

**PRODUCT CATALOGUE**  
Edition 2018



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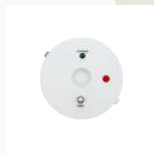
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# COMPANY PROFILE

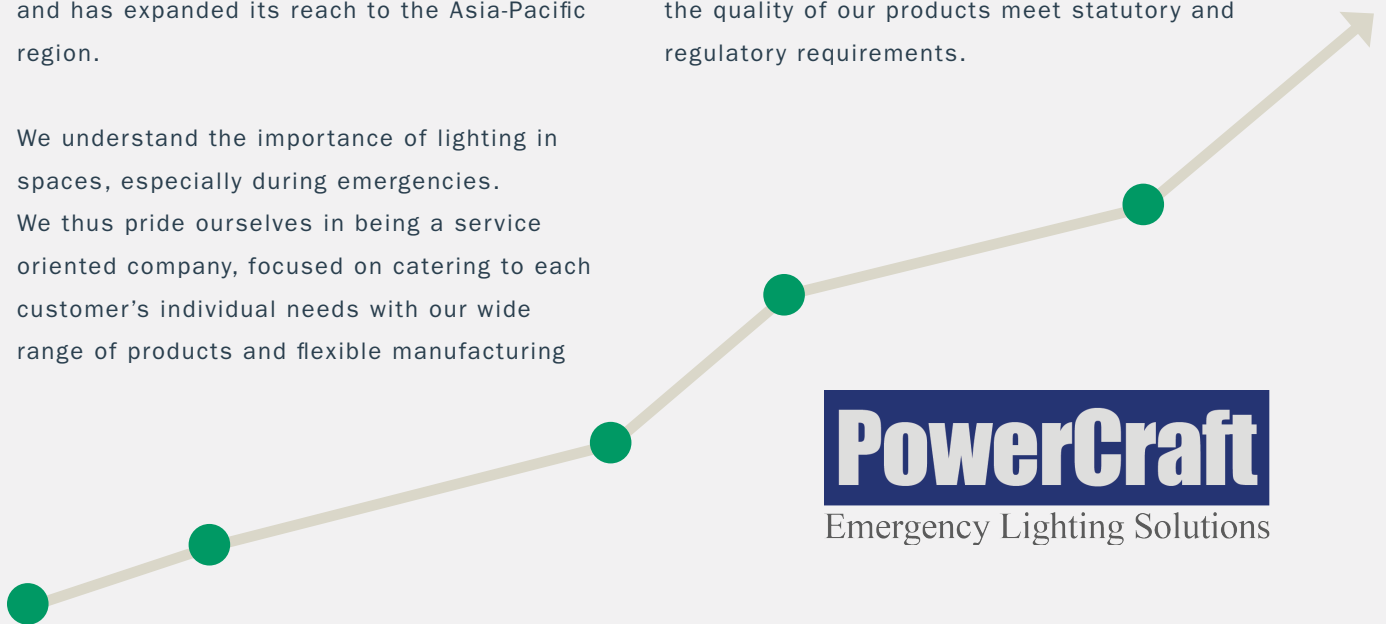
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PowerCraft Electronics Pte Ltd is dedicated to provide a complete range of emergency lighting products. We promise high quality, reliable, innovative and technologically advanced products that fully comply to Singapore and European Safety standards for emergency lighting applications. Leveraging on innovative technologies and a wide knowledge of customer's insights, we deliver integrated solutions to ensure that we take care of all our customers' needs and concerns.

Since 2000, PowerCraft Electronics has since established a strong presence in Singapore, and has expanded its reach to the Asia-Pacific region.

facilities. On top of that, our manufacturing facilities are ISO9001 certified, meaning that the quality of our products meet statutory and regulatory requirements.

We understand the importance of lighting in spaces, especially during emergencies. We thus pride ourselves in being a service oriented company, focused on catering to each customer's individual needs with our wide range of products and flexible manufacturing



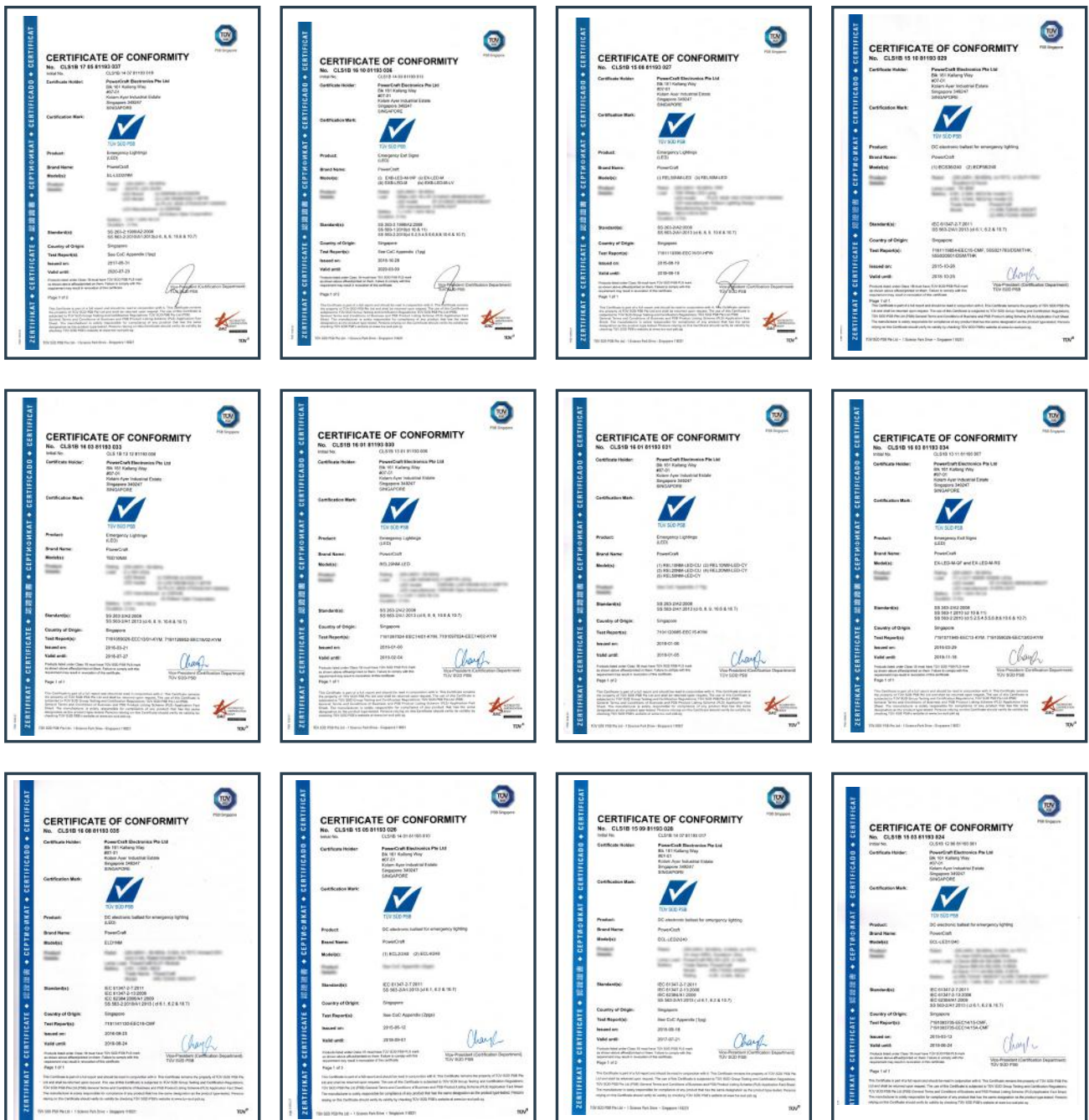
## PRODUCTS THAT MATTER TO PEOPLE

Two fundamental beliefs of our company are innovation, and having a people-centric approach. Our company is dedicated to producing emergency lighting technologies that are reliable and give our customers a sense of dependability. To ensure this, we have a deep understanding of what people need in stressful situations.

**This sets us apart, and makes us PowerCraft Electronics.**

# CERTIFICATES

WITH THE HARDWORK OF OUR TEAM, WE ARE CERTIFIED  
FOR OUR BRILLIANCE IN THIS INDUSTRY.



# EVACUATION ROUTE

## GENERAL EMERGENCY LIGHTING REGULATIONS & APPLICATIONS (SINGAPORE LOCAL STANDARDS)

### 1) Mounting Height

Emergency exit signs ( other than low-mounted graphical symbol signs ) shall be positioned **between 2m and 2.5m above floor level**. If this is not possible, the relevant authority should be consulted.

### 2) Positioning

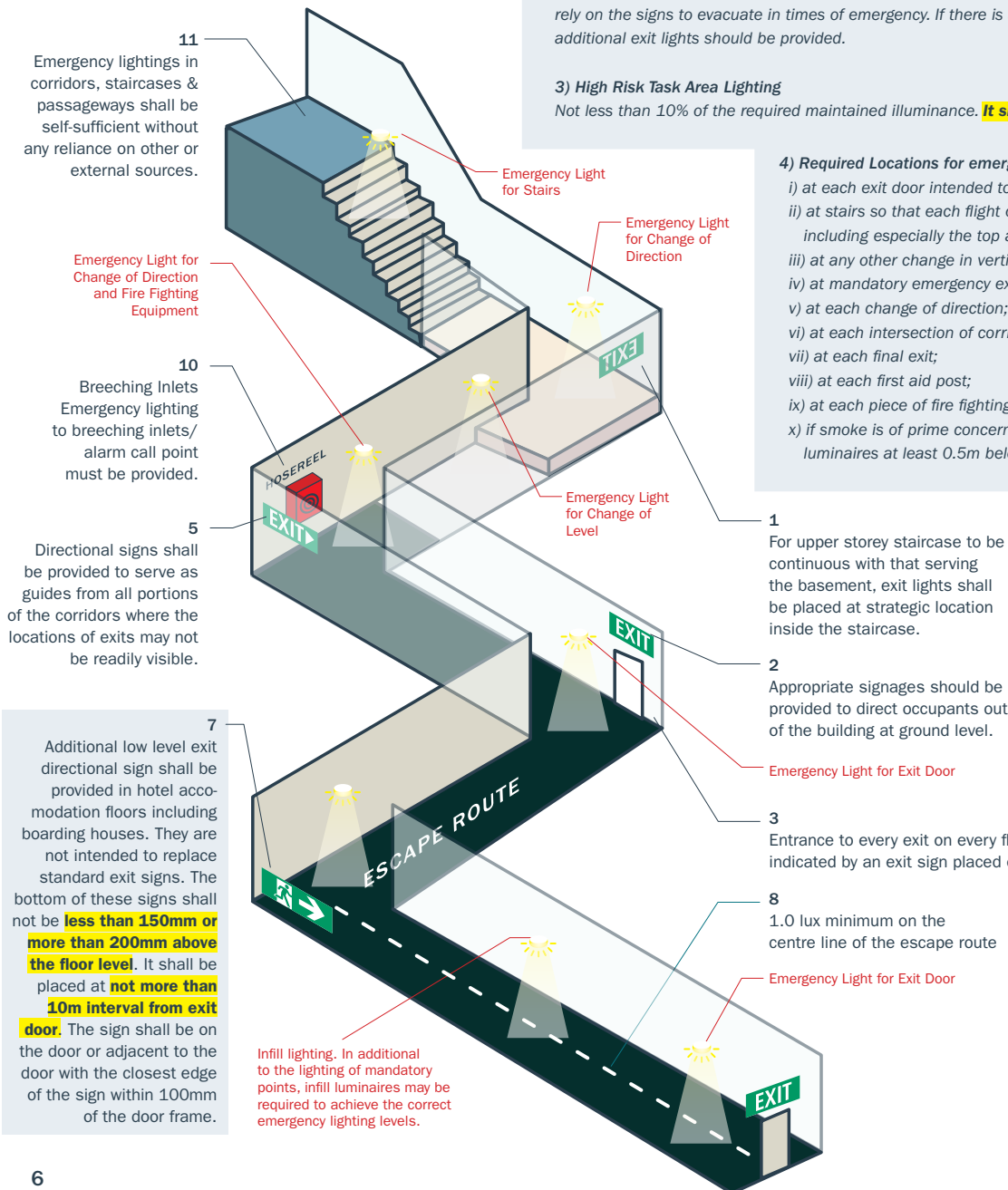
Whether in factory , warehouse premises , shopping centre or institutional occupancy area, exit directional signs are to be placed at strategic locations so that members of public can rely on the signs to evacuate in times of emergency. If there is a need for better direction, additional exit lights should be provided.

