



## Leading the Green Initiatives

Marine, Offshore and Industrial  
Green Lighting Solutions



With over a decade of experience and technical know-how, SOP (Save Our Planet) by Beng Hui Marine Electrical places emphasis in the design and development of ideal LED solutions- providing green and innovative energy efficient technologies and meeting demands of the harsh Marine environment at the same time. Missioned to “Save our Planet”, SOP is focused on creating innovative, reliable and quality lights to lead the Green Initiatives.

LED optimizes energy consumption as compared to conventional lighting, reduces maintenance through improved durability and allows great savings to one's electricity consumption.

Selecting the right LED lighting for your applications remains a challenge for many owners, facilities managers or buyers. Most of the consumers are used to the traditional fluorescent lamps, incandescent bulbs or even the high intensity discharge lamps, available in fixed wattage with similar lumen output, similar lamp service life, standard lamp bases and similar conventional housing.

SOP pledges to deliver the highest-quality range of reliable LED lighting, allowing you to maximise your investment in operations and reducing your maintenance needed.

Be it a new vessel or an upgrade, “Going Green” is one of the ways you can amortize your investment within 2 - 3 years.



#### **Design Support**

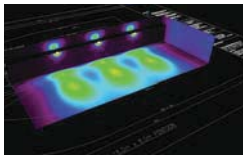
A good design is key to any lighting. With our technical know-how and in-house R&D capabilities, we are capable of LED engine design, Control hardware / software development, luminaire, electronic, optical and mechanical design.



#### **Quality Component Integration**

We make it a point to understand our clients' requirements and will be able to support in terms of:

Selecting suitable components to enhance product's efficiency and effectiveness, Tailoring products to customer's specific needs, adhering to environmental, safety and performance standards and the continuous support in the supply of components, after sales service and product training.



#### **Lux Calculation**

We will provide complimentary lux calculation for all initial stages of planning/ design up to completion. We produce summary reports that states light levels, what luminaries to use etc. Information provided are verified by real life light measurements and will give you an accurate simulation.



#### **Product demonstration**

We will be keen to conduct a brief product introduction at your office for our range of lightings. This will allow the contractors/ end-users to take a look at the quality and performance of the product prior to specification or purchase. Samples can also be given for further review purposes.



#### **Mock up**

The team will be able to provide mock-ups prior to committing on the whole project. This allows the contractors/ end-users to be guaranteed that the lightings will perform equivalently on site. Based on the project requirements, we can install a small section of the lighting equipment on a provided mock up area. The contractors/ end-users can then evaluate the mock up and make any necessary amendments or adjustments before embarking on the project.



#### **Installation service**

Our installation team is made up of engineers and sub-contractors trained and experienced in complete lighting system installation providing you with quality service and a worry-free experience. It is crucial that the products are installed to abide by SOP's standards as well as local building and electrical regulations. A well-installed system will ensure a longer service life and better performance.



#### **Extended warranty**

Extended warranty is available upon request, we look forward to ensuring your product is guaranteed to work for its longest service life possible.

## Saving with SOP LED Lighting Solutions

### Comparison of Traditional Lighting with SOP LED Light

Type / Description	Total No of Lamps	System Power	Operation Hours	kWh/year
<b>Electricity Consumption for Traditional Lighting</b>				
2 Feet Fluorescent Fitting, 18W T8 Fluorescent Tube	100	*32	24	28,032
4 Feet Fluorescent Fitting, 36W T8 Fluorescent Tube	100	*48	24	42,048
<b>Electricity Consumption for LED Lighting</b>				
2 Feet LED Luminaire, 12.5W 2 Feet SOP LED Linear Lamp	100	12.5	24	10,950
4 Feet LED Luminaire, 24W 4 Feet SOP LED Linear Lamp	100	24	24	21,024

\*Ballast Loss based on Magnetic Ballast

	Fluorescent Tube (2Ft 18W)	SOP LED Lamp (2Ft 12.5W)	Fluorescent Tube (4Ft 36W)	SOP LED Lamp (4Ft 24W)
Energy Consumption (kWh) Per year	28,032	10,950	42,048	21,024
Energy Savings (kWh) per year	17,082		21,024	
Savings of Energy (Annually)	SGD 2,562.30		SGD 3,153.60	

\*Above calculation based on example of 100 lamps with Energy Cost : S\$0.15 per kWh

- Energy saving up to 60%
- Long service life of 50,000 hours at 45°C operating temperature
- Reduced maintenance & operation costs
- Minimize spares on board

### Easy Retrofitting and Installation onboard Vessel



Secure the gear tray and cover, back to luminaire and ready to be used



Connect the wire to the power supply



Drill hole on gear tray to secure the lamp clip



On board Watertight Fixture



Remove the watertight cover



Remove the gear tray and disconnect supply cable

# EX-PROOF LED TUBULAR LIGHT FITTING

## SXCL Series



### TECHNICAL INFORMATION

<b>Certification</b>	ATEX and IECEx approvals for Zones 1/2 & 21/22 applications Ex db IIC T6 Gb and Ex tb IIIC T85°C Db IP66 Ingress Protection
<b>Housing</b>	Aluminium alloy housing with anti-corrosion powder coating RAL5002 Ultramarine blue colour Options for glass or polycarbonate diffuser
<b>Electric</b>	Integrated ACIC light engine (AC100V or AC240V options) Power factor >0.93
<b>Lifespan</b>	Ultra-long LED service life of 100,000 hours
<b>Connection</b>	¾" NPT Ex de cable gland for cables with steel wire, aluminium, braided and tape armour. Supports cable diameter from 11.5mm to 16mm Option for additional second cable gland for emergency power input
<b>Beam Angle</b>	158°
<b>EMC</b>	IEC 60533 electromagnetic compatibility to all maritime vessels and offshore MDUs
<b>Emergency Lighting</b>	Optional emergency type luminaire includes 3hrs battery backup for sustained emergency lighting using secondary LED light source Maintained and non-maintained modes are supported

