

# EX Dustproof

ZONE  
21/22

EX

IP  
66

## Explosion, water, vapour & dust proof.

Our IP66 LED dustproof is composed of a UV stabilized polycarbonate body which gives excellent protection from long-term degradation from sunlight as well as an IK08/5J diffuser impact rating.

Ex tb IIIC T85°C Db IP65  
MASC S/20-2130X



Proudly manufactured in  
**South Africa** using  
European LED Technology



**kV Protection:**  
Up to 4kV, 10kV  
on request



Indoor



**Diffuser:**  
IK08/5J



**5 Year  
Warranty**

**energywise**

Better light  
through research.

# INTRODUCING



**A stout EX luminaire that is fully serviceable and rated for zone 21 and 22 applications.**

**Our EX Dustproof** comes with an ambient temperature rating of up to  $\leq 35$  degrees. We have two variants of this luminaire, whilst the econo ticks all the zone 21 and 22 applications the premium adds a vandal resistant shroud and more elegant aesthetic

**We then manufactured** these fittings utilizing EX technology sourced from the leading component manufacturers in Europe. These luminaries were then put through months of testing to ensure that the final product could deliver against our exacting specifications

**The final result,** an EX light years in the making, yet at the leading edge of technological advancements in LED EX light technology, available today.

## KEY FEATURES

### 3 SIZE OPTIONS

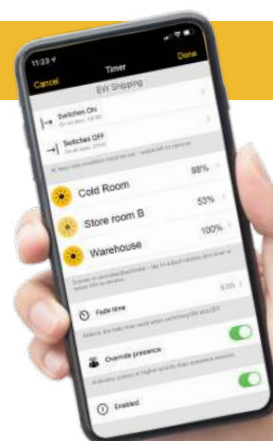
- EX Dustproof 2 Foot
- EX Dustproof 4 Foot
- EX Dustproof 5 Foot

### DIFFUSER

- Impact rating IK08/5J

### TEMPERATURE

- Ambient room temperature  $-25^{\circ}\text{C}$  to  $\leq 35^{\circ}\text{C}$ .



**Optional:**  
Bluetooth, Wifi,  
Dali & Bi Level.  
Casambi App  
featured above.



\* $25^{\circ}\text{C}$  is for Textbooks, Not Africa's Sun:  
All EW Lights are designed for the  $30^{\circ}\text{C}$  Reality. Minimum.

# Specifications

**Specped for every situation.** All our EX BayXP fittings are zone 21 & 22 certified:  
Ex 1b IIC T85°C Db IP65 - MASC S/20-2130X



**kV Protection:**  
Up to 4kV, 10kV  
on request



**5000K standard**  
3000K, 4000K,  
6500K available  
CR>80 R9>13



**Indoor/Outdoor**



**Impact Resistance:**  
IK08/5J



**Diffuser:**  
Polycarbonate



**Construction:**  
Aluminum &  
Stainless Steel



**L&B Life Rating**  
L90 B10  
54 000 hrs

## EX Dustproof

### 2 Foot 4 Foot 5 Foot

Raw Lumen:	2920 lm	4100 lm	5840 lm	7528 lm	7300 lm	8200 lm
Effective Lumen:	2540 lm	3675 lm	5052 lm	6276 lm	6230 lm	7010 lm
240V:	18W	29W	36W	45W	44W	50W
Power Factor:	0.95	0.95	0.95	0.95	0.95	0.95
Raw Efficacy:	161 lm/w	144 lm/w	165 lm/w	168 lm/w	169 lm/w	166 lm/w
Effective Efficacy:	140 lm/w	129 lm/w	143 lm/w	140 lm/w	144 lm/w	142 lm/w
L90 B10 @ 25°:	>54 000 Hrs		>54 000 Hrs		>54 000 Hrs	
L80 B10 @ 35°:	>50 000 Hrs		>50 000 Hrs		>50 000 Hrs	

Fitting Length:

**620mm**

**1250mm**

**1540mm**



**energywise**  
chemical agents

Resistance KEY:

