOD	ARGOPLUS-600-DD-L10POD	ARGOPLUS-600-DD
/ SNOI	Motion Sensors	ARGOPLUS-600-SEN-LP	ARGOPLUS-600-SEN-LPPOD	ARGOPLUS-600-SEN-L10POD	ARGOPLUS-600-SEN
ESTOP	CTP System Compatible		Yes		-
-	DALI*	ARGOPLUS-600-LP-DALI	ARGOPLUS-600-LPPOD-DALI	ARGOPLUS-600-L10POD-DALI	-
	Zoneworks XT Hive*	ARGOPLUS-600-LP-HVG	ARGOPLUS-600-LPPOD-HVG	ARGOPLUS-600-L10POD-HVG	-
Ca	rton Quantity		1		
W	eight	1.7kg	2.0kg	2.0kg	1.4kg
Di	mensions ( L X W X H)	655mm x 160mm x 105mm	720mm x 160mm x 105mm	720mm x 160mm x 105mm	655mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPLUS-600-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS				
Construction - Base	UV Stabilised Polycarbonate						
Construction - Diffuser	UV Stabil	UV Stabilised Polycarbonate					
Voltage (V) (Frequency (Hz))	220	0-240V (50Hz)					
Lamp◆	LED Strip Module						
Luminaire CCT	3000K, 400	00K, 5700K Switchable					
Lamp Projected Life	Ra>80 Ta40°c; 157,000hrs (L70/B5	50), 95,000hrs (L80/B20), 43,000hrs (L90/B10)					
Power Consumption & Light Output	(See Ta	ble on Next Page)					
Ingress Protection Rating (IP)		IP65					
Impact Rating (IK)		IK08					

 $\bullet \ \mathsf{Please} \ \mathsf{refer} \ \mathsf{to} \ \mathsf{the} \ \mathsf{specific} \ \mathsf{product} \ \mathsf{data} \ \mathsf{sheet} \ \mathsf{for} \ \mathsf{actual} \ \mathsf{power}, \\ \mathsf{light} \ \mathsf{output}, \\ \mathsf{lamp} \ \mathsf{lifetime} \ \mathsf{and} \ \mathsf{driver} \ \mathsf{values}.$ 

EMERGENCY SPECIFICATIONS	EMERGE	EMERGENCY (L10)			
Operating Mode	Sustained				
Battery Configuration	Integral	POD	POD		
Battery Type	Lithium Iro	n Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/6400mAh	3.2V /6400mAh	3.3V/5000mAh		
Charging Method	Intelligent Current Limited Constant Voltage				

LUMINAIRE CLASSIFICATION	EMERGENCY (CLP)			EMERGENCY (L10)				
Without Automatic Testing	X	2	AD	180	Х	2	AD	180
With Automatic Testing	×	2	ADF	180	X	2	ADF	180

# ARGONAUT PLUS WEATHERPROOF LINEAR 600MM

HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR

#### NO SENSOR

POWER CONSUMPTION	Standby ( Main Lar		Main Lamp On		LUMEN OUTPUT		LUMENS /		WA
OUTPUT (700mA)	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	
3000K	18.4	W	18.0W	219	2 lm	2192 lm	119 lr	n/W	
4000K DEFAULT	17.8	W	17.4W	235	51 lm	2351 lm	132 lr	n/W	
5700K	18.4	W	18.0W	230	4 lm	2304 lm	125 lr	n/W	

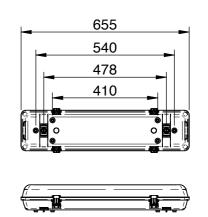
#### SENSOR

POWER CONSUMPTION	Standby Charge/ Main Lamp On	Main Lamp On	Standby Charge / Main Lamp On @ Min 10%	Main Lamp On @ Min 10%	LUMEN OUTPUT		LUMENS / WATT	
OUTPUT (700mA)	CLP L10	MAINS	CLP L10	MAINS	CLP L10	MAINS	CLP L10	MAINS
3000K	19.0W	18.6W	2.8W	2.4W	2192 lm	2192 lm	115 lm/W	118 lm/W
4000K DEFAULT	18.3W	17.9W	2.9W	2.5W	2351 lm	2351 lm	129 lm/W	131 lm/W
5700K	19.0W	18.6W	2.8W	2.4W	2304 lm	2304 lm	121 lm/W	124 lm/W

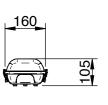
#### Product Configuration:

1 600mm No Pod

2 600mm With Pod

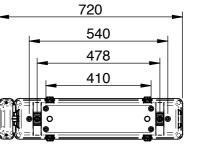


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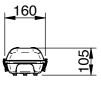


MAINS 122 lm/W

128 lm/W







Dimensions in (mm)

# ARGONAUT PLUS WEATHERPROOF LINEAR 1200MM HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR & DUAL OUTPUT

ORDERING INFORMATION	EMERGI	EMERGENCY (CLP)		MAINS
Nominal Size	1200mm <b>①</b>	1200mm <b>②</b>	1200mm <b>②</b>	1200mm ①
Standard	ARGOPLUS-1200-LP	ARGOPLUS-1200-LPPOD	ARGOPLUS-1200-L10POD	ARGOPLUS-1200
DALI Driver	ARGOPLUS-1200-DD-LP	ARGOPLUS-1200-DD-LPPOD	ARGOPLUS-1200-DD-L10POD	ARGOPLUS-1200-DD
Motion Sensors	ARGOPLUS-1200-SEN-LP	ARGOPLUS-1200-SEN-LPPOD	ARGOPLUS-1200-SEN-L10POD	ARGOPLUS-1200-SEN
CTP System Compatible		Yes		-
DALI*	ARGOPLUS-1200-LP-DALI	ARGOPLUS-1200-LPPOD-DALI	ARGOPLUS-1200-L10POD-DALI	-
Zoneworks XT Hive*	ARGOPLUS-1200-LP-HVG	ARGOPLUS-1200-LPPOD-HVG	ARGOPLUS-1200-L10POD-HVG	-
Carton Quantity		1		
Weight	2.9kg	3.2kg	3.2kg	2.7kg
Dimensions (LXWXH)	1265mm x 160mm x 105mm	1330mm x 160mm x 105mm	1330mm x 160mm x 105mm	1265mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPLUS-1200-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS				
Construction - Base	UV Stabilis	UV Stabilised Polycarbonate					
Construction - Diffuser	UV Stabilis	ed Polycarbonate					
Voltage (V) (Frequency (Hz))	220-2	240V (50Hz)					
Lamp♦	LED Strip Module						
Luminaire CCT	3000K, 4000	K, 5700K Switchable					
Lamp Projected Life	Ra>80 Ta40°c; 157,000hrs (L70/B50)	, 95,000hrs (L80/B20), 43,000hrs (L90/B10)					
Power Consumption & Light Output	(See Table	e on Next Page)					
Ingress Protection Rating (IP)		IP65					
Impact Rating (IK)		IK08					