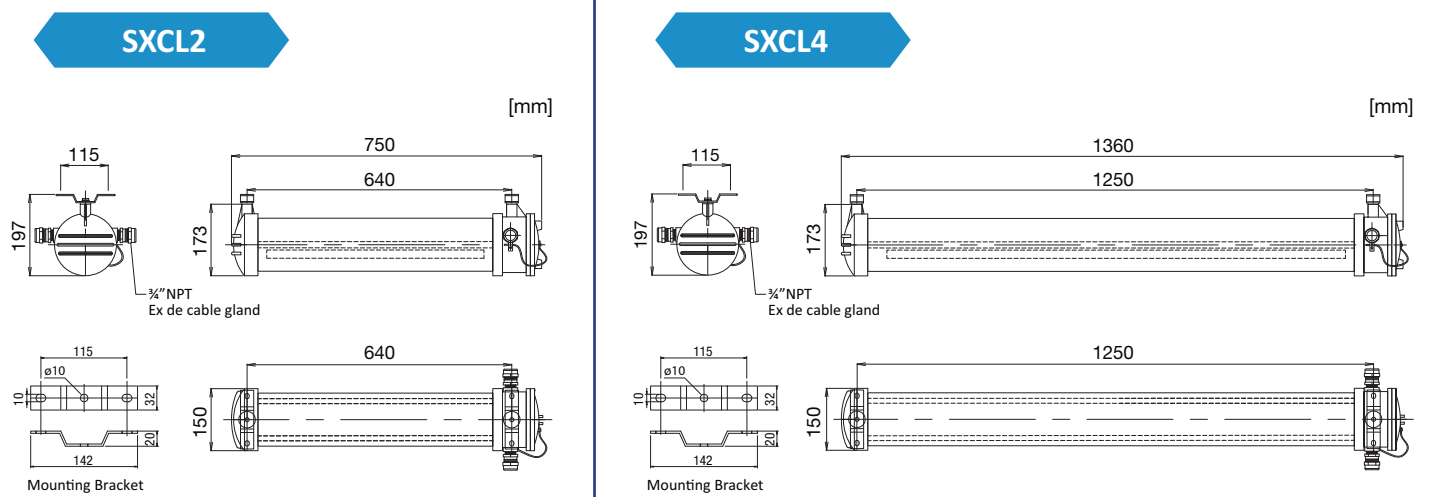


## CERTIFICATIONS



ATEX Directive (2014/34/EU)  
INERIS 20ATEX0008X  
IECEx INE 20.0007X

Ex II 2 GD  
Ex db IIC T6 Gb  
Ex tb IIIC T85°C Db

## MEASUREMENTS



Ideal Replacement:

	SXCL21 for 1X20W		SXCL41 for 1X20W
	SXCL22 for 2X20W		SXCL42 for 2X20W

## ORDER CODES

Item Code	Type	Diffuser	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Weight
CLSXC215PA1	SXCL215PA1	Polycarbonate	100V - 120V AC	1x12.5W	5000K	-20°C ~ +45°C	970lm	5.6kg
CLSXC225PA1	SXCL225PA1	Polycarbonate	100V - 120V AC	2x12.5W	5000K	-20°C ~ +45°C	1940lm	5.7kg
CLSXC415PA1	SXCL415PA1	Polycarbonate	100V - 120V AC	1x24W	5000K	-20°C ~ +40°C	1940lm	8.6 kg
CLSXC425PA1	SXCL425PA1	Polycarbonate	100V - 120V AC	2x24W	5000K	-20°C ~ +40°C	3880lm	8.7kg
CLSXC215PA2	SXCL215PA2	Polycarbonate	220V - 240V AC	1x12.5W	5000K	-20°C ~ +45°C	970lm	5.6kg
CLSXC215PA2B	SXCL215PA2B	Polycarbonate	220V - 240V AC	1x12.5W	5000K	0°C ~ +45°C	970lm	6.6kg
CLSXC225PA2	SXCL225PA2	Polycarbonate	220V - 240V AC	2x12.5W	5000K	-20°C ~ +45°C	1940lm	5.7kg
CLSXC225PA2B	SXCL225PA2B	Polycarbonate	220V - 240V AC	2x12.5W	5000K	0°C ~ +45°C	1940lm	6.7kg
CLSXC415PA2	SXCL415PA2	Polycarbonate	220V - 240V AC	1x24W	5000K	-20°C ~ +40°C	1940lm	8.7kg
CLSXC415PA2B	SXCL415PA2B	Polycarbonate	220V - 240V AC	1x24W	5000K	0°C ~ +40°C	1940lm	9.8kg
CLSXC425PA2	SXCL425PA2	Polycarbonate	220V - 240V AC	2x24W	5000K	-20°C ~ +40°C	3880lm	8.9kg
CLSXC425PA2B	SXCL425PA2B	Polycarbonate	220V - 240V AC	2x24W	5000K	0°C ~ +40°C	3880lm	9.9kg
CLSXC215GA1	SXCL215GA1	Glass	100V - 120V AC	1x12.5W	5000K	-20°C ~ +55°C	970lm	8.7kg
CLSXC225GA1	SXCL225GA1	Glass	100V - 120V AC	2x12.5W	5000K	-20°C ~ +55°C	1940lm	8.8kg
CLSXC415GA1	SXCL415GA1	Glass	100V - 120V AC	1x24W	5000K	-20°C ~ +55°C	1940lm	14.7kg
CLSXC425GA1	SXCL425GA1	Glass	100V - 120V AC	2x24W	5000K	-20°C ~ +55°C	3880lm	14.9kg
CLSXC215GA2	SXCL215GA2	Glass	220V - 240V AC	1x12.5W	5000K	-20°C ~ +50°C	970lm	8.7kg
CLSXC215GA2B	SXCL215GA2B	Glass	220V - 240V AC	1x12.5W	5000K	0°C ~ +50°C	970lm	9.7kg
CLSXC225GA2	SXCL225GA2	Glass	220V - 240V AC	2x12.5W	5000K	-20°C ~ +50°C	1940lm	8.8kg
CLSXC225GA2B	SXCL225GA2B	Glass	220V - 240V AC	2x12.5W	5000K	0°C ~ +50°C	1940lm	9.8kg
CLSXC415GA2	SXCL415GA2	Glass	220V - 240V AC	1x24W	5000K	-20°C ~ +55°C	1940lm	14.7kg
CLSXC415GA2B	SXCL415GA2B	Glass	220V - 240V AC	1x24W	5000K	0°C ~ +55°C	1940lm	15.8kg
CLSXC425GA2	SXCL425GA2	Glass	220V - 240V AC	2x24W	5000K	-20°C ~ +55°C	3880lm	14.9kg
CLSXC425GA2B	SXCL425GA2B	Glass	220V - 240V AC	2x24W	5000K	0°C ~ +55°C	3880lm	15.9kg

\*Type number ending with "B" denotes emergency type luminaire with 3hr battery backup for sustained emergency lighting.  
Maintained emergency lighting is also supported when luminaire is connected to both normal mains and emergency power supplies.