✓ Resistant | ○ Relatively Resistant | ⊗ Non-resistant

Chemical agent	Polycarbonate	Aluminium
Acetic acid 10%	✓	✓
Acetone	⊗	✓
Alcoholic beverages	✓	✓
Aluminum sulphate	✓	✓
Ammonia 5%	⊗	✓
Aniline	⊗	✓
Arsenic acid 20%	✓	✓
Benzene	⊗	✓
Benzyl alcohol	⊗	⊗
Benzyl	⊗	✓
Bromine	⊗	⊗
Calcium Chloride	✓	✓
Calcium nitrate	✓	✓
Carbon tetrachloride	⊗	✓
Carbonic acid	⊗	✓
Caustic potash	⊗	⊗
Cement	✓	✓
Chlorhydric acid 1-5%	✓	⊗
Chlorine liquids (vapours)	⊗	⊗
Chloroform	⊗	✓
Chromic acid	⊗	✓
Citric acid 20%	✓	✓
Copper sulphate	✓	⊗
Diesel-naphtha oil	⊗	✓
Ethyl alcohol	✓	✓
Ethyl chloride	⊗	⊗
Ethyl ether	⊗	✓
Food oils and fats	⊗	✓
Formic acid 10%	✓	⊗
Glycerine	✓	✓
Hexane	✓	✓
Iodine	⊗	⊗
Iron chloride	✓	⊗
Isopropyl alcohol	⊗	✓
Lubricating oil	✓	✓
Magnesium sulphate	✓	✓
Methanol	⊗	✓
Mineral oils	✓	✓
Nitric acid 20%	⊗	⊗
Oxygen	✓	✓
Ozone	✓	✓
Perchloric acid 10%	✓	⊗
Petrol	⊗	✓
Phenol	⊗	✓
Potassium bromide	✓	⊗
Potassium nitrate	✓	✓
Potassium permanganate	✓	✓
Sea climate	✓	⊗
Silicon oils	✓	✓
Soda bleach 15%	⊗	⊗
Sodium chloride	✓	⊗
Sodium hydroxide 5%	⊗	⊗
Sodium sulphate	✓	✓
Sugar	✓	✓
Sulphur	✓	✓
Sulphuric acid 30%	✓	⊗
Toluene	⊗	✓
Trichloroethylene	⊗	✓
Zinc sulphate	✓	⊗

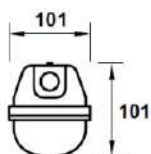
## Installation

**Easy to install, Saving you time & money**

The EX Dustproof can either be installed as pendant or surface mounted.

### Suspension Mounting

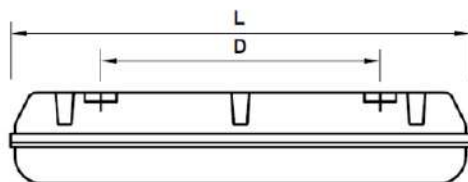
**Spring** Quick snap-on triangular attachment, no tools required.



### Dimensions

L	D
660	390
1277	800
1573	1100

**Surface** - Simple, quick surface installation (installation instructions provided in box)



Disclaimer:

While every effort is made to ensure the accuracy of technical details at the time of publication, we reserve the right to modify or upgrade any product or component specifications without prior notice. Our products undergo continuous improvements in technology, energy efficiency, safety, and cost-effectiveness to meet evolving industry standards and supplier updates.

All upgrades are made to enhance product quality, and as such, no claims or complaints will be entertained regarding specification changes.

We are ISO 9001:2015 compliant, and our assembly line adheres to IEC 60958 guidelines. Our products are covered by a Product Liability Policy, and our LED products come with a 5-year warranty (T&Cs apply—please contact Head Office for details).