<sup>•</sup> Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

EMERGENCY SPECIFICATIONS	EMERGE	EMERGENCY (L10)			
Operating Mode	Sustained				
Battery Configuration	Integral POD		POD		
Battery Type	Lithium Iro	n Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/6	3.3V/5000mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

LUMINAIRE CLASSIFICATION		EMERGE	EMERGENCY (CLP)			EMERGENCY (L10)			
Without Automatic Testing	X	2	AD	180	Х	2	AD	180	
With Automatic Testing	×	2	ADF	180	X	2	ADF	180	

# ARGONAUT PLUS WEATHERPROOF LINEAR 1200MM HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR & DUAL OUTPUT

#### NO SENSOR

POWER CONSUMPTION – DEFAULT	Standby Charge/ Main Lamp On		Main Lamp On	LUMEN OUTPUT			LUMEN	S/WATT	
OUTPUT 2 (650mA)	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
3000K	33.7W	V	33.3W	4145	ilm	4145 lm	123	m/W	125 lm/W
4000K DEFAULT	32.6V	V	32.2W	4420	) lm	4420 lm	136	m/W	137 lm/W
5700K	33.6V	V	33.2W	4322	2 lm	4322 lm	129	m/W	130 lm/W
OUTPUT 1 (350mA)									
3000K	19.2W	/	18.8W	2432	2 lm	2432 lm	127	m/W	129 lm/W
4000K DEFAULT	18.8V	V	18.4W	2549	) lm	2549 lm	136	m/W	139 lm/W
5700K	19.1W	/	18.7W	2533	3 lm	2533 lm	133	m/W	136 lm/W

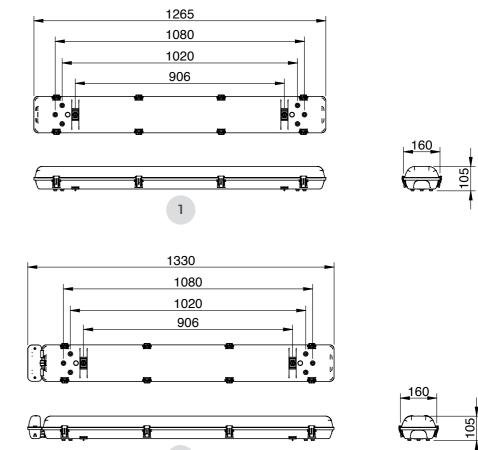
#### SENSOR

SENSOR								
POWER CONSUMPTION	Standby Charge/ Main Lamp On	Main Lamp On	Standby Charge / Main Lamp On @ Min 10%	Main Lamp On @ Min 10%	LUMEN OUTPUT		LUMENS / WATT	
OUTPUT (650mA)	CLP L10	MAINS	CLP L10	MAINS	CLP L10	MAINS	CLP L10	MAINS
3000K	34.3W	33.9W	7.5W	4.8W	4145 lm	4145 lm	121 lm/W	122 lm/W
4000K DEFAULT	33.2W	32.8W	4.9W	4.5W	4420 lm	4420 lm	133 lm/W	135 lm/W
5700K	34.1W	33.7W	5.1W	4.7W	4322 lm	4322 lm	127 lm/W	128 lm/W

#### Product Configuration:



1200mm With Pod



Dimensions in (mm)



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# ARGONAUT PLUS WEATHERPROOF LINEAR 1500MM HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR

ORDERING INFORMATION	EMERGE	ENCY (CLP)	EMERGENCY (L10)	MAINS
Nominal Size	1500mm ①	1500mm ②	1500mm ②	1500mm ①
Standard	ARGOPLUS-1500-LP	ARGOPLUS-1500-LPPOD	ARGOPLUS-1500-L10POD	ARGOPLUS-1500
DALI Driver	ARGOPLUS-1500-DD-LP	ARGOPLUS-1500-DD-LPPOD	ARGOPLUS-1500-DD-L10POD	ARGOPLUS-1500-DD
Motion Sensors	ARGOPLUS-1500-SEN-LP	ARGOPLUS-1500-SEN-LPPOD	ARGOPLUS-1500-SEN-L10POD	ARGOPLUS-1500-SEN
CTP System Compatible		Yes		-
DALI*	ARGOPLUS-1500-LP-DALI	ARGOPLUS-1500-LPPOD-DALI	ARGOPLUS-1500-L10POD-DALI	-
Zoneworks XT Hive*	ARGOPLUS-1500-LP-HVG	ARGOPLUS-1500-LPPOD-HVG	ARGOPLUS-1500-L10POD-HVG	-
Carton Quantity		1		
Weight	3.6kg	3.9kg	3.9kg	3.3kg
Dimensions (LXWXH)	1565mm x 160mm x 105mm	1630mm x 160mm x 105mm	1630mm x 160mm x 105mm	1565mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPLUS-1500-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS			
Construction - Base	UV Stabilised Polycarbonate					
Construction - Diffuser	UV Stabilised Polycarbonate					
Voltage (V) (Frequency (Hz))	220	220-240V (50Hz)				
Lamp♦	LED Strip Module					
Luminaire CCT	3000К, 4000К, 5700К Switchable					
Lamp Projected Life	Ra>80 Ta40°c; 157,000hrs (L70/B50	0), 95,000hrs (L80/B20), 43,000hrs (L90/B10)				
Power Consumption & Light Output	(See Tak	ble on Next Page)				
Ingress Protection Rating (IP)	IP65					
Impact Rating (IK)		IK08				