# EX-PROOF FLUORESCENT TUBULAR LIGHT FITTING

## SXCF Series



### TECHNICAL INFORMATION

<b>Certification</b>	ATEX and IECEx approvals for Zones 1/2 & 21/22 applications Ex db IIC T6 Gb and Ex tb IIIC T85°C Db IP66 Ingress Protection
<b>Housing</b>	Aluminium alloy housing with anti-corrosion powder coating RAL5002 Ultramarine blue colour Options for glass or polycarbonate diffuser
<b>Connection</b>	¾" NPT Ex de cable gland for cables with steel wire, aluminium, braided and tape armour. Supports cable diameter from 11.5mm to 16mm Option for additional second cable gland for emergency power input
<b>EMC</b>	IEC 60533 electromagnetic compatibility to all maritime vessels and offshore MDUs
<b>Emergency Lighting</b>	Optional emergency type luminaire includes 3hrs battery backup for sustained emergency lighting on one fluorescent tube only Maintained and non-maintained modes are supported
<b>Warranty</b>	1 year warranty

## CERTIFICATIONS

ATEX Directive (2014/34/EU)

INERIS 20ATEX0008X

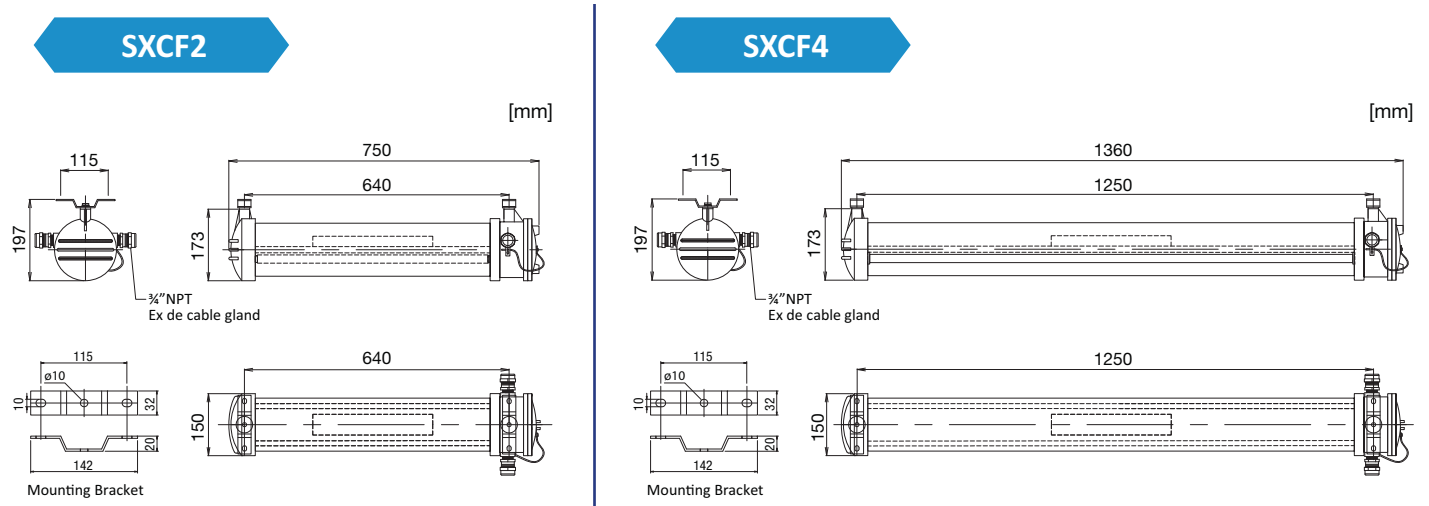
IECEx INE 20.0007X

Ex II 2 GD

Ex db IIC T6 Gb

Ex tb IIIC T85°C Db

## MEASUREMENTS



## ORDER CODES

Item Code	Type	Diffuser	Main Voltage	Power	Ambient Temp (Ta)	Weight
CLSXCF215PA	SXCF215PA	Polycarbonate	100V - 240V AC	1x18W	-20°C ~ +45°C	5.2kg
CLSXCF215PAB	SXCF215PAB	Polycarbonate	100V - 240V AC	1x18W	0°C ~ +45°C	6.3kg
CLSXCF225PA	SXCF225PA	Polycarbonate	100V - 240V AC	2x18W	-20°C ~ +45°C	5.3kg
CLSXCF225PAB	SXCF225PAB	Polycarbonate	100V - 240V AC	2x18W	0°C ~ +45°C	6.4kg
CLSXCF415PA	SXCF415PA	Polycarbonate	100V - 240V AC	1x36W	-20°C ~ +40°C	7.6kg
CLSXCF415PAB	SXCF415PAB	Polycarbonate	100V - 240V AC	1x36W	0°C ~ +40°C	8.7kg
CLSXCF425PA	SXCF425PA	Polycarbonate	100V - 240V AC	2x36W	-20°C ~ +40°C	7.7kg
CLSXCF425PAB	SXCF425PAB	Polycarbonate	100V - 240V AC	2x36W	0°C ~ +40°C	8.8kg
CLSXCF215GA	SXCF215GA	Glass	100V - 240V AC	1x18W	-20°C ~ +55°C	8.3kg
CLSXCF215GAB	SXCF215GAB	Glass	100V - 240V AC	1x18W	0°C ~ +55°C	9.4kg
CLSXCF225GA	SXCF225GA	Glass	100V - 240V AC	2x18W	-20°C ~ +55°C	8.4kg
CLSXCF225GAB	SXCF225GAB	Glass	100V - 240V AC	2x18W	0°C ~ +55°C	9.5kg
CLSXCF415GA	SXCF415GA	Glass	100V - 240V AC	1x36W	-20°C ~ +55°C	13.6kg
CLSXCF415GAB	SXCF415GAB	Glass	100V - 240V AC	1x36W	0°C ~ +55°C	14.7kg
CLSXCF425GA	SXCF425GA	Glass	100V - 240V AC	2x36W	-20°C ~ +55°C	13.7kg
CLSXCF425GAB	SXCF425GAB	Glass	100V - 240V AC	2x36W	0°C ~ +55°C	14.8kg

\*Type number ending with "B" denotes emergency type luminaire with 3hr battery backup for maintained emergency lighting on one fluorescent tube. Maintained emergency lighting on all fluorescent tubes is also supported when connected to both normal mains and emergency power supplies.