### 3) High Risk Task Area Lighting

Not less than 10% of the required maintained illuminance. **It shall not be less than 15 lux.**

### 4) Required Locations for emergency escape lighting:

- i) at each exit door intended to be used in an emergency;
- ii) at stairs so that each flight of stairs receives direct light including especially the top and the bottom steps;
- iii) at any other change in vertical level;
- iv) at mandatory emergency exits and safety sign locations;
- v) at each change of direction;
- vi) at each intersection of corridors;
- vii) at each final exit;
- viii) at each first aid post;
- ix) at each piece of fire fighting equipment and call point;
- x) if smoke is of prime concern, it is recommended to mount luminaires at least 0.5m below the ceiling

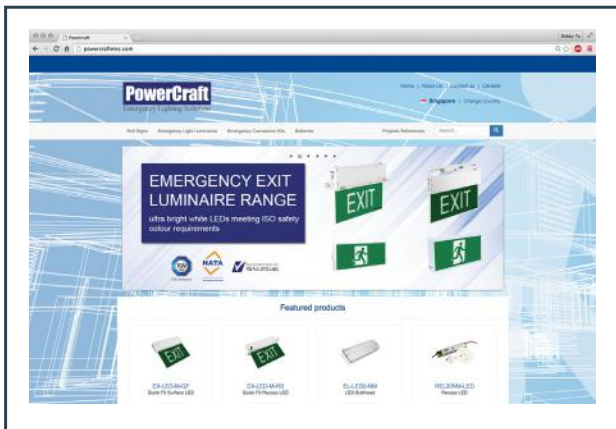


6 Exit sign placement shall be such that no point along the exit route is more than 30m from the visible sign.

9 **FOR OPEN AREAS**  
The horizontal illuminance shall not be **<0.5 lux on the floor level at each point** of the empty core area which excludes a border of 0.5m of the perimeter of the area.

# PRODUCTS & SERVICES

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## WEBSITE AND PRODUCT DATABASE

The PowerCraft website includes all relevant information, from product descriptions, technical data and dimensional information. For each product, the data sheet in PDF format is available for downloading.

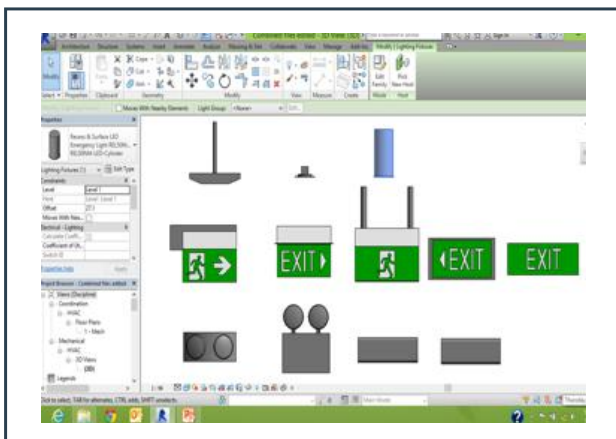
[www.powercraftelec.com](http://www.powercraftelec.com)



## DIALux

DIALux is a globally used programme for planning lighting installations. The visualisation of building situations, light distribution patterns and calculation results make it easy to plan an emergency lighting system using PowerCraft emergency luminaires.

Photometric data for PowerCraft's emergency luminaires are available on request.



## Revit

High-grade, energy-efficient buildings are planned and managed using this powerful software. In the process, designs are modified or re-designed by simply clicking or using the drag&drop function. For a number of luminaires, 3D files for Autodesk Revit are available, including extensive product information such as dimensions and energy consumption. As soon as the luminaires are positioned, the beam patterns are displayed and the installed load is calculated.

PowerCraft's Revit BMI models are available on request.



# PORTFOLIO

WE WORK WITH PROJECTS ACROSS DIFFERENT INDUSTRIES SUCH AS HEALTH INSTITUTES, COMMERCIAL BUILDINGS, EDUCATIONAL INSTITUTES AND RESIDENTIAL PROJECTS. OUR PRODUCTS ARE INSTALLED IN THESE BUILDINGS.

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## OFFICE / COMMERCIAL

Fusionopolis  
Robinson Tower  
HP Office  
AXA Tower  
West Connect Building  
Vision Exchange  
Proxima  
Novabay  
UOB Plaza  
Maybank Tower  
PSB Academy  
AIA Alexandra  
Eco-Tech @ Sunview  
Coca Cola Office  
CT Hub 1 & 2  
Link @ AMK  
Synergy @ KB  
Sunray Headquater  
Space @ Tampines

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## AIRPORT

Changi Airport Terminal 4

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## HOTEL

Shangri-La Hotel  
Orchid Hotel  
Mercure Bugis Hotel  
Park Hotel Alexandra  
Orchard Hotel  
Oasis Hotel  
Grand Copthorne Waterfront Hotel  
V Hotel Lavender

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## EDUCATION INSTITUTES

Singapore American School  
Anchorgreen Primary School  
Pei Ying Primary School  
CHIJ- Mont- Monfort Junior School  
Pei Tong Primary School  
Nanyang Technological University  
Ngee Ann Polytechnic  
National University of Singapore  
Singapore Polytechnic  
United World College

Meridian Primary School  
Boon Lay Garden Primary School  
Geylang Methodist Primary School  
Assumption English School  
Haig Girl School  
ITE College Central  
Yale NUS  
Tanglin Trust School  
Nanyang Polytechnic

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## CONDOMINIUM

DUO Residences  
The Trizon Condo  
8 @ Woodleigh  
Sims Urban Oasis  
Oxley Rise Condo  
Alex Residences  
Flamingo Valley Condo  
New Futura  
Belgravia Villas  
VUE 8 Residences  
Riverbank Condo  
Santorini Condo  
Parc Olympia Condo  
City Suites Condo  
The Panorama Condo  
6 Derbyshire Condo  
Ascent 456 Condo  
The Scotts Tower Condo  
Sea Horizon Condo  
The Topiary  
Riversail Condo  
Eco Sanctuary  
Goodwood Residences  
Silversea Condo  
Jewel Condo  
Hillsta Condo  
Double Bay Condo  
Starlight Condo  
Seawind Condo

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## SHOPPING MALL

Hillion Mall  
Plaza Singapura  
Big Box  
Wisma Atria  
Resorts World Sentosa  
Alexandra Central Mall  
HillV2 Mall  
Bugis Junction

Paragon  
Raffles City Shopping Centre  
Bedok Mall  
Tampines Mall

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## GOVERNMENT

Sungei Seletar Bus Depot  
Hougang N9C16 HDB  
Sembawang N3C8 HDB  
Sembawang N3C7 HDB  
Yishun N4C17 HDB  
Hougang N9C20 HDB  
Bukit Batok N4C13 HDB  
Jurong West N1C31 HDB  
Singapore Power Cable Tunnel, Bedok  
South Station  
Nee Soon Camp  
Jurong Fire Station  
Woodlands Nursing Home  
Chai Chee Nursing Home  
Hougang N9C19 HDB  
Sembawang Nursing Home  
Kranji Camp  
Punggol East C35 HDB  
Changi Prison  
Nee Soon Camp  
Queenstown C25A HDB  
Clementi N4C10 HDB  
Tiong Bahru Community Centre  
Tampines N4C28 HDB  
Margaret Nursing Home  
Singpost Loghub @ Greenwich  
West Coast Community Centre  
DSTA Office  
River Safari  
Clementi Fire Station

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## HEALTHCARE

National Centre for Infectious Disease  
Khoo Teck Puat Hospital  
NUH Medical Centre  
Tan Tock Seng Hospital  
St's Andrew Community Hospital  
Mount Alvernia Hospital  
Changi Hospital  
Ren Ci Hospital  
National Heart Centre



# OVERSEAS PROJECT

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## BRUNEI

National Cancer Centre

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## HONG KONG

Landmark Mandarin Oriental @ Central

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## INDONESIA

Telkom Tower @ Jakarta  
DoubleTree Hotel @ Jakarta  
Widya Mandala Catholic University  
Menara Astra

## INDONESIA, BOGOR

Indofood Palembang

## INDONESIA, BANDUNG

Maranata Universitas

## INDONESIA, CILEGON

Krakatau Nippon Steel Sukimin

## INDONESIA, DEPOK

Merc Ui  
UI Project

## INDONESIA, JAKARTA

Permata Bank Metropolitan  
Atlanta  
Pt. Dbilder Indonesia  
NPCT1  
City Bank  
City Bank South Quarter  
AAJI

Samuel GF & MZ  
Bank Danamon  
Podomoro  
Nayang School  
Pt. Inti Indah  
UNJ Pasca Sarjana  
Summitmas  
Roki  
Hotel Swis  
Manulife  
Samsung tugu  
Cargil  
Kapital  
AIA Center  
DBS Samarinda  
Sunlife  
Alam Sutra  
Dinas Perhubungan  
Restaurant Lyman Office  
B Braun Poject  
Inventory - IWE  
Pasific Place  
Project Manhattan Square  
PGN  
Wika

## INDONESIA, KARAWANG

Pt. Chemco Harapan Nusantara

## INDONESIA, TANGGERANG

PMDK

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## MACAU

Mandarin Oriental Hotel Macau  
Mandarin Oriental Hotel

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## MYANMMAR

Coca Cola HQ

## PHILIPPINES

One World Place @ BGC Taguig, Manila  
World Plaza @ BGC Taguig, Manila  
Asian Hospital and Medical Center @ Manila  
Manila Bay Resort  
Palladium Store  
Winford Hotel and Casino  
Marriot West Wing Hotel @ Manila  
Resort World @ Manila

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## QATAR, DOHA

Al Nakilat Office  
Al Meera Department stores  
Al Udeid base in various projects  
Flix Cinema  
Schools @ Al Khor  
Schools @ Sailiyah  
Schools @ Rawdat  
Schools @ Umquran  
Hamad Medical Corporation  
Sewage Treatment Plant, Lusail  
Development  
Energy Centre  
Lusail Pumping Station  
Qatar Olympic Committee  
Woqod

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## VIETNAM

Xuyên Mộc Tax Office  
B.Braun Manufacturing Plant  
Long Hau Factory  
Masan Factory @ Hậu Giang  
Vista Verde Condominium  
Novotel Phu Quoc  
The Krista Condominium  
Juraron Industries  
TOTO Vietnam Factory  
Park Hyatt Saigon Hotel  
Beverage Factory  
Sheraton Hotel  
TC Motor Vietnam



# HOLISTIC APPROACH

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PowerCraft Electronics' emergency lighting appliances act as a beacon to safety during times of emergency. Our exit signs, emergency light luminaires, emergency conversion kits, and batteries make sure that you're sufficiently prepared.

Lights play a critical role in times of emergency or power outage. We've ensured that our products are easy to use, reliable and above all long lasting.

Here in Powercraft, we are interested to work with our customers in providing high quality emergency lighting because we are aware of the user's responsibility towards every building they are working on. We are also specialized in customizing emergency lighting solutions according to what our clients need other than ensuring what we proposed is in line with the relevant standards.





# EXIT LUMINAIRE RANGE

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PowerCraft Electronics' Exit Luminaire Range consists of long life white LEDs that meet international standards. They deliver up to 85% energy saving compared with traditional fluorescent lamps, and are maintenance free without any compromise on light quality. They are also guaranteed to light up even in the darkest of times. The Exit Luminaires that Powercraft are providing ranges from aesthetically pleasing designs to exit luminaires with higher protection rating.