<sup>◆</sup> Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

122

EMERGENCY SPECIFICATIONS	EMERGEI	EMERGENCY (L10)			
Operating Mode		Sustained			
Battery Configuration	Integral	POD			
Battery Type	Lithium Iror	n Phosphate	Lithium Nanophosphate®		
Voltage (V) / Capacity (mAh)	3.2V/64	3.3V/5000mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

LUMINAIRE CLASSIFICATION		EMERGENCY (CLP)			EMERGENCY (L10)				
Without Automatic Testing	×	2	AD	180	X	2	AD	180	
With Automatic Testing	X	2	ADF	180	X	2	ADF	180	

# **ARGONAUT PLUS WEATHERPROOF LINEAR 1500MM**

HIGH SPEC & EFFICIENCY, SWITCHABLE COLOUR

#### NO SENSOR

POWER CONSUMPTION	Standby ( Main Lar		Main Lamp On	LUMEN OUTPUT		T LUMENS/WATT		/WATT	
OUTPUT (950mA)	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
3000K	49.3	W	48.9W	587	7 lm	5877 lm	119 Ir	n/W	120 lm/W
4000K DEFAULT	47.5	W	47.1W	633	7 lm	6337 lm	133 lr	n/W	135 lm/W
5700K	49.2	W	48.8W	6185	5 lm	6185 lm	126 lr	n/W	127 lm/W

#### SENSOR

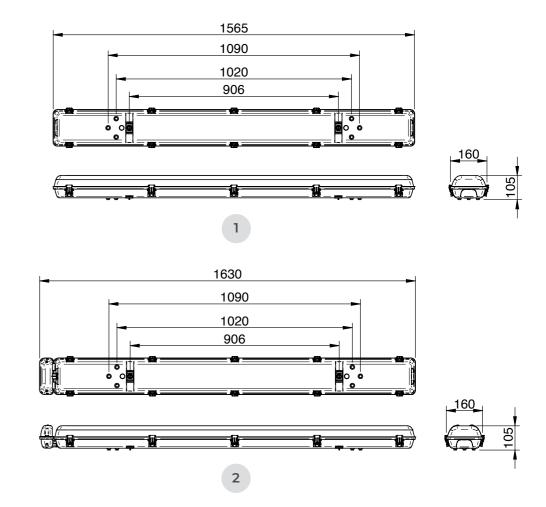
POWER CONSUMPTION	Standby Charge/ Main Lamp On	Main Lamp On	Standby Charge / Main Lamp On @ Min 10%	Main Lamp On @ Min 10%	LUMEN OUTPUT		LUMENS / WATT		
OUTPUT (950mA)	CLP L10	MAINS	CLP L10	MAINS	CLP L10	MAINS	CLP	L10	MAINS
3000K	48.3W	47.9 W	7.1W	6.7W	5877 lm	5877 lm	122 lr	m/W	123 lm/W
4000K DEFAULT	46.7W	46.3W	7.0W	6.6W	6337 lm	lm 6337 lm		m/W	137 lm/W
5700K	48.1W	47.7W	7.1W	6.7W	6185 lm	6185 lm	129 lr	n/W	130 lm/W

#### Product Configuration:

1 1500mm No Pod

2 1500mm With Pod

Dimensions in (mm)



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or materials (Specifications) as part of our continuous improvement program. Please confirm the applicable Specifications at the time of placing your order.

# **ARGONAUT PRO WEATHERPROOF LINEAR**



The Argonaut Pro Weatherproof Linear range is designed to maximise LED efficiency with the highest product performance and LED lifetime. Featuring configurable quad output, they maximise efficiency by delivering up to 152lm/W.

Backed by Clevertronics support, service and warranty, the Linear range is available as a Standard or Emergency CLP or L10 Nanophosphate with monitoring capabilities including Zoneworks XT Hive, DALI and CTP.

#### **Applications**



Car Parks



Corridors



Fire Stairs



Back of House



### **Emergency Range**

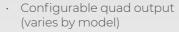




\*1200mm Standard Linear, varies by model.

#### **Features and Benefits**







- · Long life, energy efficient LED strip module
- · Large terminal block for easy installation
- · Lithium Iron Phosphate or Nanophosphate battery
- · Emergency POD for maximum in-service life and lowest maintenance
- · Emergency integral battery option also available
- Efficacy options of 137lm/W → 152lm/W



# ARGONAUT PRO WEATHERPROOF LINEAR 600MM ULTIMATE SPEC & EFFICIENCY

ORDERING INFO	RMATION	EMERGI	ENCY (CLP)	EMERGENCY (L10)	MAINS
Nominal Size		600mm ①	600mm <b>②</b>	600mm <b>②</b>	600mm <b>①</b>
Standard		ARGOPRO-600-LP	ARGOPRO-600-LPPOD	ARGOPRO-600-L10POD	ARGOPRO-600
DALI Driver		ARGOPRO-600-DD-LP	ARGOPRO-600-DD-LPPOD	ARGOPRO-600-DD-L10POD	ARGOPRO-600-DD
Motion Sensors	;	ARGOPRO-600-SEN-LP	ARGOPRO-600-SEN-LPPOD	ARGOPRO-600-SEN-L10POD	ARGOPRO-600-SEN
CTP System Co	mpatible		Yes		-
DALI*		ARGOPRO-600-LP-DALI	ARGOPRO-600-LPPOD-DALI	ARGOPRO-600-L10POD-DALI	-
Zoneworks XT	Hive*	ARGOPRO-600-LP-HVG	ARGOPRO-600-LPPOD-HVG	ARGOPRO-600-L10POD-HVG	-
Carton Quantity			1		
Weight		1.7kg	2.0kg	2.0kg	1.4kg
Dimensions ( L X	WXH)	655mm x 160mm x 105mm	720mm x 160mm x 105mm	720mm x 160mm x 105mm	655mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPRO-600-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS			
Construction - Base	UV Stabilised Polycarbonate					
Construction - Diffuser	UV Stabilised Polycarbonate					
Voltage (V) (Frequency (Hz))	220-240V (50Hz)					
Lamp◆	LED Strip Module					
Luminaire CCT	40	4000K				
Lamp Projected Life	Ra>80 Ta40°c;184,000hrs (L70/B50), 10	00,000hrs (L80/B20), 43,000hrs (L90/B10)				
Power Consumption & Light Output	(See Table o	on Next Page)				
Ingress Protection Rating (IP)	IP65					
Impact Rating (IK)	IP.	(08				