# EX-PROOF LED FLOODLIGHT

## SXF80 Series



- ✓ **COMPACT**
- ✓ **ROBUST**
- ✓ **LIGHTWEIGHT**
- ✓ **VIBRATION-PROOF**



## TECHNICAL INFORMATION

<b>Certification</b>	ATEX and IECEx approvals certified by BV and ClassNK for Zones 1/2 & 21/22 applications Ex db eb op is IIC T6/T5/T4 Gb and Ex tb op is IIIC T80°C/T100°C/T135°C Db IP66 and IP67 Ingress Protection IK08 Impact Protection
<b>Housing</b>	Marine grade seawater resistant aluminium alloy body with anti-corrosion powder coating SUS316 stainless steel mounting bracket, protection guard and external fasteners RAL5002 Ultramarine blue colour
<b>Electric</b>	Integrated ACIC light engine supports dual voltage AC100V-120V/220V-240V ELV dimming support Power factor >0.99
<b>Lifespan</b>	Ultra-long LED service life of 100,000 hours @ 40°C
<b>Connection</b>	1x M20 Ex de cable gland for non-armoured cable of diameter 11mm to 15mm Option for additional and/or different size cable glands Ex e external GRP junction box with terminals up to 4mm <sup>2</sup>
<b>Beam Angle</b>	Available in both narrow and wide beams
<b>EMC</b>	IEC 60533 electromagnetic compatibility to all maritime vessels and offshore MDUs



## CERTIFICATIONS

### SXF8011

**ATEX Directive (2014/34/EU)**  
**EPS 18 ATEX 1 191 X**  
**IECEx EPS 18.0097X**

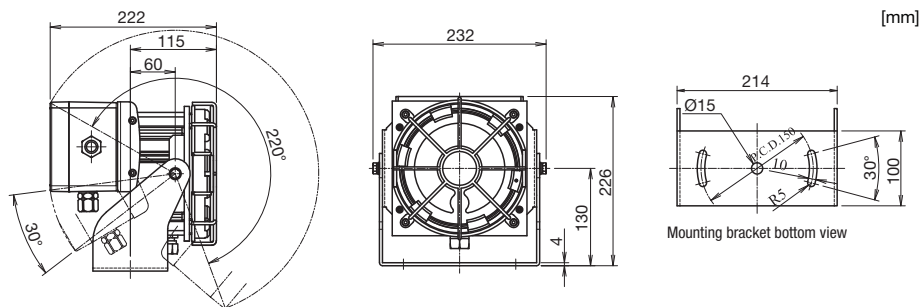
**Ex II 2 GD**  
Ex db eb op is IICT6/T5 Gb  
Ex tb op is IIICT80°C/T100°C Db  
 $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +40^{\circ}\text{C}/+50^{\circ}\text{C}$

### SXF8012 / SXF8013

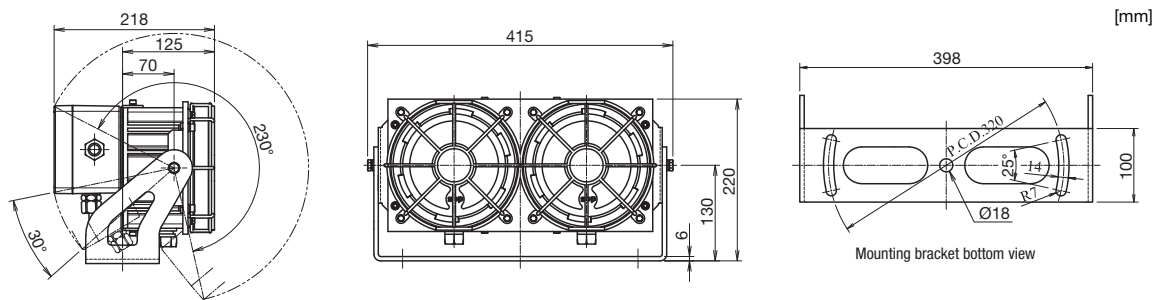
**Ex II 2 GD**  
Ex db eb op is IICT6/T5/T4 Gb  
Ex tb op is IIICT80°C/T100°C/T135°C Db  
 $-40^{\circ}\text{C} \leq T_{\text{amb}} \leq +30^{\circ}\text{C}/+40^{\circ}\text{C}/+50^{\circ}\text{C}$

## MEASUREMENTS

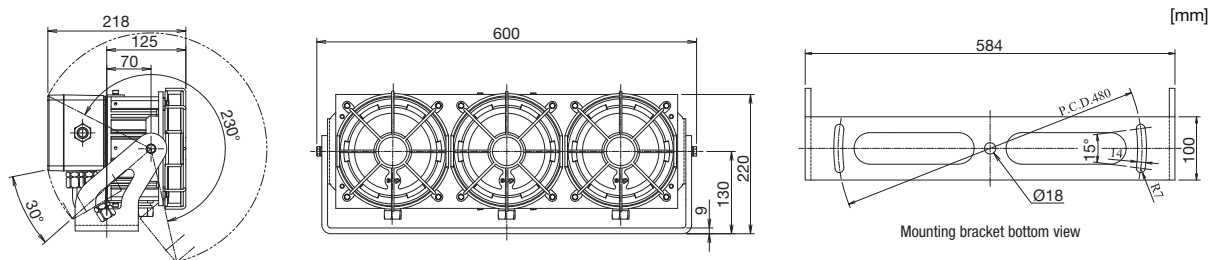
### SXF8011



### SXF8012



### SXF8013



#### Ideal Replacement:

**SXF8011 for:** 150W (MH), 250W (Mercury), 500W (Halogen)  
**SXF8012 for:** 250W (MH), 400W (Mercury), 1000W (Halogen)  
**SXF8013 for:** 250W (HPS), 400W (MH), 1500W (Halogen)