EX-LED-M-QF  
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EX-LED-M-RS  
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EXB-LED-M  
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EXB-LED-M-WP  
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# EX-LED-M-QF QUICK FIT SURFACE LED

AESTHETIC AND FUNCTIONAL ASPECTS  
ARE MET BY THE QUICK FIT DESIGN



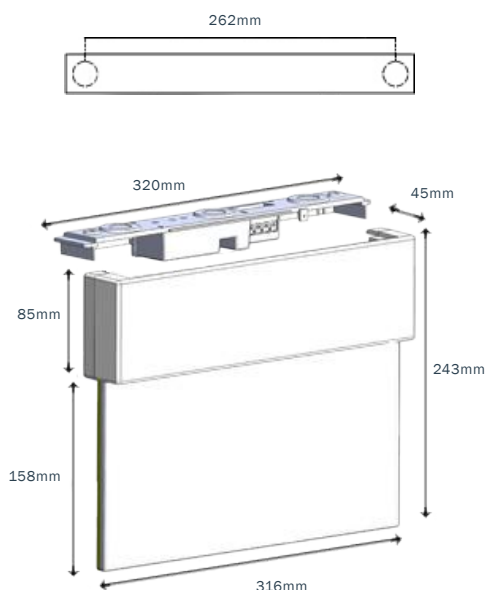
## TECHNICAL SPECIFICATIONS

MODEL NO:	EX-LED-M-QF
Mode of Operation:	Maintained
Lamp:	1.2W White LED module with burning life-span > 50,000 hours
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	3W (Total standby power inclusive of LED converter)
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Mounting:	Surface wall / Suspended / Surface ceiling
Safety Features:	Low battery voltage cut off to prevent over discharge
Diffuser:	Acrylic plate (fire retardant)
Fitting Construction:	Injection moulded with fire retardant (UL94), high impact material
Weight:	Approx. 1.2 Kg
Dimensions:	243mm (H) x 320mm (W) x 45mm (D)
Standards / Compliance:	SS IEC 60598-2-22, SS 563

## Ordering Guide:

Legend	Single Sided	Double Sided
	EX-LED-M-QF-S-RM	EX-LED-M-QF-D-RM
	EX-LED-M-QF-SR-RM	EX-LED-M-QF-DR-RM
	EX-LED-M-QF-SL-RM	EX-LED-M-QF-DL-RM
	EX-LED-M-QF-S	EX-LED-M-QF-D
	EX-LED-M-QF-SR	EX-LED-M-QF-DR
	EX-LED-M-QF-SL	EX-LED-M-QF-DL

- Designed for fast installation and easy maintenance.
- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Numerous installations options available
- Series connection of LEDs achieve a high level of uniform light distribution and ensuring maximum life span.
- Low battery voltage cut-off with latch function , to eliminate battery over discharge.
- Durable fire retardant construction ( UL 94 ) to combat corrosion
- Lightweight ergonomics design boost productivity of installers.



CLASS II



PSB Singapore



Type and batch tested with PSB PLUS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice



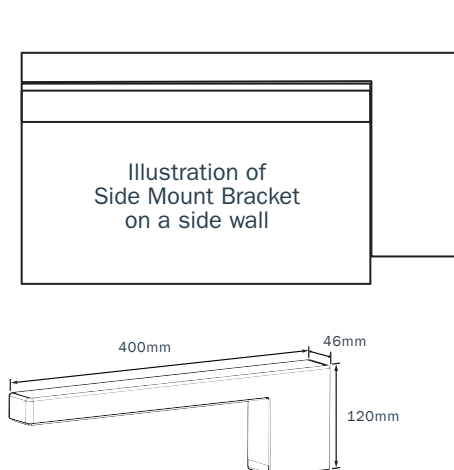
## ACCESSORIES for EX-LED-M-QF



### SIDE MOUNT BRACKET

When exit signs cannot be installed above the door or on the ceiling due to visual and technical reasons, our side mount bracket is able to provide solution to do side mounting on the wall.

1.



### Ordering Guide (With Side Mount):

Legend	Single Sided	Double Sided
	EX-LED-M-QF-SIDE-S-RM	EX-LED-M-QF-SIDE-D-RM
	EX-LED-M-QF-SIDE-SR-RM	EX-LED-M-QF-SIDE-DR-RM
	EX-LED-M-QF-SIDE-SL-RM	EX-LED-M-QF-SIDE-DL-RM
	EX-LED-M-QF-SIDE-S	EX-LED-M-QF-SIDE-D
	EX-LED-M-QF-SIDE-SR	EX-LED-M-QF-SIDE-DR
	EX-LED-M-QF-SIDE-SL	EX-LED-M-QF-SIDE-DL

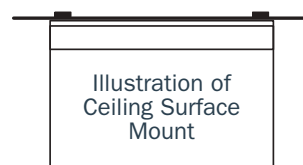
### Ordering Guide (With Waterproof Enclosure):

Legend	Single-Sided	Double Sided
	EX-LED-M-QF-S-RM-WP-SC-ENC	EX-LED-M-QF-D-RM-WP-SC-ENC
	EX-LED-M-QF-SR-RM-WP-SC-ENC	EX-LED-M-QF-DR-RM-WP-SC-ENC
	EX-LED-M-QF-SL-RM-WP-SC-ENC	EX-LED-M-QF-DL-RM-WP-SC-ENC
	EX-LED-M-QF-S-WP-SC-ENC	EX-LED-M-QF-D-WP-SC-ENC
	EX-LED-M-QF-SR-WP-SC-ENC	EX-LED-M-QF-DR-WP-SC-ENC
	EX-LED-M-QF-SL-WP-SC-ENC	EX-LED-M-QF-DL-WP-SC-ENC

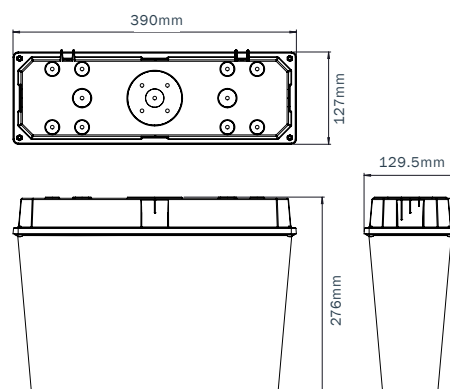
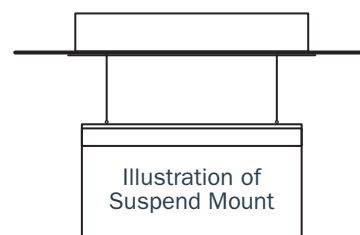
### WEATHERPROOF ENCLOSURE

This weatherproof enclosure can assist in providing double-sided signage in wet or dusty areas and to meet local standards. The weatherproof enclosure can be mounted as followed:

2.



3.





# EX-LED-M-RS QUICK FIT RECESS LED

COLLABORATING SAFETY WITH STYLE IN  
AN EMERGENCY BY THE QUICK FIT DESIGN



Extra Safety  
Feature! Safety  
Hook for wire to  
hook up to the  
concrete ceiling.

Spring steel fixing  
clips available for  
flexible and secure  
installation.



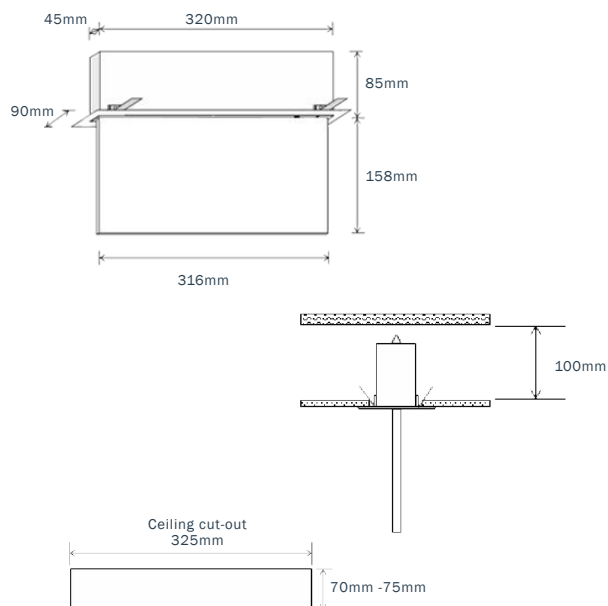
## Ordering Guide:

Legend	Single Sided	Double Sided
	EX-LED-M-RS-S-RM	EX-LED-M-RS-D-RM
	EX-LED-M-RS-SR-RM	EX-LED-M-RS-DR-RM
	EX-LED-M-RS-SL-RM	EX-LED-M-RS-DL-RM
	EX-LED-M-RS-S	EX-LED-M-RS-D
	EX-LED-M-RS-SR	EX-LED-M-RS-DR
	EX-LED-M-RS-SL	EX-LED-M-RS-DL

- Designed for fast installation and easy maintenance.
- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs achieve a high level of uniform light distribution and ensuring maximum life span.
- Low battery voltage cut-off with latch function , to eliminate battery over discharge.
- Durable fire retardant construction ( UL 94 ) to combat corrosion
- Lightweight ergonomics design boost productivity of installers.

## TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>EX-LED-M-RS</b>
Mode of Operation:	Maintained
Lamp:	1.2W White LED module with burning life-span > 50,000 hours
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	3W (Total standby power inclusive of LED converter)
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Mounting:	Recessed Ceiling
Safety Features:	Low battery voltage cut off to prevent over discharge
Diffuser:	Acrylic plate (fire retardant)
Fitting Construction:	Injection moulded with fire retardant (UL94), high impact material
Weight:	Approx. 1.2 Kg
Dimensions:	243mm (H) x 320mm (W) x 45mm (D)
Standards / Compliance:	SS IEC 60598-2-22, SS 563



CLASS II



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# EXB-LED-M-WP WEATHERPROOF LED

WELL-EQUIPPED EXIT LIGHT THAT  
DEFIES HARSH ENVIRONMENTAL  
CONDITIONS.



## TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>EXB-LED-M-WP</b>
<b>Mode of Operation:</b>	Maintained
<b>Lamp:</b>	1.2W White LED module with burning life-span > 50,000 hours
<b>Rated Duration:</b>	3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	3W (Total standby power inclusive of LED converter)
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Regulated variable rate
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Micro switch
<b>Mounting:</b>	Surface wall / Semi-recessed wall
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Diffuser:</b>	Injection moulded with fire retardant (UL94), high impact material
<b>Fitting Construction:</b>	Injection moulded with fire retardant (UL94), high impact material
<b>Weight:</b>	Approx. 1.2 Kg
<b>Dimensions:</b>	171mm (H) x 406mm (W) x 65mm (D)
<b>Standards /</b>	SS IEC 60598-2-22, SS 563

## Ordering Guide:

### Legend



### Single Sided

EXB-LED-M-WP-S-RM

EXB-LED-M-WP-SR-RM

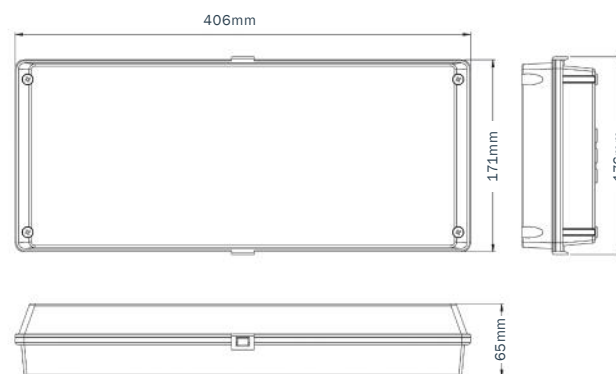
EXB-LED-M-WP-SL-RM

EXB-LED-M-WP-S

EXB-LED-M-WP-SR

EXB-LED-M-WP-SL

- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs achieve a high level of uniform light distribution and ensuring maximum life span.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.



CLASS II



IP65

# EX-LED-M SLIMLINE LED

## SLIM FRAMELESS EXIT SIGN WITH NUMEROUS INSTALLATION OPTIONS



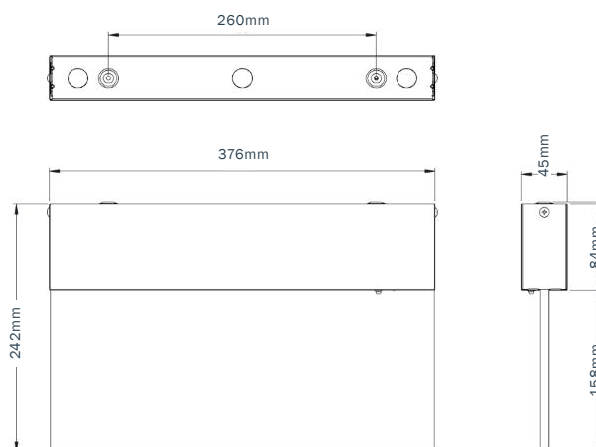
### TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>EX-LED-M</b>
<b>Mode of Operation:</b>	Maintained
<b>Lamp:</b>	1.2W White LED module with burning life-span > 50,000 hours
<b>Rated Duration:</b>	3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	3W (Total standby power inclusive of LED converter)
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Regulated variable rate
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Micro switch
<b>Mounting:</b>	Surface mount (Recessed mount option available)
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Diffuser:</b>	Acrylic plate (fire retardant)
<b>Fitting Construction:</b>	Electro galvanized steel. Epoxy powder coating for casing and gear tray
<b>Weight:</b>	Approx. 1.2 Kg
<b>Dimensions:</b>	242mm (H) x 376mm (W) x 45mm (D)
<b>Standards / Compliance:</b>	SS IEC 60598-2-22, SS 563

### Ordering Guide:

Legend	Single Sided	Double Sided
	EX-LED-M-S-RM	EX-LED-M-D-RM
	EX-LED-M-SR-RM	EX-LED-M-DR-RM
	EX-LED-M-SL-RM	EX-LED-M-DL-RM
	EX-LED-M-S	EX-LED-M-D
	EX-LED-M-SR	EX-LED-M-DR
	EX-LED-M-SL	EX-LED-M-DL

- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs provides equal biasing of all LEDs ensures maximum LED life span and uniform light distribution
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Add-on plate for recess mounting.