◆ Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

EMERGENCY SPECIFICATIONS	EMERGE	EMERGENCY (L10)	
Operating Mode		Sustained	
Battery Configuration	Integral	POD	POD
Battery Type	Lithium Iron	n Phosphate	Lithium Nanophosphate®
Voltage (V) / Capacity (mAh)	3.2V/64	3.3V/5000mAh	
Charging Method	Int	oltage	

LUMINAIRE CLASSIFICATION		EMERGENCY (L10)						
Without Automatic Testing	X	2	AD	180	X	2	AD	180
With Automatic Testing	X	2	ADF	180	X	2	ADF	180

# **ARGONAUT PRO WEATHERPROOF LINEAR 600MM**

ULTIMATE SPEC & EFFICIENCY

#### NO SENSOR

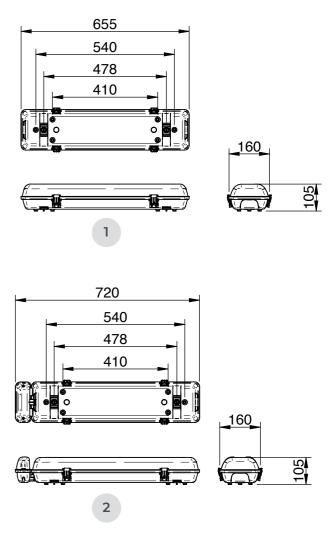
POWER CONSUMPTION	Standby Charge/ Main Lamp On Main Lamp On			LUMEN O	UTPUT	LUMENS / WATT			
ОИТРИТ	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
Output (700mA)	18.7	W	18.3W	256	4 lm	2564 lm	137	m/W	140 lm/W

#### **SENSOR**

POWER CONSUMPTION	5 5 ,		Main Lamp On	Standby Charge / Main Lamp On @ Min 10%		Main Lamp On @ Min 10%	LUMEN OUTPUT		LUMENS / WATT			
OUTPUT	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
Output (700mA)	18.4	4W	18.0W	2.9	9W	2.5W	256	4 lm	2564 lm	139 li	m/W	142 lm/W

#### Product Configuration:

- 1 600mm No Pod
- 2 600mm With Pod



Dimensions in (mm)

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# ARGONAUT PRO WEATHERPROOF LINEAR 1200MM ULTIMATE SPEC & EFFICIENCY, CONFIGURABLE QUAD OUTPUT

(	ORDERING INFORMATION	EMERGI	ENCY (CLP)	EMERGENCY (L10)	MAINS
	Nominal Size	1200mm <b>①</b>	1200mm <b>②</b>	1200mm <b>②</b>	1200mm <b>①</b>
	Standard	ARGOPRO-1200-LP	ARGOPRO-1200-LPPOD	ARGOPRO-1200-L10POD	ARGOPRO-1200
PART#	DALI Driver	ARGOPRO-1200-DD-LP	ARGOPRO-1200-DD-LPPOD	ARGOPRO-1200-DD-L10POD	ARGOPRO-1200-DD
/ SNOI	Motion Sensors	ARGOPRO-1200-SEN-LP	ARGOPRO-1200-SEN-LPPOD	ARGOPRO-1200-SEN-L10POD	ARGOPRO-1200-SEN
ESTOPT	CTP System Compatible		Yes		-
-	DALI*	ARGOPRO-1200-LP-DALI	ARGOPRO-1200-LPPOD-DALI	ARGOPRO-1200-L10POD-DALI	-
	Zoneworks XT Hive*	ARGOPRO-1200-LP-HVG	ARGOPRO-1200-LPPOD-HVG	ARGOPRO-1200-L10POD-HVG	-
(	Carton Quantity		1		
١	Weight	2.9kg	3.2kg	3.2kg	2.7kg
[	Dimensions ( L X W X H)	1265mm x 160mm x 105mm	1330mm x 160mm x 105mm	1330mm x 160mm x 105mm	1265mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPRO-1200-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS			
Construction - Base	UV Stabilis					
Construction - Diffuser	Construction - Diffuser UV Stabilised Polycarbonate					
Voltage (V) (Frequency (Hz))	220-	-240V (50Hz)				
Lamp◆	LED	LED Strip Module				
Luminaire CCT		4000K				
Lamp Projected Life	Ra>80 Ta40°c;184,000hrs (L70/B50	), 100,000hrs (L80/B20), 43,000hrs (L90/B10)				
Power Consumption & Light Output	(See Tab	le on Next Page)				
Ingress Protection Rating (IP)		IP65				
Impact Rating (IK)		IK08				

• Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

EMERGENCY SPECIFICATIONS	EMERGEN	EMERGENCY (L10)				
Operating Mode	Sustained					
Battery Configuration	Integral	POD	POD			
Battery Type	Lithium Iron	Lithium Nanophosphate®				
Voltage (V) / Capacity (mAh)	3.2V/640	00mAh	3.3V/5000mAh			
Charging Method	Intelli	t Voltage				

LUMINAIRE CLASSIFICATION		EMERGENCY (L10)						
Without Automatic Testing	X	2	AD	180	Χ	2	AD	180
With Automatic Testing	X	2	ADF	180	X	2	ADF	180