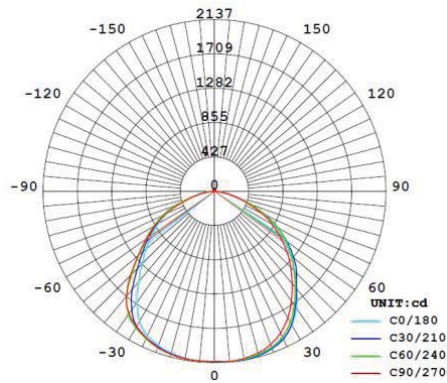
## ORDER CODES

Item Code	Type	Main Voltage	Power	CCT	Beam Angle	System Lumen	Peak Candlepower	Weight
CIGLASXF8011W	SXF8011W	100V - 120V AC / 220V - 240V AC	78W	5000K	108°	6000lm	2000cd	5.8Kg
CIGLASXF8011N	SXF8011N	100V - 120V AC / 220V - 240V AC	78W	5000K	36°	5680lm	7500cd	6.0Kg
CIGLASXF8012W	SXF8012W	100V - 120V AC / 220V - 240V AC	156W	5000K	108°	12000lm	4000cd	11.5Kg
CIGLASXF8012N	SXF8012N	100V - 120V AC / 220V - 240V AC	156W	5000K	36°	11800lm	16000cd	11.7Kg
CIGLASXF8013W	SXF8013W	100V - 120V AC / 220V - 240V AC	234W	5000K	108°	17100lm	6400cd	17.0Kg
CIGLASXF8013N	SXF8013N	100V - 120V AC / 220V - 240V AC	234W	5000K	36°	16900lm	22000cd	17.3Kg

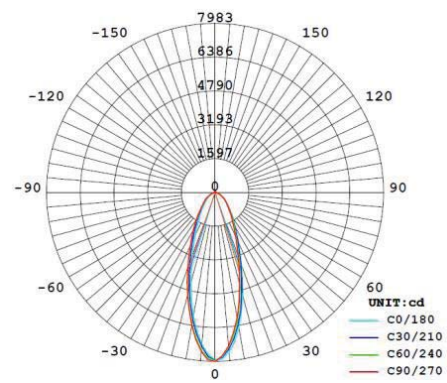
\*\* Optional DC24V

## PHOTOMETRIC DATA

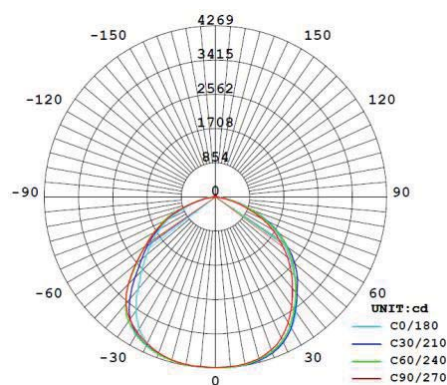
**SXF8011F**



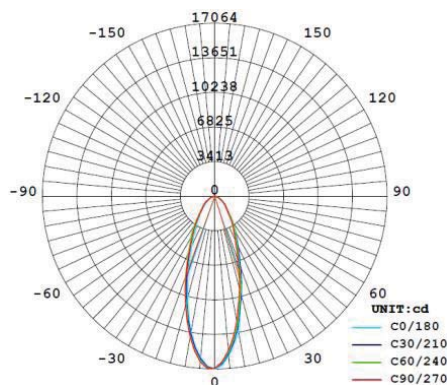
**SXF8011N**



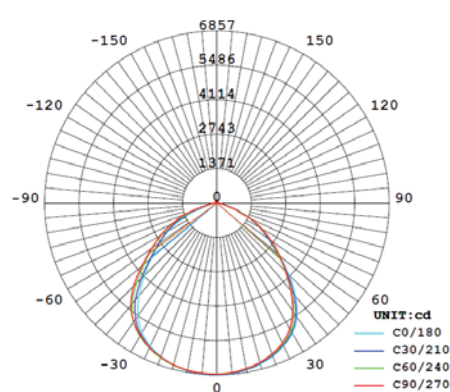
**SXF8012F**



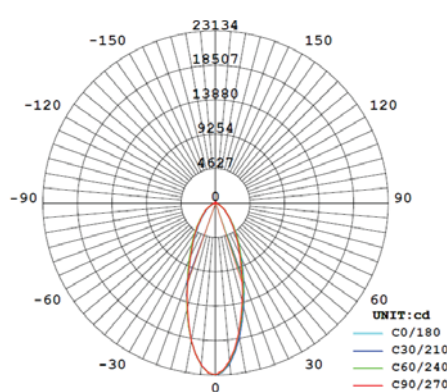
**SXF8012N**



**SXF8013F**



**SXF8013N**



# EX-PROOF LED PENDANT LIGHT

## SXPL Series



## TECHNICAL INFORMATION

<b>Certification</b>	ATEX and IECEx approvals certified by CSA and Sira for Zones 1/2 & 21/22 applications EX db IIC T6 Gb and EX tb IIIC T85°C Db IP66 Ingress Protection
<b>Housing</b>	Marine grade seawater resistant aluminium alloy body with anti-corrosion powder coating Borosilicate glass diffuser Stainless steel protection guard and external fasteners RAL5002 Ultramarine blue colour
<b>Electric</b>	AC100V, AC240V or DC24V options Power factor >0.97
<b>Lifespan</b>	Long LED service life of 50,000 hours
<b>Connection</b>	4x M20 cable entries Supplied with 1x M20 Ex de cable gland for 11.5mm to 16mm diameter cables with steel wire, aluminium, braided and tape armour, and 3x Ex de stopper plugs Option for additional cable glands or glands for non-armoured cable
<b>Beam Angle</b>	160°
<b>EMC</b>	IEC 60533 electromagnetic compatibility to all maritime vessels and offshore MDUs

## CERTIFICATIONS

ATEX Directive (2014/34/EU)