# Distribution Options

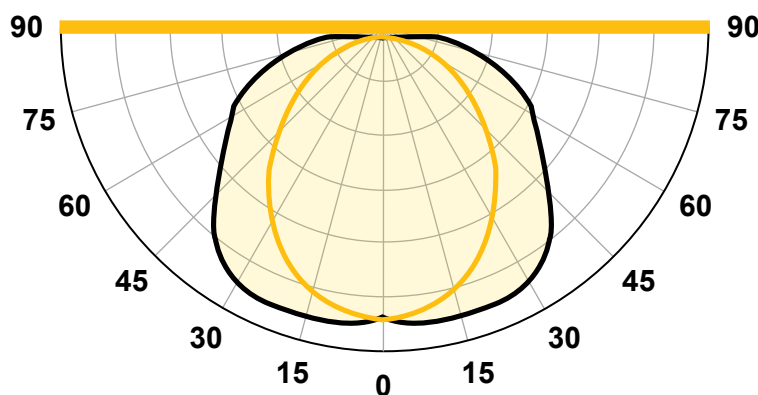
## Precision Lighting for Zone 21/22 Environments.

### Reliable, Targeted Illumination for Safety & Efficiency

Our Zone 21/22 LED Dustproof luminaires are engineered to deliver precise, controlled lighting in hazardous environments where dust and combustible particles are present. Unlike conventional fixtures that scatter light inefficiently, these luminaires utilize specialized optics to direct illumination exactly where it's needed, enhancing visibility and minimizing glare. With a selection of 30°, 60°, 90°, and 110° beam angles, as well as asymmetrical optics for vertical illumination.

Designed with high-quality European components, our Zone 21/22 LED Dustproof luminaires combine durability, efficiency, and superior light control, ensuring reliable performance in the most demanding hazardous environments.

## Dustproof Distribution



## A Closer Look

### Engineered to the highest standards.

#### Shroud

Aluminum shroud adds a premium element to the tamper protection whilst our Econo version is still able to maintain a zone 21/22 certification.

#### Diffuser

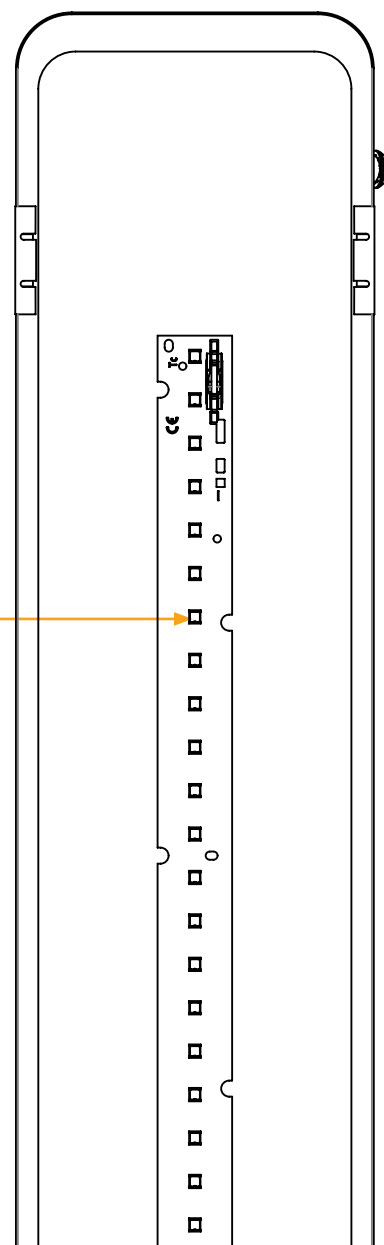
Polycarbonate diffuser offers great IK08 impact protection and efficient distribution of light. The continuous silicone gasket allows a water-resistant (IP66) assembly.

#### LEDs

Source from the best component manufacturers in Europe to ensure maximum lifespan, quality and light spectrums.

#### Finishings

All fasteners are Stainless Steel 304 for longevity.



# Features

## Standard across the EX Dustproof range.



Indoor/Outdoor



Sustainably Recyclable.



Polycarbonate Body.



Serviceable: All units are serviceable and all parts replaceable.



5000K Standard, 3000K, 4000K, 6500K on request.