# ARGONAUT PRO WEATHERPROOF LINEAR 1200MM ULTIMATE SPEC & EFFICIENCY, CONFIGURABLE QUAD OUTPUT

#### NO SENSOR

POWER CONSUMPTION	Standby ( Main La		Main Lamp On		LUMEN O	UTPUT		LUMEN	S/WATT	
OUTPUT	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS	
Output 4 (900mA)	42.5	SW.	42.1W	625	59 lm	6259 lm	147	lm/W	149 lm/W	
Output 3 (750mA)	37.0	W	36.6W	5495 lm		5495 lm	149	lm/W	150 lm/W	
Output 2 (650mA) DEFAULT	31.1	W	30.7W	466	50 lm	4660 lm	150	lm/W	152 lm/W	
Output 1 (500mA)	,		23.6W	3541 lm		3541 lm	148	lm/W	150 lm/W	

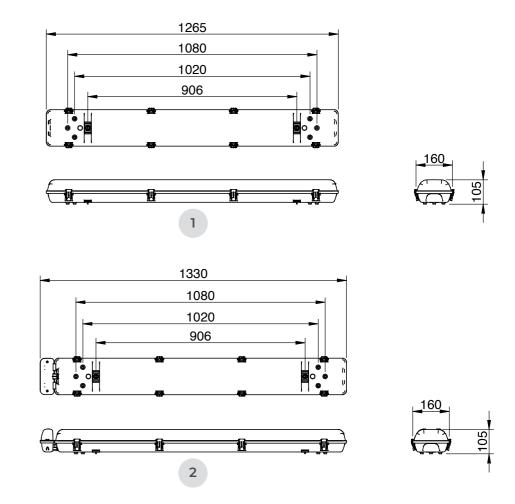
#### SENSOR

POWER CONSUMPTION	Standby ( Main Lar		Main Lamp On  Standby Charge / Main Lamp On @ Main Lamp On @ Min 10%  LUMEN OUTPUT LU		Main Lamp On @ Main Lamp		UMENS ,	/ WATT				
OUTPUT	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
Output 4 (900mA)	43.1	W	42.7W	5.	7W	5.3W	625	9 lm	6259 lm	145	m/W	147 lm/W
Output 3 (750mA)	36.7	W	36.3W	5.	1W	4.7W	549	5 lm	5495 lm	150	m/W	151 lm/W
Output 2 (650mA) DEFAULT	31.3	W	30.9W	4.	4W	4.0W	466	0 lm	4660 lm	149	m/W	151 lm/W
Output 1 (500mA)	24.5	W	24.1W	3.0	5W	3.2W	354	1 lm	3541 lm	146	m/W	147 lm/W

#### Product Configuration:

1 1200mm No Pod

2 1200mm With Pod



Dimensions in (mm)

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# ARGONAUT PRO WEATHERPROOF LINEAR 1500MM ULTIMATE SPEC & EFFICIENCY, SWITCHABLE DUAL OUTPUT

(	ORDERING INFORMATION	EMERGI	ENCY (CLP)	EMERGENCY (L10)	MAINS
	Nominal Size	1500mm <b>①</b>	1500mm <b>②</b>	1500mm <b>②</b>	1500mm (j
	Standard	ARGOPRO-1500-LP	ARGOPRO-1500-LPPOD	ARGOPRO-1500-L10POD	ARGOPRO-1500
PART#	DALI Driver	ARGOPRO-1500-DD-LP	ARGOPRO-1500-DD-LPPOD	ARGOPRO-1500-DD-L10POD	ARGOPRO-1500-DD
/ SNOI	Motion Sensors	ARGOPRO-1500-SEN-LP	ARGOPRO-1500-SEN-LPPOD	ARGOPRO-1500-SEN-L10POD	ARGOPRO-1500-SEN
ESTOP	CTP System Compatible		-		
-	DALI*	ARGOPRO-1500-LP-DALI	ARGOPRO-1500-LPPOD-DALI	ARGOPRO-1500-L10POD-DALI	-
	Zoneworks XT Hive*	ARGOPRO-1500-LP-HVG	ARGOPRO-1500-LPPOD-HVG	ARGOPRO-1500-L10POD-HVG	-
(	Carton Quantity		1		
\	Veight	3.6kg	3.9kg	3.9kg	3.3kg
[	Dimensions ( L X W X H)	1565mm x 160mm x 105mm	1630mm x 160mm x 105mm	1630mm x 160mm x 105mm	1565mmx160mmx105mm

<sup>\*</sup> For motion sensors add -SEN to the product code as per following example: ARGOPRO-1500-SEN-LP-DALI

TECHNICAL SPECIFICATIONS	EMERGENCY (CLP)	EMERGENCY (L10)	MAINS			
Construction - Base	UV Stabilis	sed Polycarbonate				
Construction - Diffuser	Construction - Diffuser UV Stabilised Polycarbonate					
Voltage (V) (Frequency (Hz))	220-	240V (50Hz)				
Lamp♦	LED Strip Module					
Luminaire CCT		4000K				
Lamp Projected Life	Ra>80 Ta40°c; 184,000hrs (L70/B50)	), 100,000hrs (L80/B20), 43,000hrs (L90/B10)				
Power Consumption & Light Output	(See Tabl	le on Next Page)				
Ingress Protection Rating (IP)						
Impact Rating (IK)		IK08				

<sup>•</sup> Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

EMERGENCY SPECIFICATIONS	EMERGE	EMERGENCY (L10)			
Operating Mode	Sustained				
Battery Configuration	Integral	POD			
Battery Type	Lithium Iro	Lithium Nanophosphate®			
Voltage (V) / Capacity (mAh)	3.2V/6-	3.3V/5000mAh			
Charging Method	Intelligent Current Limited Constant Voltage				

LUMINAIRE CLASSIFICATION	JMINAIRE CLASSIFICATION				EMERGENCY (L10)			
Without Automatic Testing	X	2	AD	180	Х	2	AD	180
With Automatic Testing	X	2	ADF	180	X	2	ADF	180