CSANe 21ATEX1065X

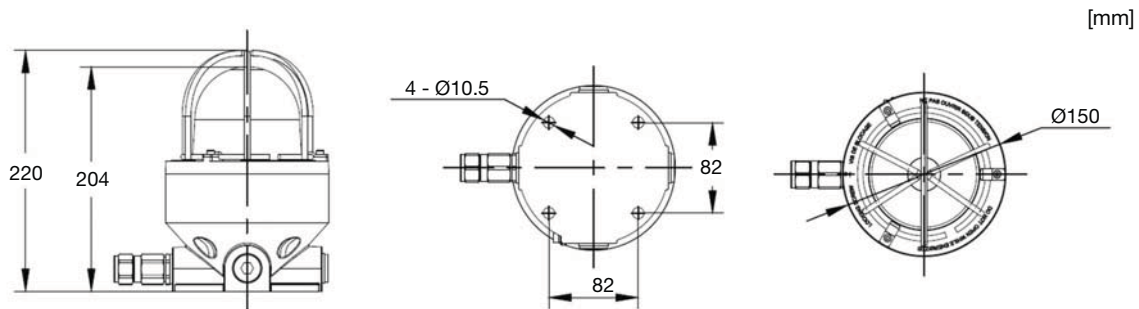
IECEX CSAE 21.0015X

 II 2 GD

EX db IIC T6 Gb

EX tb IIIC T85°C Db

## MEASUREMENTS



## ORDER CODES

Ideal Replacement:



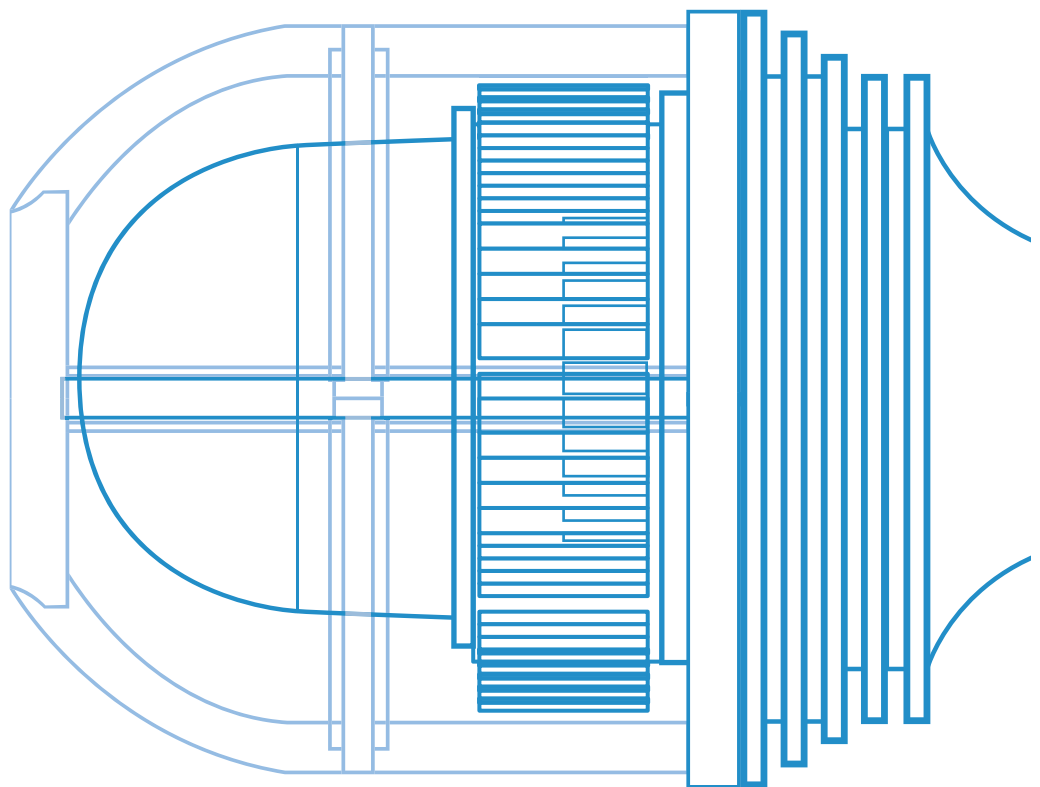
Item Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
CLSXPL13A2	SXPL13A2	220V - 240V AC	13W	5000K	-25°C ~ +50°C	900lm
CLSXPL12A1	SXPL12A1	100V - 120V AC	12W	5000K	-25°C ~ +50°C	900lm
CLSXPL10D	SXPL10D	24V DC	10W	5000K	-25°C ~ +50°C	900lm



# LED MODULE SERIES

## GLOWING IN DARKNESS

SOP LED Module Series is designed to be energy efficient and highly versatile. It has various applications to cater to different needs with easy installation methods. The LED light source is made to be shock resistant with polycarbonate diffuser and comes with different guards available to suit various applications.



# LED PORTABLE WORK LIGHT



## LGP SERIES



### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

Marine grade aluminium alloy with powder coating and polycarbonate body, diffuser and guard

### Options

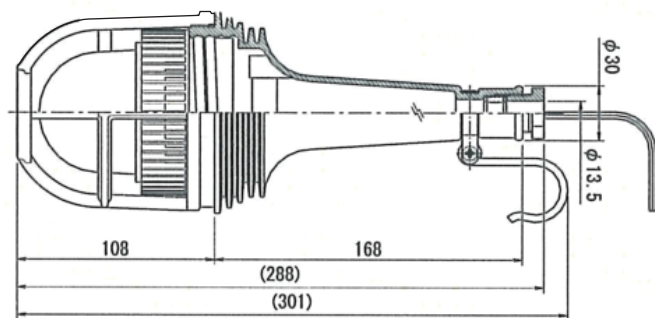
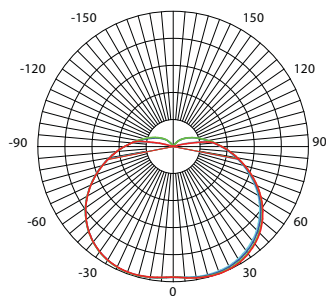
Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.0Kg

### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Triac dimming compatible (220-240VAC & 100V-120VAC only)
- Vibration-resistant
- Alternative to 100W incandescent bulb
- Energy savings of up to 90% compared to 100W incandescent bulb
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

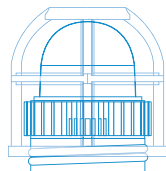
Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGP13A225KPC	LGP-13	220V - 240V AC	13W	5000K	160°	-40°C ~ +45°C	900lm
LGP12A115KPC	LGP-12	100V - 120V AC	12W	5000K	160°	-40°C ~ +45°C	900lm
LGP10D245KPC	LGP-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm
LGP10D245KPR	LGP-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm

Also available in other CCT.