CLASS I



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# EXB-LED-M SURFACE BOX LED

## COMPACT AND CLASSIC BOX EXIT LIGHT



### TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>EXB-LED-M</b>
<b>Mode of Operation:</b>	Maintained
<b>Lamp:</b>	1.2W White LED module with burning life-span > 50,000 hours
<b>Rated Duration:</b>	3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	3W (Total standby power inclusive of LED converter)
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Regulated variable rate
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Micro switch
<b>Mounting:</b>	Suspended / Surface Ceiling / Surface Wall
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Diffuser:</b>	Acrylic plate (fire retardant)
<b>Fitting Construction:</b>	Electro galvanized steel. Epoxy powder coating for casing and gear tray
<b>Weight:</b>	Approx. 1.5 Kg
<b>Dimensions:</b>	Surface mount: 178mm (H) x 348mm (W) x 60mm (D)
<b>Standards / Compliance:</b>	SS IEC 60598-2-22, SS 563

### Ordering Guide:

#### Legend



#### Single Sided

EXB-LED-M-S-RM

EXB-LED-M-SR-RM

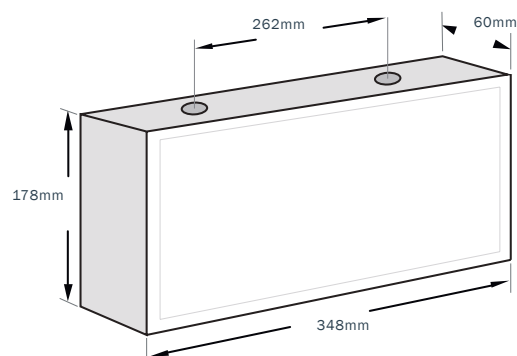
EXB-LED-M-SL-RM

EXB-LED-M-S

EXB-LED-M-SR

EXB-LED-M-SL

- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs provides equal biasing of all LEDs ensures maximum LED life span and uniform light distribution
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- High efficiency charger and LED converter
- Charge indicator and test switch



CLASS I



PSB Singapore

Type and batch tested with  
PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# EXB-LED-M-LV RECESS BOX LED

LOW LEVEL EXIT LIGHT IMPROVE SAFETY  
WHEN SMOKE OBSCURE EXIT LIGHT  
MOUNTED ABOVE THE DOOR



## Ordering Guide:

### Legend



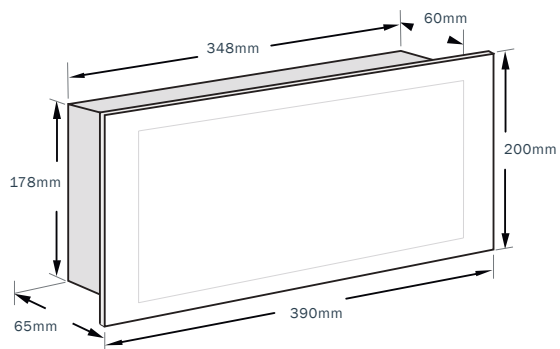
### Single Sided

- EXB-LED-M-LV-S-RM
- EXB-LED-M-LV-SR-RM
- EXB-LED-M-LV-SL-RM
- EXB-LED-M-LV-S
- EXB-LED-M-LV-SR
- EXB-LED-M-LV-SL

- Ultra bright white LEDs meeting ISO safety colour requirements.
- Exceeds SS IEC 60598-2-22 and SS 563 brightness requirements
- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs provides equal biasing of all LEDs ensures maximum LED life span and uniform light distribution
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- High efficiency charger and LED converter
- Charge indicator and test switch

## TECHNICAL SPECIFICATIONS

MODEL NO:	EXB-LED-M-LV
Mode of Operation:	Maintained
Lamp:	1.2W White LED module with burning life-span > 50,000 hours
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	3W (Total standby power inclusive of LED converter)
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Mounting:	Recessed Wall Mount
Safety Features:	Low battery voltage cut off to prevent over discharge
Diffuser:	Acrylic plate (fire retardant)
Fitting Construction:	Electro galvanized steel. Epoxy powder coating for casing and gear tray
Weight:	Approx. 1.5 Kg
Dimensions:	Recess mount: 200mm (H) x 390mm (W) x 65mm (D)
Standards / Compliance:	SS IEC 60598-2-22, SS 563



CLASS I



PSB Singapore



Type and batch tested with  
PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# CUSTOMIZED LED

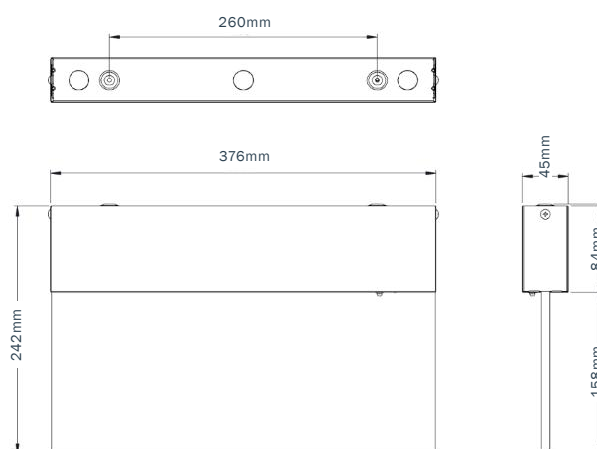
## CUSTOMIZED FRAMELESS LED SIGNAGE

- Extra low power consumption
- High Quality , Long Life SMD LED module
- Series connection of LEDs provides equal biasing of all LEDs ensures maximum LED life span and uniform light distribution
- Add-on plate for recess mounting.
- Customization of Legends are available:



### TECHNICAL SPECIFICATIONS

MODEL NO:	CUSTOMISED LED
Mode of Operation:	Slave
Lamp:	1.2W White LED module with burning life-span > 50,000 hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	3W (Total standby power inclusive of LED converter)
Mounting:	Surface mount (Recessed mount option available)
Diffuser:	Acrylic plate (fire retardant)
Fitting Construction:	Electro galvanized steel. Epoxy powder coating for casing and gear tray
Weight:	Approx. 1.2 Kg
Dimensions:	242mm (H) x 376mm (W) x 45mm (D)



CLASS I



# EMERGENCY LUMINAIRE RANGE

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Products from our emergency luminaire range are not only stylish but also ensuring that escape routes and exits path within the open area and high risk task are clearly recognisable. Our Recess Emergency Luminaire especially is so discreet and unobtrusive that you will not even realize it's presence but will provide you with the greatest spacing. Most of Powercraft's emergency luminaires have a duration of 3 hours and furthermore when these LEDs are addressed separately from the general lighting, ageing effects are avoided and reliability is increased even further.



**REL10NM-LED-CU**  
PAGE 24



**REL10NM-LED-CY**  
PAGE 25

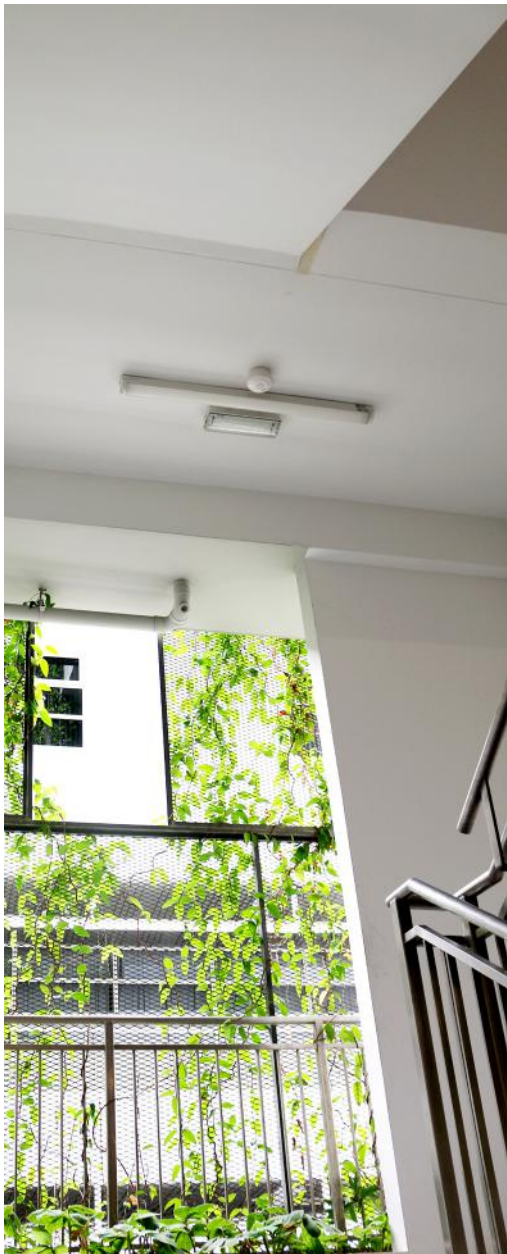


**EL-LED2-NM**  
PAGE 37



**TED10NM**  
PAGE 33





# REL10NM-LED-CU

## RECESS LED

### MINIMALIST FUSS-FREE DESIGN AND YET HIGHLY EFFICIENT



#### TECHNICAL SPECIFICATIONS

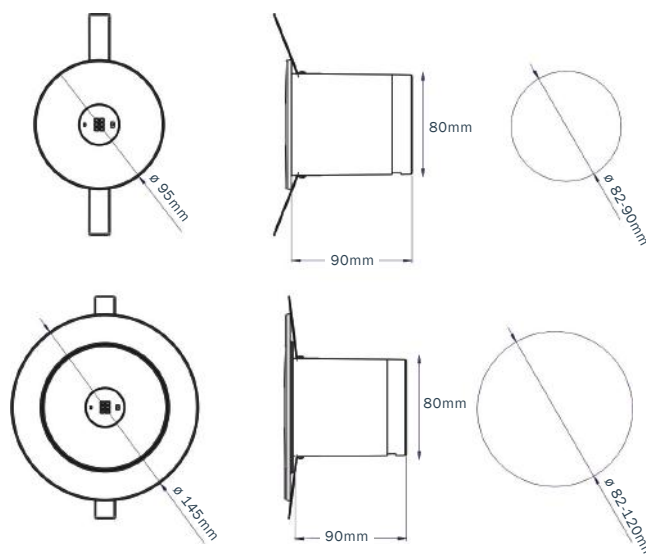
MODEL NO:	REL10NM-LED-CU
Mode of Operation:	Non-Maintained
Lamp:	3W White LED
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Injection moulded with fire retardant (UL94), high impact material
Weight:	Approx. 0.4 Kg
Standards / Compliance:	SS IEC 60598-2-22, SS 563, IEC 61347-2-7, IEC 61347-2-13

#### Ordering Guide:

##### Ordering Code

REL10NM-LED-CU

- All In One Compact design for fast installation and easy maintenance.
- Energy savings; Extra low standby power consumption
- Durable fire retardant housing ( UL 94 ) to combat corrosion
- Perfect as Escape Route lighting and Anti-Panic Lighting.
- Maximum Efficiency and perfect light distribution that result to very wide spacing thus lesser number of emergency luminaires are needed in conformity with relevant standards.



CLASS II



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

# REL10NM-LED-CY

## SURFACE LED

**SURFACE MOUNT LED DESIGN  
WITHOUT COMPROMISING ON  
PERFORMANCE.**



### TECHNICAL SPECIFICATIONS

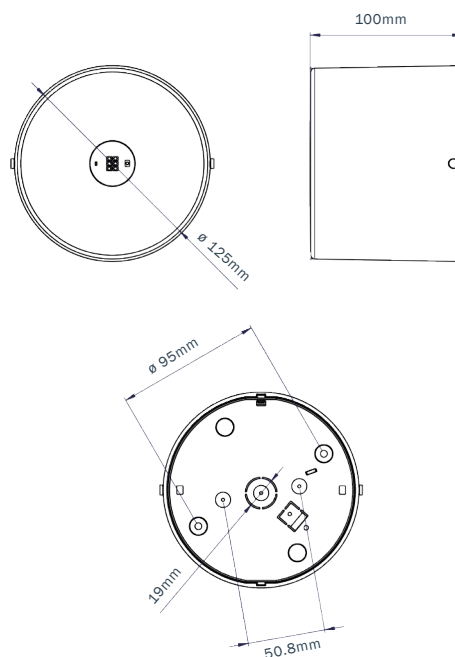
<b>MODEL NO:</b>	<b>REL10NM-LED-CY</b>
Mode of Operation:	Non-Maintained
Lamp:	3W White LED
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Injection moulded with fire retardant (UL94), high impact material
Weight:	Approx. 0.4 Kg
Standards / Compliance:	SS IEC 60598-2-22, SS 563, IEC 61347-2-7, IEC 61347-2-13

### Ordering Guide:

#### Ordering Code

REL10NM-LED-CY

- All In One Compact design for fast installation and easy maintenance.
- Energy savings; Extra low standby power consumption
- Durable fire retardant housing ( UL 94 ) to combat corrosion
- Perfect as Escape Route lighting and Anti-Panic Lighting.
- Maximum Efficiency and perfect light distribution that result to very wide spacing thus lesser number of emergency luminaires are needed in conformity with relevant standards.