# ARGONAUT PRO WEATHERPROOF LINEAR 1500MM ULTIMATE SPEC & EFFICIENCY, SWITCHABLE DUAL OUTPUT

#### NO SENSOR

POWER CONSUMPTION	Standby ( Main Lar		Main Lamp On	LUMEN OUTPUT		LUMENS / WATT			
ОИТРИТ	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
Output 2 (1200mA) DEFAULT	59.1	W	58.1W	849	8 lm	8498 lm	144	m/W	146 lm/W
Output 1 (900mA)	44.1	W	42.8W	638	5 lm	6385 lm	145 I	m/W	149 lm/W

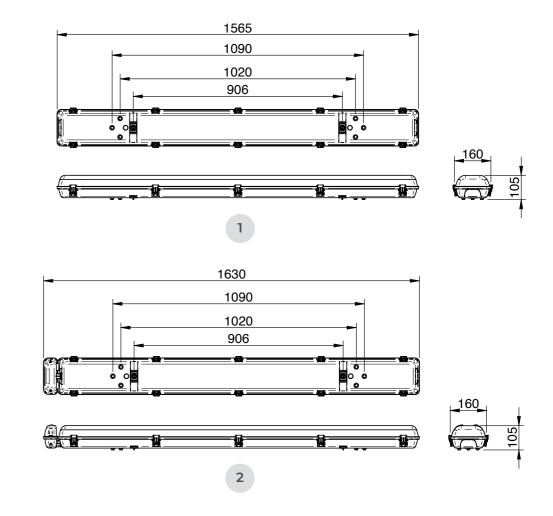
#### SENSOR

POWER CONSUMPTION	Standby Main La	Charge/ imp On	Main Lamp On	Main Lai	Charge/ mp On @ 10%	Main Lamp On @ Min 10%	L	UMEN C	DUTPUT	LI	UMENS,	/WATT
ОИТРИТ	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS	CLP	L10	MAINS
Output 2 (1200mA) DEFAULT	58.	5W	58.1W	9.5	7W	7.0W	849	98 lm	8498 lm	145 lı	m/W	146 lm/W
Output 1 (900mA)	43.	1W	42.7W	8.0	OW	5.3W	638	85 lm	6385 lm	148 li	m/W	150 lm/W

#### Product Configuration:

1 1500mm No Pod

2 1500mm With Pod



Dimensions in (mm)

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# **ARGONAUT VANDAL RESISTANT LINEAR**



The Argonaut Vandal Resistant Linear range provides a wide selection of emergency Linears for vandal resistant applications where higher

Available in L10 Nanophosphate® with all emergency test options including Zoneworks® XT Hive, DALI and CTP System.

level of impact protection is required.

#### **Applications**

**Protection** 



Public Amenities







Railway Stations



Correction Facilities



### **Features and Benefits**

· Lithium Nanophosphate® battery

· Die cast low copper aluminium body

· Zoneworks® XT Hive or DALI test

· Clevertest Plus System compatible

· Tested to BS EN 60598-2-22

· LED lamps

· IK10

· IP66

options















# **ARGONAUT VANDAL RESISTANT LINEAR 600MM**

ORDE	ERING INFORMATION	L10	MAINS		
Nomi	nal Size	600mm	600mm		
St	tandard	LVP2LEDM-P	FVP2LED-P		
PART#	ALI Driver	LVP2LEDM-P-DD	FVP2LED-P-DD		
	TP System Compatible	Yes	-		
	1otion Sensors	Yes (High/Low) + ON / OFF			
	ALI	LVP2LEDM-P-DALI	-		
Z	oneworks® XT Hive	LVP2LEDM-P-HVG	-		
Carto	n Quantity	4	4		
Weigl	ht - Single (Carton)	3.2kg	2.4kg		
Dime	nsions (L x W x H)	790mm x 140mm x 120mm	700mm x 140mm x 120mm		

TECHNICAL SPECIFICATIONS	L10	MAINS			
Construction - Base	Pressure Die-Cast, Low Copper Aluminium Alloy Body with Powder Coat Paint Finish				
Construction - Diffuser	Opal Impact Resistant Polycarbonate with Secure Access Screws (LSZH)				
Voltage (V) (Frequency (Hz))	220-240V (50Hz)				
Power Consumption ◆ (Standby / Max)	1.3W / 27W	22W			
Nominal Total Light Output ◆	252	29lm			
Lamp	LED Stri	p Module			
Lamp CCT & Life ◆	4000K, 100,000 hrs (I	L80,B20, Ra>80, Ta40c)			
Operating Temperature	0°C to 40°C				
Ingress Protection Rating (IP)	IP66				
IK Rating	Ik	K10			

• Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

EMERGENCY SPECIFICATIONS	L10	MAINS
Operating Mode	Maintained	-
Battery Configuration	Pod	-
Battery Type	Lithium Nanophosphate®	-
Voltage / Capacity (mAh)	6.6V / 2500mAh	-
Charging Method	Intelligent Current Limited Constant Voltage	-

LUMINAIRE CLASSIFICATION		Lī	0	
Without Automatic Testing	X	1	AG	180
With Automatic Testing	X	1	AFG	180

The product details described in this document are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. We reserve the right to change product design, specifications are current as at the version date of the document. The version date of the document are current as at the version date of the document are current as at the version date of the document are current as at the version date of the document are current as at the version date of the document are current as at the version date of the document are current as at the version date of the document are current as at the version date of theor materials (Specifications) as part of our continuous improvement program. Please confirm the applicable Specifications at the time of placing your order.