# LED PORTABLE WORK LIGHT



## LGP SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Vibration-resistant
- Alternative to 300W incandescent bulb
- Energy savings of up to 90% compared to 300W incandescent bulb
- Long service life of 30,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance

### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

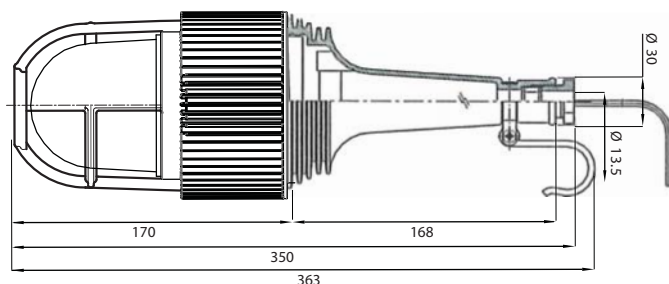
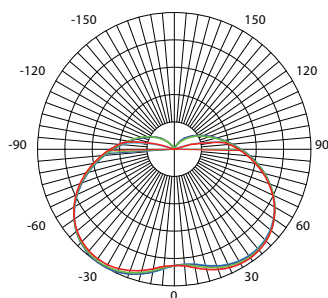
Marine grade aluminium alloy with powder coating and polycarbonate body, diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.5Kg



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGP30AD25KPC	LGP-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm
LGP30AD25KPR	LGP-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm

Also available in other CCT.

# LED PENDANT LIGHT



## LGC SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Triac dimming compatible (220-240VAC & 100V-120VAC only)
- Vibration-resistant
- Alternative to 100W incandescent bulb
- Energy savings of up to 90% compared to 100W incandescent bulb
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



### Application

Engine rooms, Low visibility areas,  
Decks, Warehouses, Yards

### Material

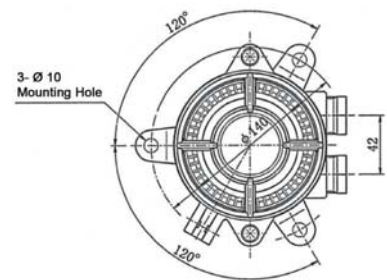
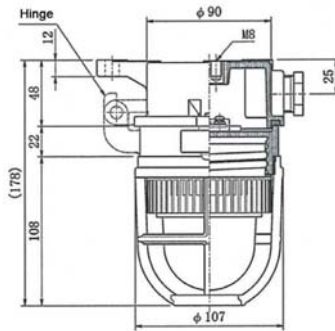
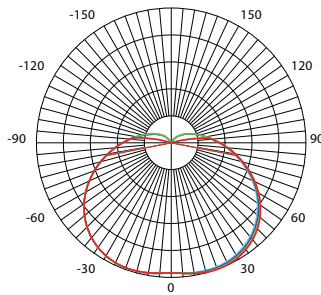
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.0Kg



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGC13A225KPC	LGC-13	220V - 240V AC	13W	5000K	160°	-40°C ~ +45°C	900lm
LGC12A115KPC	LGC-12	100V - 120V AC	12W	5000K	160°	-40°C ~ +45°C	900lm
LGC10D245KPC	LGC-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm
LDC10D245KPR	LGC-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm

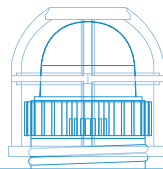
Also available in other CCT.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.





# LED PENDANT LIGHT



## LGC SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Vibration-resistant
- Alternative to 300W incandescent bulb
- Energy savings of up to 90% compared to 300W incandescent bulb
- Long service life of 30,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance

### Application

Engine rooms, Low visibility areas,  
Decks, Warehouses, Yards

### Material

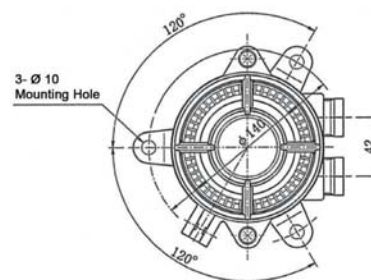
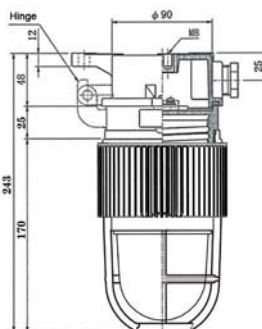
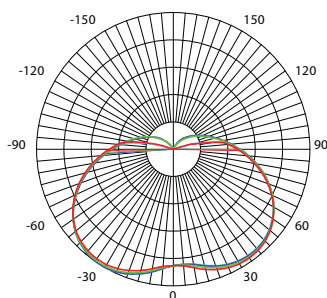
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.5Kg



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

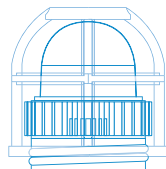
Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGC30AD25KPC	LGC-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm
LGC30AD25KPR	LGC-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm

Also available in other CCT.