Colour rendition index 80+



LED Life rating: L90 B10, 54 000 hrs



Earth connection and CLASS I insulation fixture.



Optic impact rating IK08/5J.



Voltage surge protection up to 4kV.



All screws & mini shackles in stainless steel 316.



Suspended by chain or steel cable. (not included)



Surface mount.



Top Bin Chips <3 MacAdams

# Extras

## Optional extras.



Casambi bluetooth technology.



All units can be fitted with Dali or bi-level driver.



Voltage surge protection. Up to 10kV.



IES files available.



Motion Sensor



VOLTpro

### Effective Lumen Output After Warm-up

We adhere to industry best practices in providing accurate Effective Performance Data (Lumens, Watts, and L&B) that account for driver and LED thermal losses during the warm-up period.

To ensure precise measurements, we conduct Energy and Photometric Testing only after the LED within the fitting has been powered on long enough to reach a stable and constant lumen output—achieving thermal equilibrium at an ambient temperature ( $T_a$ ) of 35°C.

Unfortunately, some suppliers misrepresent efficacy by inflating lumen values 10–20% above the true effective output. This is often done by using raw LED photometric data, which:

- Excludes driver losses (typically 2–5%)

- Ignores thermal adjustment losses, which can take 20–240 minutes and account for 7–15% reduction in output

Given these factors, the actual Effective Lumen Output is often lower than raw values suggest. In extreme cases, some suppliers report only raw LED values, completely disregarding real-world performance.

For transparency and accuracy, we ensure our data reflects true effective lumens, providing reliable performance metrics you can trust.



**5 year warranty:**

Please visit  
[www.energywise.co.za](http://www.energywise.co.za)

Designed and  
Manufactured by

**energywise**

**Better Light  
Through Research.**

[sales@energywise.co.za](mailto:sales@energywise.co.za) | [www.energywise.co.za](http://www.energywise.co.za)

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Postal address: PO Box 1166, Kloof, South Africa, 3640



Permit number  
MASC-098MR



# Energywise lighting options

Energywise specialises in LED luminaries for industrial, EX, commercial and horticultural applications.

## INDUSTRIAL



**Bay XP**  
Factories, Warehouses,  
Cold rooms etc.

**Standard**  
Height: 6-25m  
IP: 65  
Temp: 40/65°C



**Bay XL**  
Factories, Warehouses,  
Supply rooms etc.

**Standard**  
Height: 3-20m  
IP: 40  
Temp: 30°C



**Bay XE**  
Factories, Warehouses,  
Supply rooms etc.

**Standard**  
Height: 6-25m  
IP: 20  
Temp: 30°C



**DUSTPROOF**  
Warehouses, Car  
parks, Corridors.

**Standard**  
Height: 2.5-8m  
IP: 66  
Temp: 35°C



**VANDAL-RESISTANT  
DUSTPROOF** Car parks,  
Corridors, Mills.

**Standard**  
Height: 2.5-8m  
IP: 66  
Temp: 35°C



**PUREBox Panel**  
Medical & laboratory,  
Clean rooms etc.

**Standard**  
Height: 3-5m  
IP: 54  
Temp: 35°C



**Torch Bulkhead**  
Heavy industrial areas.

**Standard**  
Height:  
IP: 65  
Temp: 30°C



**Pod IP65**  
Tamperproof and  
nearly unbreakable.

**Standard**  
Height: 2-5m  
IP: 65  
Temp: 35°C



**Bay XF**  
Get the job done,  
Glare-Free.

**Standard**  
Height: 2-10m  
IP: 20  
Temp: 30°C



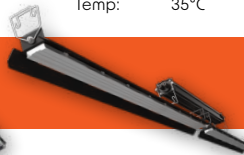
**Plate XP**  
Swiss army knife  
of lighting.