# **ARGONAUT VANDAL RESISTANT LINEAR 1200MM**



TECHNICAL SPECIFICATIONS	L10	MAINS			
Construction - Base	Pressure Die-Cast, Low Copper Aluminium	Alloy Body with Powder Coat Paint Finish			
Construction - Diffuser	Opal Impact Resistant Polycarbonat	e with Secure Access Screws (LSZH)			
Voltage (V) (Frequency (Hz))	220-240V (50Hz)				
Power Consumption ◆ (Standby / Max)	1.0W / 48.5W	46W			
Nominal Total Light Output ◆	5556	0lm			
Lamp	LED Strip	Module			
Lamp CCT & Life ◆	4000K, 100,000 hrs (L	80,B20, Ra>80, Ta40c)			
Operating Temperature	0°C to 40°C				
Ingress Protection Rating (IP)	IPi	66			

• Please refer to the specific product data sheet for actual power, light output, lamp lifetime and driver values.

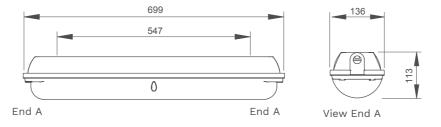
MERGENCY SPECIFICATIONS L10		MAINS
Operating Mode	Maintained	-
Battery Configuration	Pod	-
Battery Type	Lithium Nanophosphate®	-
Voltage / Capacity (mAh)	6.6V / 2500mAh	-
Charging Method	Intelligent Current Limited Constant Voltage	-

LUMINAIRE CLASSIFICATION		L	10	
Without Automatic Testing	×	1	AG	180
With Automatic Testing	×	1	AFG	180

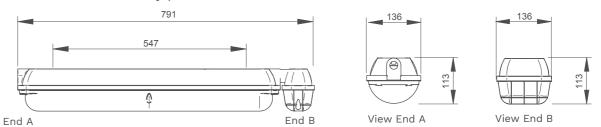
# **ARGONAUT VANDAL RESISTANT LINEAR**

#### LVP4LEDM-P LVP4LEDM-P 1 LUX SPACING TABLE AND MOUNTING HEIGHTS 0.5LUX SPACING TABLE AND MOUNTING HEIGHTS Escape Routes 1 Lux min. along centre line Open (Anti-panic) Areas 0.5 Lux min. within core area Luminaires arranged in a regular array Axial Spacing Axial to Wall Transverse to Wall Axial Spacing CEILING MOUNTING HEIGHT (M) <→ <→ L10 L10 L10 L10 L10 L10 12.3 4.2 4.0 13.0 12.0 3.5 13.0 4.5 13.0 13.0 14.0 4.5 14.0 14.0 5.0 14.7 4.8

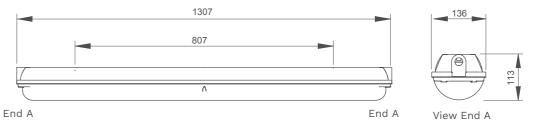
#### 600mm/2ft no pod



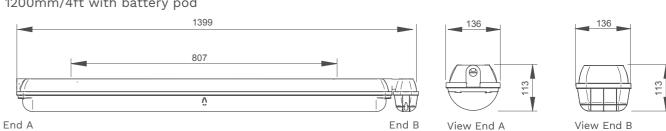
#### 600mm/2ft with battery pod



#### 1200mm/4ft no pod



#### 1200mm/4ft with battery pod



**Emergency Lighting Modes of Operation Chemical Resistance Table** 

# Emergency Lighting Modes of Operation

The following table outlines the different modes that exit and emergency lighting fittings can operate in. Contact us if you would like some assistance in selecting the right mode for your application.

#### **Emergency Operating Modes**

#### Maintained

An emergency luminaire in which the lamp is energised used in plant rooms to at all times. The lamp is ON function as both general when there is power present and is ON during a emergency lighting. power failure.

**EXAMPLES:** Exit signs. Single lamp fluoro battens lighting and the



#### **POWER ON**





#### **Non-Maintained**

An emergency luminaire in which the lamp(s) are only in operation during a power fail.

**EXAMPLE:** Single lamp: Lifelight emergency luminaires.









**EXAMPLE:** Twin lamp: Supalite floods, often used in factory units and only operate in the event of a power fail.











**POWER OFF** 

#### Sustained

An emergency luminaire typically containing two lamps, one of which is in operation while there is power present, and the other "non-maintained" lamp only energised during a power fail. Also known as Combined Non-Maintained.

**EXAMPLE 1:** LED TUBE or LED strip batten with separate dedicated LED emergency pod.

back up.