**CLASS II**



Type and batch tested with  
PSB PLS-LISTED LABEL

# REL20NM-LED RECESS LED

**BRIGHTEST STAR THAT SHINES  
IN EVERY ARCHITECT'S DREAM.**



So discreet and unobtrusive that you will not even realize it's presence BUT will provide you the greatest spacing.

## TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>REL20NM-LED</b>
Mode of Operation:	Non-Maintained
Lamp:	3W White LED
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Aluminium epoxy powder coated reflector, galvanised zinc coated charger housing
Weight:	Approx. 0.3 Kg
Standards / Compliance:	SS IEC 60598-2-22, SS 563

## Ordering Guide:

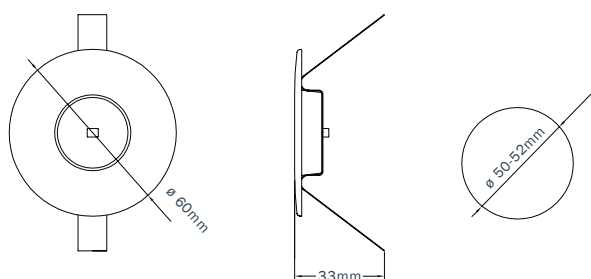
### Ordering Code

REL20NM-LED-60mm

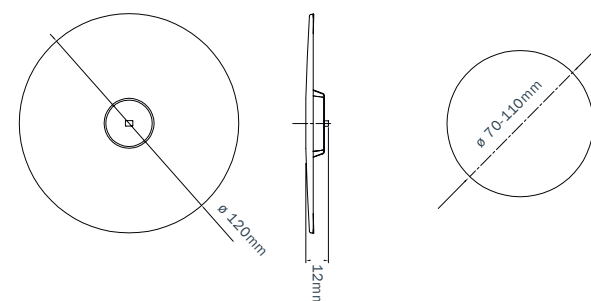
REL20NM-LED-120mm

- Very wide spacing, double of traditional 10W halogen.
- Save up to 2/3 of the number of fittings used.
- Energy savings, extra low standby power consumption.
- Slim casing , fit through 50mm hole.
- Easy Installation and low maintenance

### 60mm Reflector



### 120mm Reflector



### REL20NM-LED



CLASS I



PSB Singapore



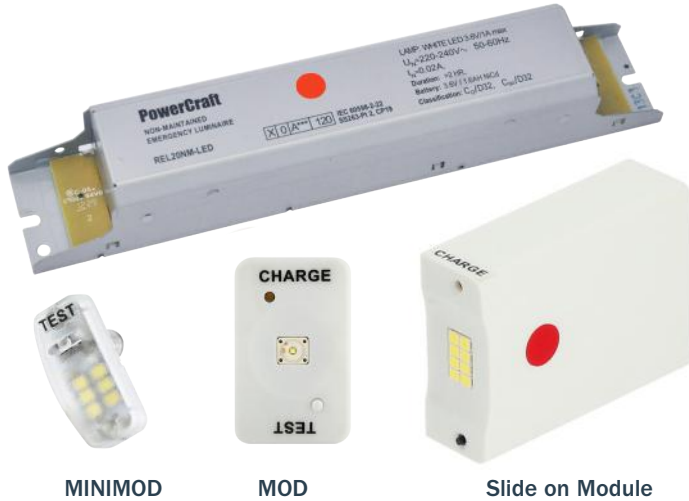
Type and batch tested with PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice



# REL20NM-LED SELF-CONTAINED / SUSTAINED LED

DESIGNED TO DISCREETLY BLEND  
IN WITH YOUR GENERAL LIGHTING.



- Prevents damage to fluorescent or LED lamps as it is independent from voltage and output from the general lighting
- Optimal and uniform light point spacing for anti-panic luminaires and escape route luminaires can be achieved.
- Reliability of the emergency modules is increased as the LED modules are addressed separately from the general lighting therefore aging effects are avoided.
- Easy wiring and full compatibility.

## TECHNICAL SPECIFICATIONS

MODEL NO:	REL20NM-LED
Mode of Operation:	Non-Maintained
Lamp Module:	MINIMOD: 3W, MOD: 3W, Slide on Module: 4W
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Galvanised zinc coated charger housing
Weight:	Approx. 0.3 Kg
Standards / Compliance:	SS IEC 60598-2-22, SS 563

## Ordering Guide:

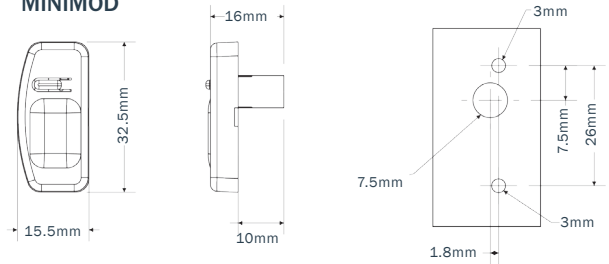
### Ordering Code

REL20NM-LED-MINIMOD

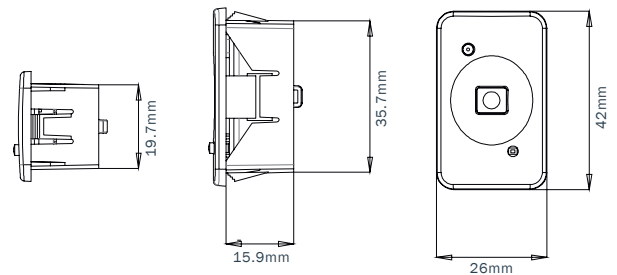
REL20NM-LED-MOD

REL20NM-LED-SL

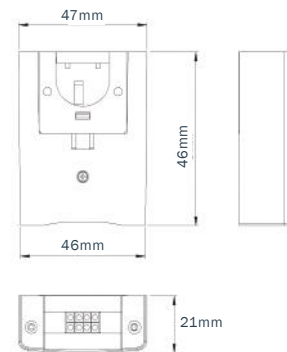
### MINIMOD



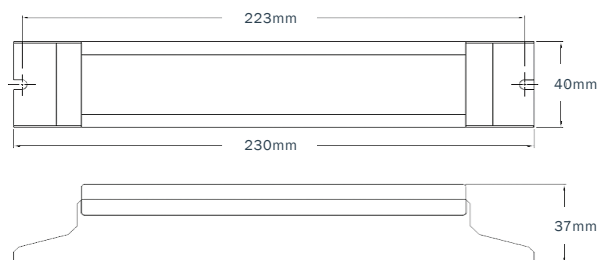
### MOD



### Slide on Module



### REL20NM-LED



CLASS I



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# REL50NM-LED

## RECESS LED

**HIGH PERFORMANCE RECESS LED  
ENSURE PERFECT LIGHT DISTRIBUTION  
FOR AREAS WITH HIGH CEILING.**



### TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>REL50NM-LED</b>
Mode of Operation:	Non-Maintained
Lamp:	10W White LED
Rated Duration:	2 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	2.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Aluminium epoxy powder coated reflector, Steel (Charger Housing)
Weight:	Approx. 1.3 Kg
Standards / Compliance:	IEC 61347-2-13, IEC 62384, SS 563

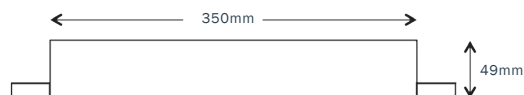
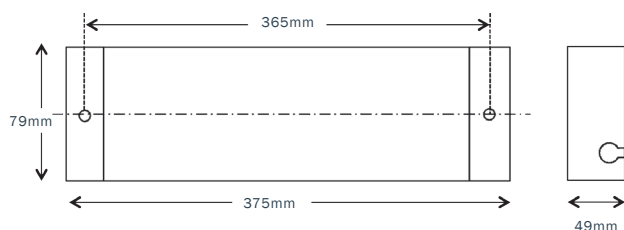
### Ordering Guide:

#### Ordering Code

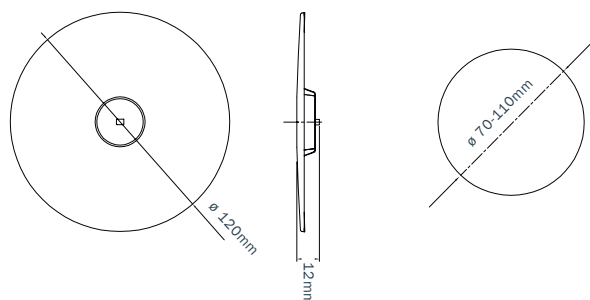
Non- Maintained

REL50NM-LED-120mm

- Very Wide Spacing
- Energy savings, extra low standby power consumption
- Suitable for high ceiling recess mounting.
- Applicable to areas which require higher illuminance levels than the existing IEC standards or Singapore Standards.
- Able to provide perfect light distribution with maximum efficiency even for ceiling height which are more than 10 meters.
- Perfect as escape route lighting and anti-panic lighting.



### 120mm Reflector



CLASS I



PSB Singapore

Type and batch tested with  
PSB PLS-LISTED LABEL

# REL50M-LED RECESS LED

**HIGH PERFORMANCE RECESS LED  
ENSURE PERFECT LIGHT DISTRIBUTION  
FOR AREAS WITH HIGH CEILING.**



## TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>REL50M-LED</b>
Mode of Operation:	Maintained
Lamp:	10W White LED
Rated Duration:	2 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	12.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Aluminium epoxy powder coated reflector, Steel (Charger Housing)
Weight:	Approx. 1.3 Kg
Standards / Compliance:	IEC 61347-2-13, IEC 62384, SS 563

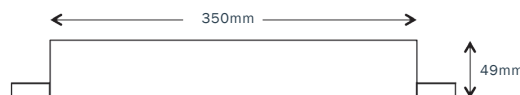
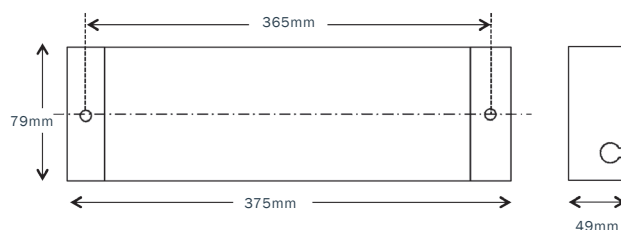
## Ordering Guide:

### Ordering Code

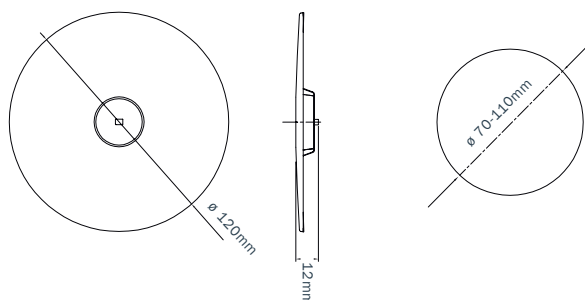
Maintained

REL50M-LED-120mm

- Very Wide Spacing
- Energy savings, extra low standby power consumption
- Suitable for high ceiling recess mounting.
- Applicable to areas which require higher illuminance levels than the existing IEC standards or Singapore Standards.
- Able to provide perfect light distribution with maximum efficiency even for ceiling height which are more than 10 meters.
- Perfect as escape route lighting and anti-panic lighting.