**Standard**  
Height: 6-25m  
IP: 65  
Temp: 35°C



**TOBLO bay**  
Factories, Warehouses,  
Supply rooms etc.

**Standard**  
Height: 6-25m  
IP: 40  
Temp: 40/30°C



**Bay XT**  
Distribution centers,  
Warehouses etc.

**Standard**  
Height: 3-20m  
IP: 40  
Temp: 35°C



**Retrofit 44**  
Converting old HID  
tech to LED

**Standard**  
IP: 00  
Temp: 30°C



**Retrofit 22**  
Converting old HID  
bulkhead to LED

**Standard**  
IP: 00  
Temp: 35°C

## RETAIL & COMMERCIAL



**LEDrail 1000**  
Shops, Production  
facilities, parking

**Standard**  
Height: 2.5-10m  
IP: 40  
Temp: 30°C



**LEDrail 2000**  
Shops, Sheds,  
Underground parking

**Standard**  
Height: 2.5-10m  
IP: 40  
Temp: 30°C



**LEDrail 4000**  
Retail, board rooms,  
department stores.

**Standard**  
Height: 2.5-6m  
IP: 40  
Temp: 35°C



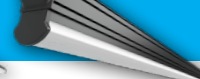
**LEDrail 8000**  
Retail, board rooms,  
department stores.

**Standard**  
Height: 2.5-6m  
IP: 40  
Temp: 35°C



**LEDrail 4-100**  
All retail outlets,  
showrooms, offices etc

**Standard**  
Height: 2.5-10m  
IP: 40  
Temp: 35°C



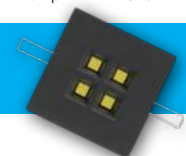
**LEDrail 4LCO**  
Shops, Production  
facilities, showrooms etc

**Standard**  
Height: 2.5-10m  
IP: 40  
Temp: 35°C



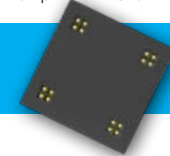
**Linear 4-300**  
Glare free  
precision lighting

**Standard**  
Height: 2.5-10m  
IP: 40  
Temp: 35°C



**Downlighter**  
Offices, retail and  
hospitality settings.

**Standard**  
IP: 40  
Temp: 30°C



**Panel 595x595**  
Offices, healthcare,  
educational facilities.

**Standard**  
IP: 40  
Temp: 30°C



**Panel 1195x595**  
Offices, commercial,  
educational settings.

**Standard**  
IP: 40  
Temp: 30°C



**EX Bay XP**  
Factories, Warehouses,  
Mills, Marine etc.

**Standard**  
Height: 6-25m  
IP: 65  
Temp: 40°C



**EX DUSTPROOF  
PREMIUM** Warehouses,  
Car parks, Mills.

**Standard**  
Height: 2.5-8m  
IP: 65  
Temp: 35°C



**EX DUSTPROOF**  
Warehouses, Car  
parks, Corridors, Mills.

**Standard**  
Height: 2.5-8m  
IP: 65  
Temp: 35°C



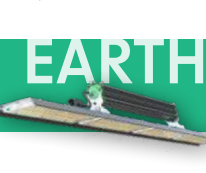
**EX Pod**  
Factories, Mines,  
Marine etc.

**Standard**  
Height: 2-5m  
IP: 68  
Temp: 40°C



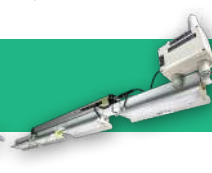
**EX Torch**  
Heavy industrial  
areas.

**Standard**  
IP: 65  
Temp: 40°C



**EARTHbay**  
Horticulture, Open  
areas etc

**Standard**  
From canopy: 0.5-2m  
IP: 65  
Temp: 35°C



**EARTHplate**  
Horticulture, Rack/  
Under shelf etc

**Standard**  
From canopy: 0.4-2m  
IP: 65  
Temp: 35°C



**EARTHpod**  
Horticulture,  
Propagation, Racks etc.

**Standard**  
From canopy: 0.2-1m  
IP: 65  
Temp: 35°C

## EARTH

Lights on. Job done.

**energywise**

Better light  
through research.