**POWER ON** 







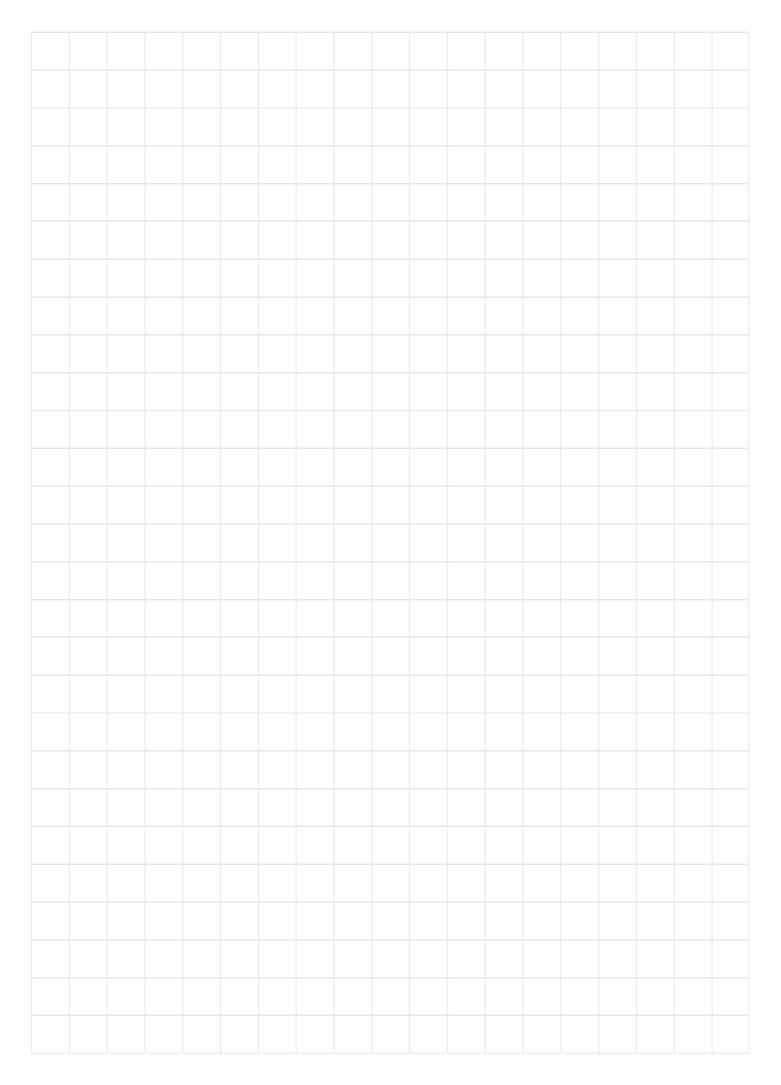
# Chemical Resistance Table

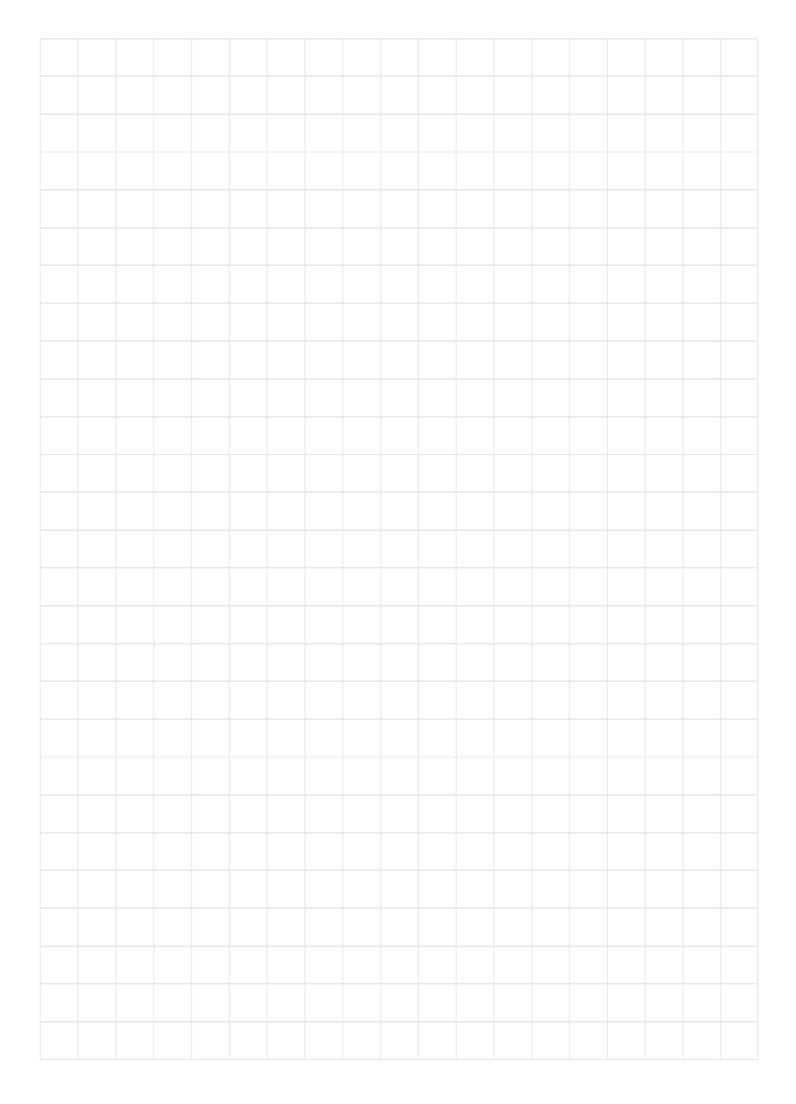
Construction	Materials	Body	Diffuser
Argonaut PLU	S & PRO	PC	PC
Argonaut PRC (Special Order)	) CHEM	GRP	PC or Acrylic

Resistant Semi-resistant Not resistant

Ambient temperature at 20°C

Chemical Specifics	Polycarbonate (PC)	Acrylic (PMMA)	Glass Fibre Reinforced Plastic (GRP)
Accumulator acid	_	•	•
Acetic acid <15%	•	•	•
Alcohol <30%	•	•	
Alcohol concentrate	•	*	*
Ammonia <25%	_	•	_
Aromatic hydrocarbons	_	•	_
Benzene	*	×	_
Carbon dioxide	•	•	•
Carbon monoxide	•	•	•
Carbon tetrachloride	•	_	
Caustic soda <2%	*	•	_
Common salt (Sodium chloride)	_	•	•
Cooking oil (Animal fat – but not pork)	*	•	•
Cooking oil (Cold)	•	•	•
Cooking oil (Hot)	×	•	•
Cooking oil (Pork fat)	*	•	•
Cooking oil (Vegetable)	*	•	•
Crude oil	_	•	•
Diesel oil	<u> </u>	•	•
Ethyl Acetate	•	*	×
Glycerine	<u> </u>	•	•
Glycol	•	•	•
Hydrocarbons	<u> </u>	<u> </u>	-
Hydrochloric acid <10%	•	•	•
Hydrogen peroxide <40%	_	•	×
Hydrogen sulphide	•	•	•
Kerosene/paraffin oil	*	•	•
Ketones	•	×	×
Methanol	•	×	*
Milk of lime (Limewater)	_	•	•
Nitric acid <5%	•	•	•
Nitric acid <30%		_	_
Oil (Hydraulic)	*	•	•
Oil (Lubricating)	*	•	•
Oil based paint	*	•	•
Petrol	•	•	•
Pyridine	•	×	×
Sea water	•	•	•
Soap suds	<u> </u>	•	•
Soda	•	•	•
Sulphuric acid <30%	•	•	•
Sulphuric acid concentrate	×	×	_
Sulphurous acid <5%	*	•	
Synthetic detergent	•	•	•
Turpentine	•	•	•







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