## 120mm Reflector



CLASS I



PSB Singapore





# REL50NM-LED-CY

## SURFACE LED

**HIGH PERFORMANCE SURFACE LED  
ENSURES PERFECT LIGHT DISTRIBUTION  
FOR AREAS WITH HIGH CEILING**



### TECHNICAL SPECIFICATIONS

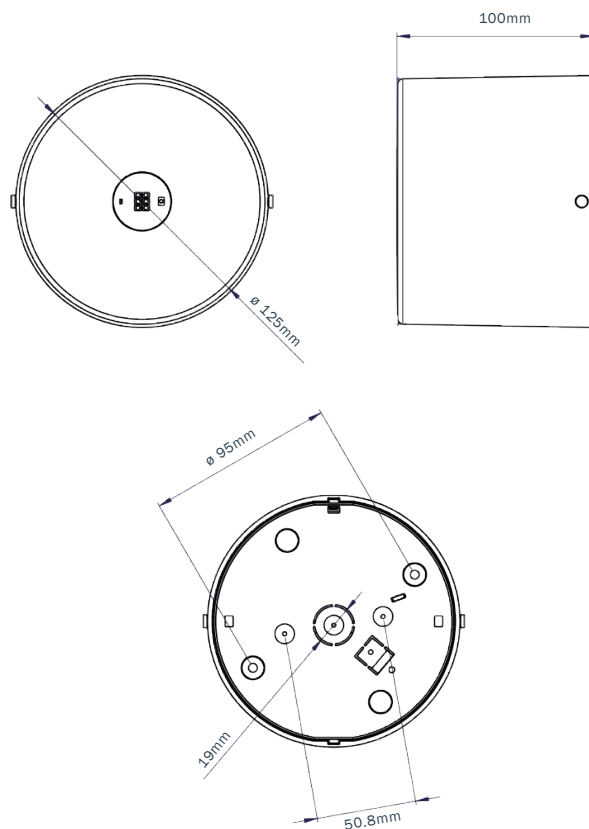
<b>MODEL NO:</b>	<b>REL50NM-LED-CY</b>
Mode of Operation:	Non-Maintained
Lamp:	10W White LED
Rated Duration:	2 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 3.0W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Injection moulded with fire retardant (UL94), high impact material
Weight:	Approx. 0.7 Kg
Standards / Compliance:	SS IEC 60598-2-22, SS 563, IEC 61347-2-7, IEC 61347-2-13

### Ordering Guide:

#### Ordering Code

REL50NM-LED-CY

- Very Wide Spacing
- Energy savings, extra low standby power consumption
- Suitable for high ceiling surface mounting.
- Applicable to areas which require higher illuminance levels than the existing IEC standards or Singapore Standards.
- Able to provide perfect light distribution with maximum efficiency even for ceiling height which are more than 10 meters.
- Perfect as escape route lighting and anti-panic lighting.



CLASS II



\*\*\*Note: Technical Specification subject to change without prior notice

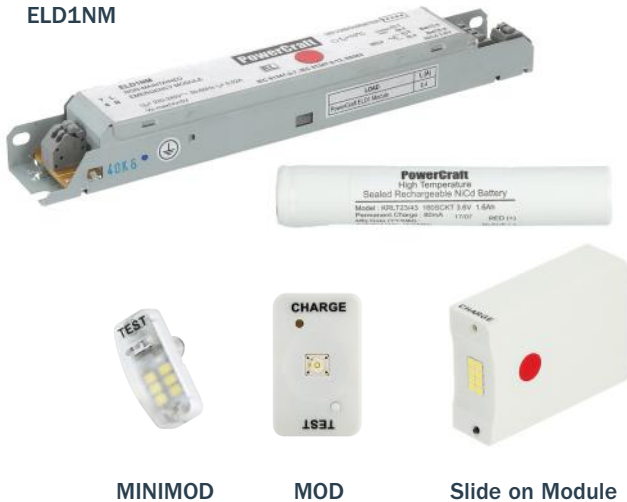
# ELD1NM

## SELF-CONTAINED / SUSTAINED LED

(with MINIMOD, MOD, SLIDE ON MODULE)

DESIGNED TO DISCREETLY INCREASE  
RELIABILITY AND AVOID AGEING EFFECTS

ELD1NM



MINIMOD

MOD

Slide on Module

- Prevents damage to fluorescent or LED lamps as it is independent from voltage and output from the general lighting
- Optimal and uniform light point spacing for anti-panic luminaires and escape route luminaires can be achieved.
- Reliability of the emergency modules is increased as the LED modules are addressed separately from the general lighting therefore aging effects are avoided.
- Easy wiring and full compatibility.

### TECHNICAL SPECIFICATIONS

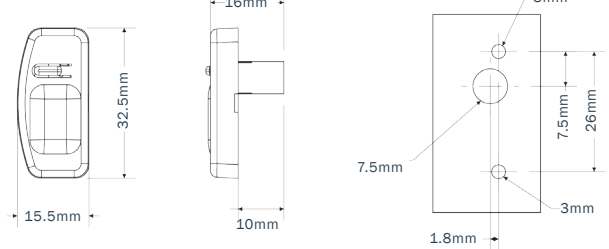
MODEL NO:	ELD1NM
Mode of Operation:	Non-Maintained
Lamp Module:	MINIMOD: 3W, MOD: 3W, Slide on Module: 4W
Rated Duration:	3 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Injection moulded with fire retardant, high impact material
Weight:	Approx. 0.3 Kg
Standards / Compliance:	SS IEC 60598-2-22

### Ordering Guide:

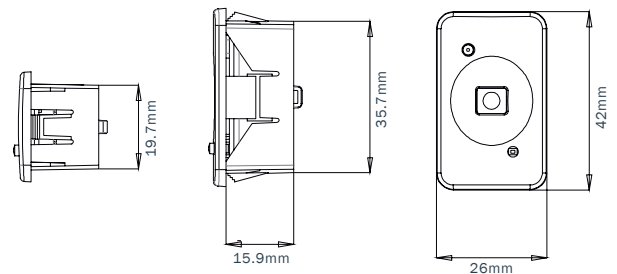
#### Ordering Code

ELD1NM-S  
ELD1NM-MINIMOD  
ELD1NM-MOD

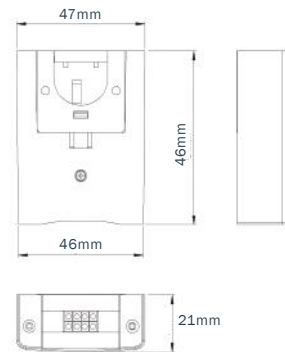
#### MINIMOD



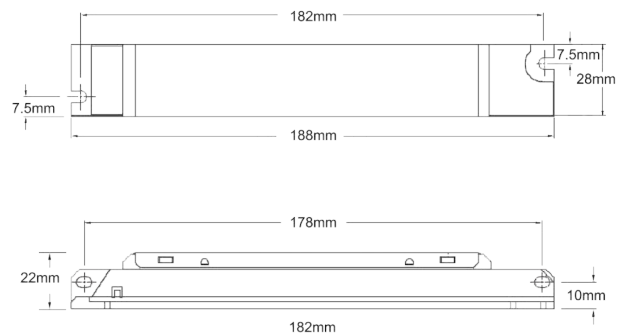
#### MOD



#### Slide on Module



#### ELD1NM



CLASS I



CE

Type and batch tested with  
PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# ELD2NM

## SLIDE ON LED

DESIGNED TO DISCREETLY BLEND IN  
WITH YOUR GENERAL LIGHTING EVEN  
WITH HIGH CEILING

ELD2NM



Slide on Module

### TECHNICAL SPECIFICATIONS

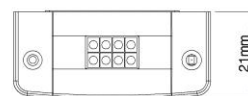
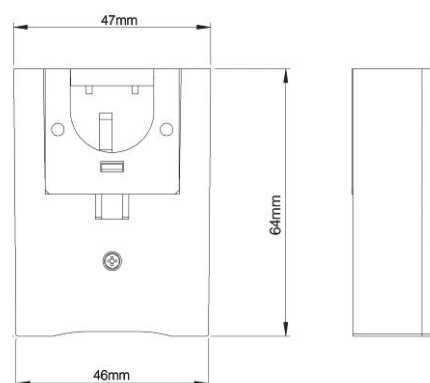
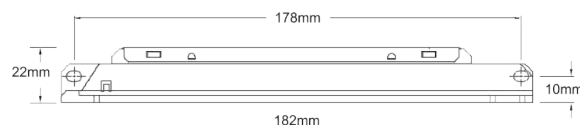
<b>MODEL NO:</b>	<b>ELD2NM</b>
Mode of Operation:	Non-Maintained
Lamp:	3 x 3W LED Modules
Rated Duration:	2 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Injection moulded with fire retardant, high impact material
Weight:	Approx. 0.3 Kg
Standards / Compliance:	SS IEC 60598-2-22

### Ordering Guide:

#### Ordering Code

ELD2NM-S

- Prevents damage to fluorescent or LED lamps as it is independent from voltage and output from the general lighting
- Reliability of the emergency modules is increased as the LED modules are addressed separately from the general lighting therefore aging effects are avoided.
- Easy wiring and full compatibility.
- Suitable for high ceiling and is applicable to areas which require higher illuminance levels than the existing IEC standards or Singapore Standards.



CLASS I

# TED10NM

## TWIN-SPOT LED

ADJUSTABLE LENS OF OUR TWIN-SPOT IS PERFECT FOR HIGH RISK APPLICATIONS AND LARGE OPEN AREAS.



With Weatherproof Enclosure Housing

### TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>TED10NM</b>
Mode of Operation:	Non-Maintained
Lamp:	2 x 3W Power LED Module
Rated Duration:	2 Hours (3 Hours on request)
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Micro switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Moulded Fire retardant (UL94) housing and diffuser.
Weight:	Approx. 1.5 Kg
Dimensions:	310mm (W) x 140mm (H) x 105mm (D)
Standards / Compliance:	SS IEC 60598-2-22, SS 563

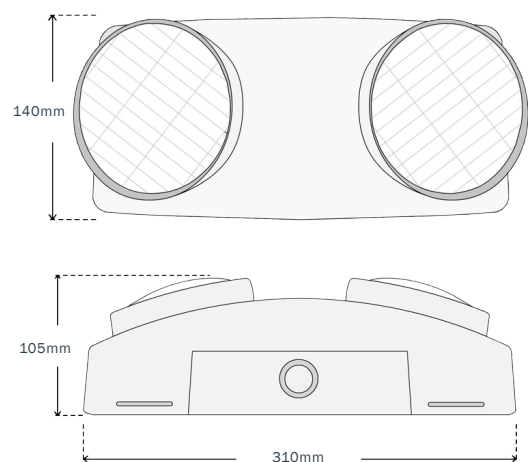
### Ordering Guide:

#### Ordering Code

TED10NM

TED10NM (c/w weatherproof enclosure)

- Snap in design ensures fast installation and easy maintenance.
- Fire Retardant (UL94) housing and UV stabilized diffuser
- Low Heat generation, ensures long and reliable service life.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Charge LED indicator and test switch available
- Perfect to use in large open areas and high risk task areas.
- Adjustable lens optimum for matching light output to applications.
- Weatherproof (IP65) enclosure is available.



CLASS II



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

\*\*\*Note: Technical Specification subject to change without prior notice

# TED10NM (WP) WEATHERPROOF TWIN-SPOT LED

OUR WEATHERPROOF TWIN-SPOT IS  
WELL PREPARED IN HARSH  
ENVIRONMENTAL CONDITIONS.



## TECHNICAL SPECIFICATIONS

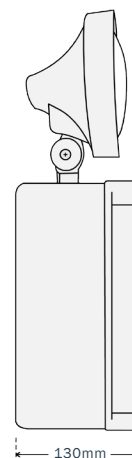
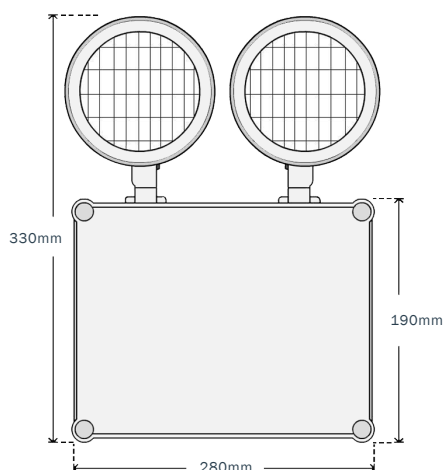
<b>MODEL NO:</b>	<b>TED10NM (WP)</b>
Mode of Operation:	Non-Maintained
Lamp:	2 x 3W Power LED Module
Rated Duration:	2 Hours
Mains Supply:	220-240 Volts, 50-60Hz
Power Consumption:	< 1.5W
Battery:	High Temperature Nickel Cadmium
Charger:	Regulated variable rate
Charge Monitor:	LED
Test Facility:	Momentary test switch
Safety Features:	Low battery voltage cut off to prevent over discharge
Fitting Construction:	Moulded Fire retardant (UL94) housing and diffuser.
Weight:	Approx. 2.5 Kg
Dimensions:	330mm (W) x 280mm (H) x 130mm (D)
Standards / Compliance:	SS IEC 60598-2-22, SS 563

## Ordering Guide:

### Ordering Code

TED10NM(WP)

- Low Heat generation, ensures long and reliable service life.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Charge LED indicator and test switch available
- Weatherproof design suitable for outdoor applications and high risk task areas.
- Adjustable lens optimum for matching light output to applications.



CLASS II



PSB Singapore



Type and batch tested with  
PSB PLS-LISTED LABEL

IP65

\*\*\*Note: Technical Specification subject to change without prior notice

# EL28NM/1A T5 FLOURESCENT BULKHEAD

**LOW MAINTENANCE EMERGENCY BULK-  
HEAD IDEAL FOR BOTH EXTERIOR AND  
INTERIOR AREAS**



## TECHNICAL SPECIFICATIONS

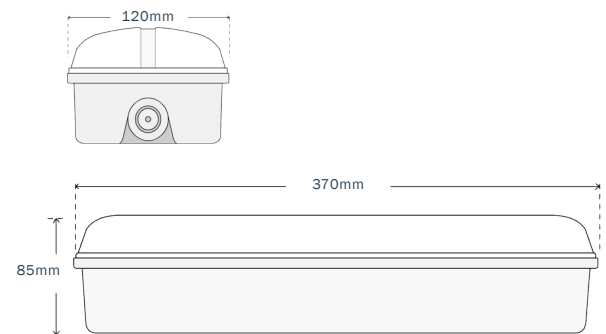
<b>MODEL NO:</b>	<b>EL28NM/1A</b>
<b>Mode of Operation:</b>	Non-Maintained
<b>Lamp:</b>	2 x 8W T5 Fluorescent Lamp
<b>Rated Duration:</b>	2 Hours (3 Hours on request)
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	< 4.0W
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Variable rate, short circuit protected
<b>Charge Monitor:</b>	LED
<b>Degree of Protection (Against Dust and Moisture)</b>	IP54 (IP65 with test switch mounted internally)
<b>Test Facility:</b>	Momentary Test Switch
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Fitting Construction:</b>	Injection moulded with fire retardant (UL94), high impact material
<b>Weight:</b>	Approx. 1.0 Kg
<b>Dimensions:</b>	370mm (W) x 120mm (H) x 85mm (D)
<b>Standards / Compliance:</b>	SS IEC 60598-2-22, SS 563

## Ordering Guide:

### Ordering Code

EL28NM/1A

- Fire Retardant (UL94) housing and UV stabilized Diffuser
- Low Heat generation, ensures long and reliable service life.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Charge LED indicator and test switch available
- Weatherproof design suitable for indoor and outdoor applications
- Optimal for anti-panic ( open area ) and escape route lighting applications.



**CLASS I**



PSB Singapore



Type and batch tested with  
PSB PLS-LISTED LABEL

**IP65**

# EL-LED1-M

## LED BULKHEAD

**LOW MAINTENANCE EMERGENCY  
BULKHEAD IDEAL FOR BOTH EXTERIOR  
AND INTERIOR AREAS**



### TECHNICAL SPECIFICATIONS

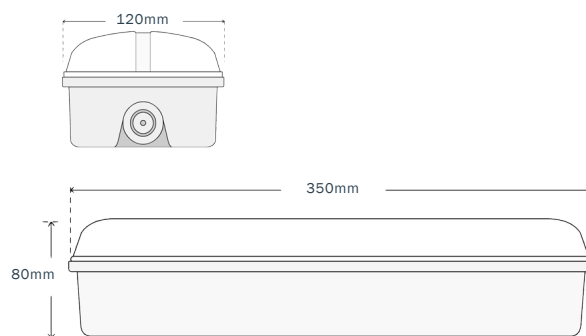
<b>MODEL NO:</b>	<b>EL-LED1-M</b>
<b>Mode of Operation:</b>	Maintained
<b>Lamp:</b>	LED Module
<b>Rated Duration:</b>	2 Hours (3 Hours on request)
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	10W
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Regulated variable rate, Short circuit protected
<b>Charge Monitor:</b>	LED
<b>Degree of Protection (Against Dust and Moisture)</b>	IP54 (IP65 with test switch mounted internally)
<b>Test Facility:</b>	Momentary Test Switch
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Fitting Construction:</b>	Injection moulded with fire retardant (UL94), high impact material
<b>Weight:</b>	Approx. 1.0 Kg
<b>Dimensions:</b>	350mm (W) x 120mm (H) x 80mm (D)

### Ordering Guide:

#### Ordering Code

EL-LED1/M

- Fire Retardant (UL94) housing and UV stabilized Opal Diffuser
- Low Heat generation, ensures long and reliable service life.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Charge LED indicator and test switch available
- Weatherproof design suitable for indoor and outdoor applications
- Optimal for anti-panic ( open area ) and escape route lighting applications.
- High Quality, Long Life LED module.



**CLASS II IP65**



# EL-LED2-NM

## LED BULKHEAD

**LOW MAINTENANCE EMERGENCY  
BULKHEAD IDEAL FOR BOTH EXTERIOR  
AND INTERIOR AREAS**



### TECHNICAL SPECIFICATIONS

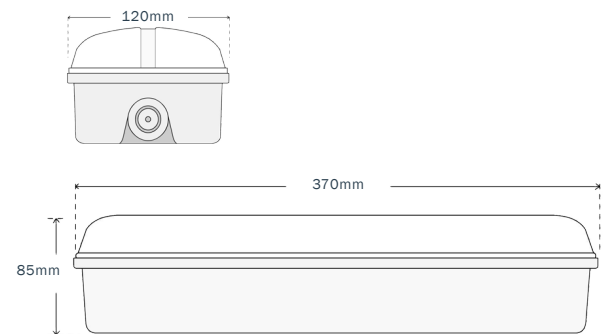
<b>MODEL NO:</b>	<b>EL-LED2-NM</b>
<b>Mode of Operation:</b>	Non-Maintained
<b>Lamp:</b>	2 x 3W Power LED Module
<b>Rated Duration:</b>	2 Hours (3 Hours on request)
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Power Consumption:</b>	< 1.5W
<b>Battery:</b>	High Temperature Nickel Cadmium
<b>Charger:</b>	Regulated variable rate, Short circuit protected
<b>Charge Monitor:</b>	LED
<b>Degree of Protection</b> (Against Dust and Moisture)	IP54 (IP65 with test switch mounted internally)
<b>Test Facility:</b>	Momentary Test Switch
<b>Safety Features:</b>	Low battery voltage cut off to prevent over discharge
<b>Fitting Construction:</b>	Injection moulded with fire retardant (UL94), high impact material
<b>Weight:</b>	Approx. 1.0 Kg
<b>Dimensions:</b>	370mm (W) x 120mm (H) x 85mm (D)
<b>Standards / Compliance:</b>	SS IEC 60598-2-22, SS 563

### Ordering Guide:

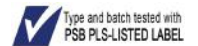
#### Ordering Code

EL-LED2/NM

- Fire Retardant (UL94) housing and UV stabilized Diffuser
- Low Heat generation, ensures long and reliable service life.
- Low battery voltage cut-off with latch function, to eliminate battery over discharge.
- Charge LED indicator and test switch available
- Weatherproof design suitable for indoor and outdoor applications
- Optimal for anti-panic ( open area ) and escape route lighting applications.
- High Quality, Long Life LED module.



**CLASS II**



**IP65**

# CONVERSION KITS

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Powercraft's Conversion Kits are designed to be used with various types of fluorescent and LED lamps and can deliver optimum performance in the event of a mains failure by providing sufficient light level. These conversion kits have a low standby power consumption that ensure reliability and a longer shelf life. Most of our conversion kits have short-circuit protection as well. With the low-profile casing that we provide, our conversion kits are one of the slimmest in the market therefore they are usually concealed in fluorescent and LED fittings very easily.



**ECL2/240**  
PAGE 41



**ECL-LED1**  
PAGE 43



# ECP36

## PROFESSIONAL RANGE



### TECHNICAL SPECIFICATIONS

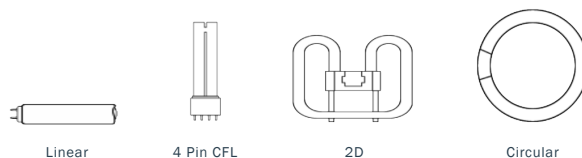
<b>MODEL NO:</b>	<b>ECP36</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	T5, T8 Fluorescent, 4 Pin CFL and 2D Lamps
<b>Rated Duration:</b>	3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Supply Current:</b>	20mA - 35mA
<b>Power Consumption:</b>	< 4.5W
<b>Trickle Charge:</b>	125mA
<b>Battery Charger:</b>	Dual Rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563

### Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECP36/240/4.8/2.5-A	NiCd 4.8V 2.5AH	Cane
ECP36/240/4.8/2.5-S	NiCd 4.8V 2.5AH	Side by side
ECP36/240/4.8/4.5-A	NiCd 4.8V 4.5AH	Cane
ECP36/240/4.8/4.5-A+A	NiCd 4.8V 4.5AH	Cane + Cane

## OUR ECP CONVERSION KIT COMES WITH FILAMENT CONDITIONING THAT PREVENTS PREMATURE FILAMENT DAMAGE

- Filament Conditioning prevents premature filament damage (Black Ends)
- Four pole relay configuration at lamp for total isolation.
- Suitable for T5, T8, CFL and 2D fluorescent lamps.
- Short-circuit protection at battery terminals.
- IC controlled dual rate charging.
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I



PSB Singapore



Type and batch tested with PSB PLS-LISTED LABEL

# ECS36/240 STANDARD RANGE



## TECHNICAL SPECIFICATIONS

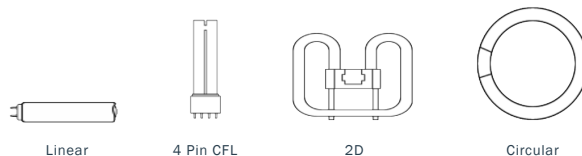
<b>MODEL NO:</b>	<b>ECS36</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	T5, T8, 4 Pin CFL and 2D Fluorescent Lamps
<b>Rated Duration:</b>	1 Hour / 2 Hours / 3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Supply Current:</b>	20mA - 35mA
<b>Power Consumption:</b>	< 4.5W
<b>Trickle Charge:</b>	80mA
<b>Battery Charger:</b>	Dual Rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563

## Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECS36/240/4.8/1.6-A	NiCd 4.8V 1.6AH	Cane
ECS36/240/4.8/1.6-S	NiCd 4.8V 1.6AH	Side by side
ECS36/240/4.8/2.5-A	NiCd 4.8V 2.5AH	Cane
ECS36/240/4.8/2.5-S	NiCd 4.8V 2.5AH	Side by side
ECS36/240/4.8/4.5-A	NiCd 4.8V 4.5AH	Cane
ECS36/240/4.8/4.5-A+A	NiCd 4.8V 4.5AH	Cane + Cane

OUR ECS CONVERSION KIT IS DEVELOPED TO ENSURE SAFE EVACUATION OF ALL BUILDINGS.

- Suitable for T5, T8, CFL and 2D fluorescent lamps.
- Low standby power consumption of < 4.5W
- Short-circuit protection at battery terminals.
- IC controlled dual rate charging.
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I



PSB Singapore



Type and batch tested with  
PSB PLS-LISTED LABEL

# ECL2/240 LOW PROFILE RANGE



## TECHNICAL SPECIFICATIONS

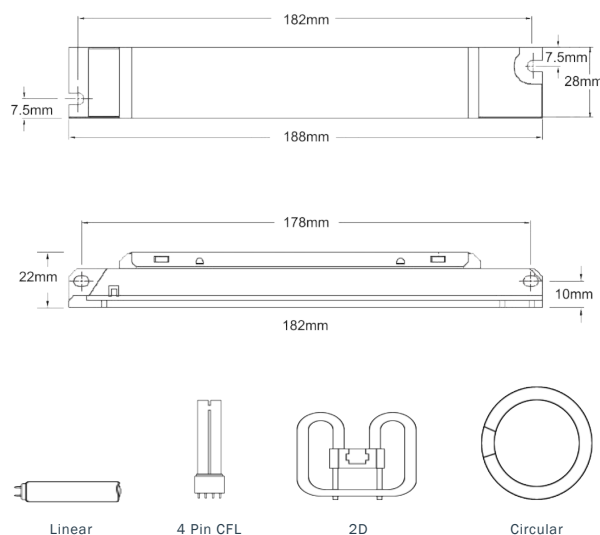
<b>MODEL NO:</b>	<b>ECL2</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	T5, T8, 4 Pin CFL and 2D Fluorescent Lamps
<b>Rated Duration:</b>	1 Hour / 2 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz (110-240V on request)
<b>Supply Current:</b>	20mA
<b>Power Consumption:</b>	< 2.0W
<b>Trickle Charge:</b>	80mA / 125mA
<b>Battery Charger:</b>	Regulated Variable Rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium / Nickel-Metal Hydride
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563

## Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECL1/240/3.6/1.6-S	NiCd 3.6V 1.6AH	Side by side
ECL1/240/3.6/2.5-A	NiCd 3.6V 2.5AH	Cane
ECL2/240/4.8/1.3-S	NiMH 4.8V 1.3AH	Side by side
ECL2/240/4.8/1.6-A	NiCd 4.8V 1.6AH	Cane
ECL2/240/4.8/1.6-S	NiCd 4.8V 1.6AH	Side by side
ECL2/240/4.8/2.5-A	NiCd 4.8V 2.5AH	Cane
ECL2/240/4.8/2.5-S	NiCd 4.8V 2.5AH	Side by side
ECL2/120-240/4.8/2.5-A	NiCd 4.8V 2.5AH	Cane
ECL2/120-240/4.8/2.5-S	NiCd 4.8V 2.5AH	Side by side

## OUR SLIMMEST CONVERSION KIT THAT CAN BE EASILY CONCEALED IN THE FLUORESCENT FITTING.

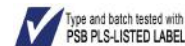
- Suitable for T5, T8, CFL and 2D fluorescent lamps.
- Extra low standby power consumption.
- Short-circuit protection.
- Five-pole relay configuration.
- Low-profile casing ( 22mm x 28mm cross-section )
- Ballast control output ensures compatibility with most high frequency ballast.
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I

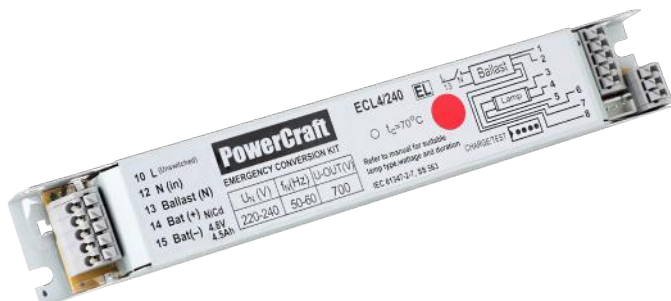


PSB Singapore





# ECL4/240 LOW PROFILE RANGE



## TECHNICAL SPECIFICATIONS

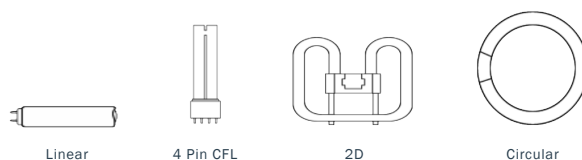
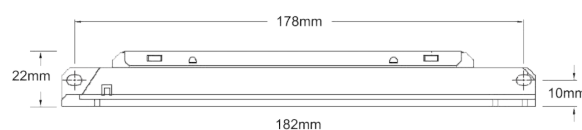
<b>MODEL NO:</b>	<b>ECL4</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	T5, T8, 4 Pin CFL and 2D Fluorescent Lamps
<b>Rated Duration:</b>	3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz (110-240V on request)
<b>Supply Current:</b>	20mA
<b>Power Consumption:</b>	< 2.0W
<b>Trickle Charge:</b>	125mA / 225mA
<b>Battery Charger:</b>	Regulated Variable Rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563

## Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECL4/240/4.8/4.5-A	NiCd 4.8V 4.5AH	Cane
ECL4/240/4.8/4.5-A+A	NiCd 4.8V 4.5AH	Cane + Cane

## OUR SLIMMEST CONVERSION KIT THAT CAN BE EASILY CONCEALED IN THE FLUORESCENT FITTING.

- Suitable for T5, T8, CFL and 2D fluorescent lamps.
- Extra low standby power consumption.
- Short-circuit protection.
- Five-pole relay configuration.
- Low-profile casing ( 22mm x 28mm cross-section )
- Ballast control output ensures compatibility with most high frequency ballast.
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I



PSB Singapore



# ECL-LED1 LED RANGE



## TECHNICAL SPECIFICATIONS

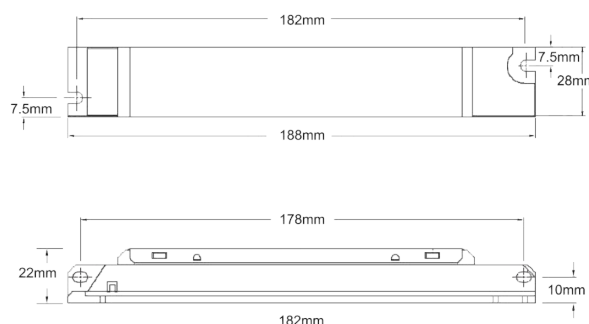
<b>MODEL NO:</b>	<b>ECL-LED 1</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	3 - 70V LED Load
<b>Rated Duration:</b>	2 Hours / 3 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Supply Current:</b>	20mA
<b>Power Consumption:</b>	< 2.0W
<b>Trickle Charge:</b>	80mA / 125mA
<b>Battery Charger:</b>	Regulated variable rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563, IEC 61347-2-13, IEC 62384

### Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECL-LED1/240/3.6/1.6-A	NiCd 3.6V 1.6AH	Cane
ECL-LED1/240/3.6/1.6-S	NiCd 3.6V 1.6AH	Side by side
ECL-LED1/240/3.6/2.5-A	NiCd 3.6V 2.5AH	Cane
ECL-LED1/240/3.6/2.5-S	NiCd 3.6V 2.5AH	Side by side

## OUR SLIMMEST LED CONVERSION KIT THAT IS COMPACT AND EFFICIENT.

- LED Load.
- Extra low standby power consumption.
- Low-profile casing ( 22mm x 28mm cross-section )
- Suitable for a wide range LED load voltage range
- Regulated charger output
- Able to power a LED light fitting at a reduce luminous flux for two hours or more
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I



PSB Singapore



## ECL-LED2 LED RANGE



### TECHNICAL SPECIFICATIONS

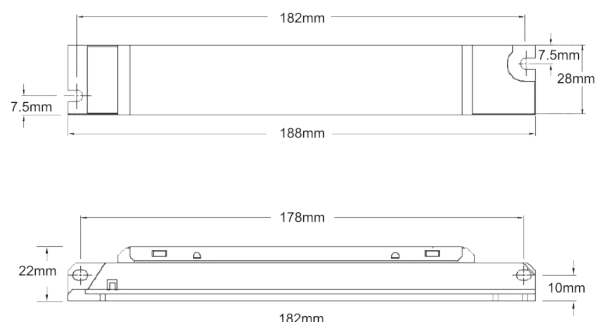
<b>MODEL NO:</b>	<b>ECL-LED 2</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	3 - 70V LED Load
<b>Rated Duration:</b>	2 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Supply Current:</b>	40mA
<b>Power Consumption:</b>	< 4.0W
<b>Trickle Charge:</b>	125mA / 225mA
<b>Battery Charger:</b>	Regulated variable rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Nickel Cadmium
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C
<b>Standards / Compliance:</b>	IEC 61347-2-7 (SS 490-2-7), SS 563, IEC 61347-2-13, IEC 62384

### Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECL-LED2/240/4.8/2.5-A	NiCd 4.8V 2.5AH	Cane
ECL-LED2/240/4.8/2.5-S	NiCd 4.8V 2.5AH	Side by side
ECL-LED2/240/4.8/4.5-A	NiCd 4.8V 4.5AH	Cane
ECL-LED2/240/4.8/4.5-A+A	NiCd 4.8V 4.5AH	Side by side

## OUR SLIMMEST LED CONVERSION KIT THAT IS COMPACT AND EFFICIENT.

- LED Load.
- Extra low standby power consumption.
- Low-profile casing ( 22mm x 28mm cross-section )
- Suitable for a wide range LED load voltage range
- Regulated charger output
- Able to power a LED light fitting at a reduce luminous flux for two hours or more
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I



PSB Singapore

Type and batch tested with  
PSB PLS-LISTED LABEL

## ECP-LED4 LED RANGE



### TECHNICAL SPECIFICATIONS

<b>MODEL NO:</b>	<b>ECP-LED4</b>
<b>Mode of Operation:</b>	Maintained / Non-Maintained
<b>Lamp Type:</b>	AC LED Tube 180-240 Volts AC, 22W (max)
<b>Rated Duration:</b>	1hours / 2 Hours
<b>Mains Supply:</b>	220-240 Volts, 50-60Hz
<b>Supply Current:</b>	30mA
<b>Power Consumption:</b>	3W
<b>Battery Charger:</b>	Regulated variable rate
<b>Battery Protection:</b>	Low battery voltage cut off to prevent over discharge
<b>Battery Type:</b>	High Temperature Li-ion (LiPoFe4)
<b>Charge Monitor:</b>	LED
<b>Test Facility:</b>	Momentary test switch
<b>Casing Construction:</b>	Electro-galvanised steel
<b>Max. Casing Temp, Tc:</b>	70°C
<b>Max. Ambient Temp, Ta:</b>	50°C

### Ordering Guide:

Ordering Code	Battery Type	Battery Configuration
ECP-LED4/240/12.8/1.5AH	Li-ion 12.8V/1.5AH	Cane
ECP-LED4/240/12.8/3.2AH	Li-ion 12.8V/3.2AH	Cane

## OUR ECP-LED CONVERSION KIT IS SUITABLE FOR A WIDE RANGE OF LED FITTINGS

- AC LED Load
- Suitable for a wide range of AC LED Tube, Down lights.
- Short-circuit protection at battery terminals.
- Extra low standby power consumption.
- Able to power a LED light fitting at a reduce luminous flux for two hours or more
- High Temperature 70 °C Li-Ion battery
- Automatically activated in the event of power cuts
- Offer a good luminous flux to facilitate the evacuation.



CLASS I

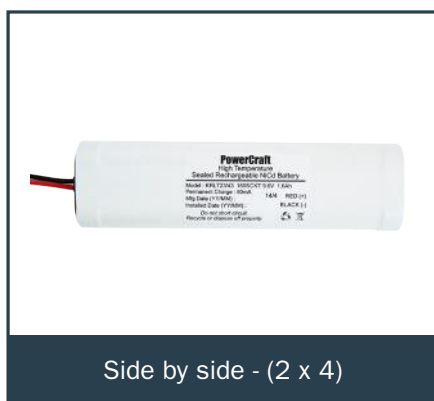
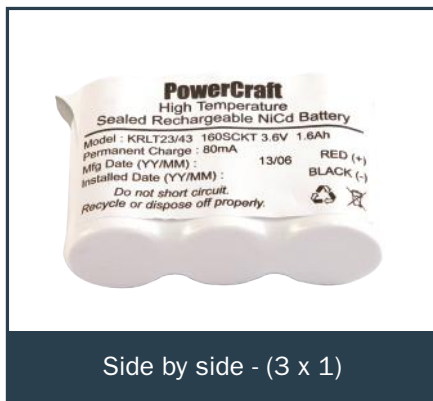


# BATTERY PACKS

For many years, Powercraft have always recognized the importance of the quality of batteries used with a reliable conversion kit to ensure the proper function of an emergency lighting therefore PowerCraft develops and manufactures its own Nickel-Cadmium rechargeable batteries that can have a service life of at least four years in maintained and non-maintained operation at high temperatures and constant charging. Powercraft's Nickel-Cadmium batteries are also tested to the most stringent standards applicable which is IEC 61951 to make sure that these batteries can provide full output during emergency situations.







BATTERY TYPE	BATTERY CONFIGURATION (Rows x No. of Cells)	Total No. of Cells per pack	Cell Size	Pack Dimension (mm)
NiCd 3.6V 1.6AH	Cane (1 x 3)	3	Sub-C	130 x ø 34
NiCd 3.6V 1.6AH	Side by Side (3 x 1)	3	Sub-C	70 x 47 x 24
NiCd 3.6V 2.5AH	Cane (1 x 3)	3	C	152 x ø 27
NiCd 3.6V 2.5AH	Side by Side (3 x 1)	3	C	80 x 50 x 27
NiMh 4.8V 1.3AH	Side by Side (2 x 2)	4	AA	105 x 30 x 16
NiCd 4.8V 1.6AH	Cane (1 x 4)	4	Sub-C	174 x ø 24
NiCd 4.8V 1.6AH	Side by Side (2 x 2)	4	Sub-C	92 x 47 x 24
NiCd 4.8V 2.5AH	Cane (1 x 4)	4	C	201 x ø 27
NiCd 4.8V 2.5AH	Side by Side (4 x 1)	4	C	105 x 56 x 27
NiCd 4.8V 4.5AH	Cane (1 x 4)	4	D	241 x ø 34
NiCd 4.8V 4.5AH	Cane + Cane (1 x 2) + (1 x 2)	2 + 2	D	(121 x ø 34) + (121 x ø 34)
NiCd 9.6V 1.6AH	Side by Side (2 x 4)	8	Sub-C	173 x 46 x 24
NiCd 9.6V 2.5AH	Side by Side (2 x 4)	8	C	201 x 54 x 27
Li-ion 12.8V 3.2Ah	Cane (1 x 4)	4	26650	263 x ø 33

\*\*\*Note: Technical Specification subject to change without prior notice



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