# LED WALL LIGHT



## LGB SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Triac dimming compatible (220-240VAC & 100V-120VAC only)
- Vibration-resistant
- Alternative to 100W incandescent bulb
- Energy savings of up to 90% compared to 100W incandescent bulb
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance,



### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

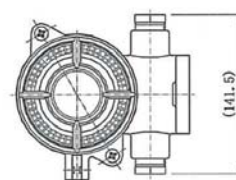
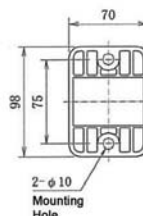
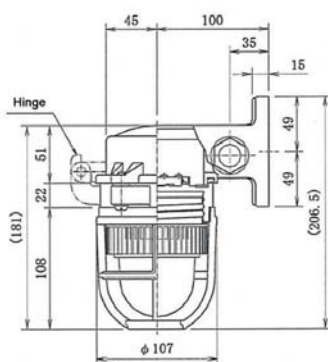
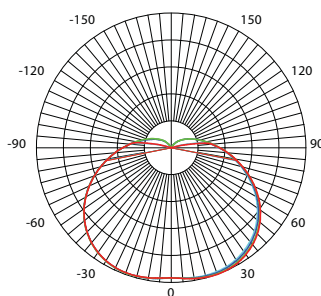
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.0Kg



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGB13A225KPC	LGB-13	220V - 240V AC	13W	5000K	160°	-40°C ~ +45°C	900lm
LGB12A115KPC	LGB-12	100V - 120V AC	12W	5000K	160°	-40°C ~ +45°C	900lm
LGB10D245KPC	LGB-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm
LGB10D245KPR	LGB-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm

Also available in other CCT.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# LED WALL LIGHT



## LGB SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Vibration-resistant
- Alternative to 300W incandescent bulb
- Energy savings of up to 90% compared to 300W incandescent bulb
- Long service life of 30,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance

### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

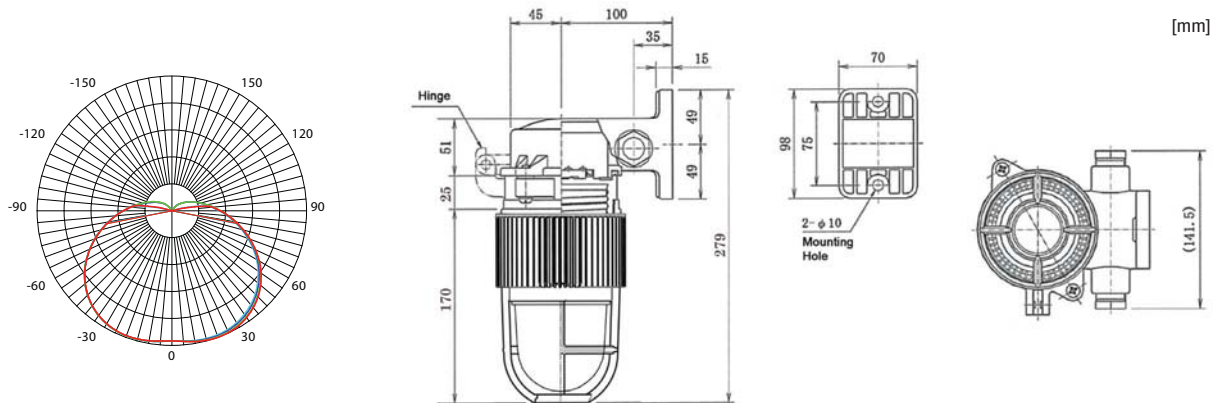
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.5Kg



## TECHNICAL SPECIFICATIONS IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGB30AD25KPC	LGB-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm
LGB30AD25KPR	LGB-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm

Also available in other CCT.



# LED WALL LIGHT



## LGW SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Triac dimming compatible (220-240VAC & 100V-120VAC only)
- Vibration-resistant
- Alternative to 100W incandescent bulb
- Energy savings of up to 90% compared to 100W incandescent bulb
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

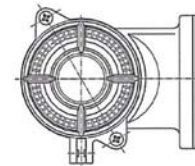
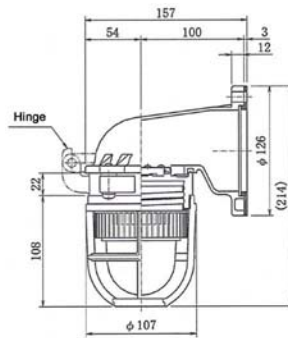
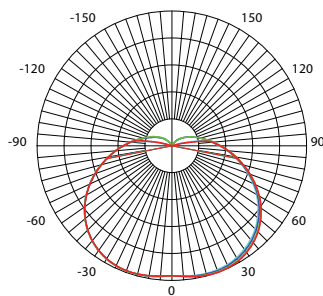
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.0Kg

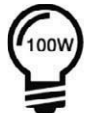


[mm]

## TECHNICAL SPECIFICATIONS IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGW13A225KPC	LGW-13	220V - 240V AC	13W	5000K	160°	-40°C ~ +45°C	900lm
LGW12A115KPC	LGW-12	100V - 120V AC	12W	5000K	160°	-40°C ~ +45°C	900lm
LGW10D245KPC	LGW-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm
LGW10D245KPR	LGW-10	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm

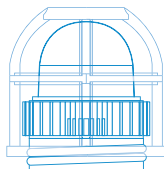
Also available in other CCT.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.





# LED WALL LIGHT



## LGW SERIES



### Key Features

- Complete solution with heat sink, driver and polycarbonate diffuser
- Vibration-resistant
- Alternative to 300W incandescent bulb
- Energy savings of up to 90% compared to 300W incandescent bulb
- Long service life of 30,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance

### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

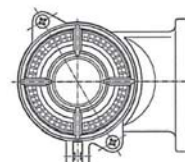
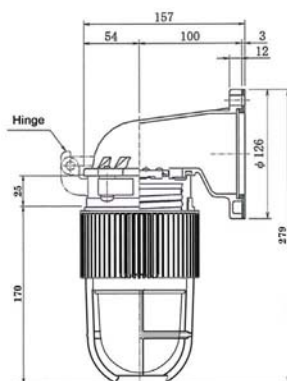
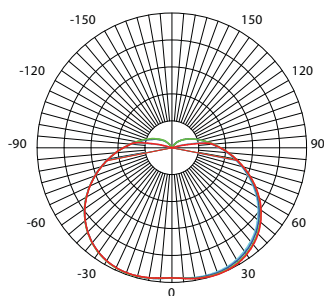
Marine grade aluminium alloy with powder coating and PBT fiberglass reinforced body, polycarbonate diffuser and guard

### Options

Polycarbonate clear guard (PC)  
Polycarbonate red guard (PR)

### Weight

1.5Kg



[mm]

## TECHNICAL SPECIFICATIONS

IP 56

- PC Denotes : Polycarbonate clear guard
- PR Denotes : Polycarbonate red guard

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LGW30AD25KPC	LGW-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm
LGW30AD25KPR	LGW-30	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm

Also available in other CCT.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# FLOODLIGHT SERIES

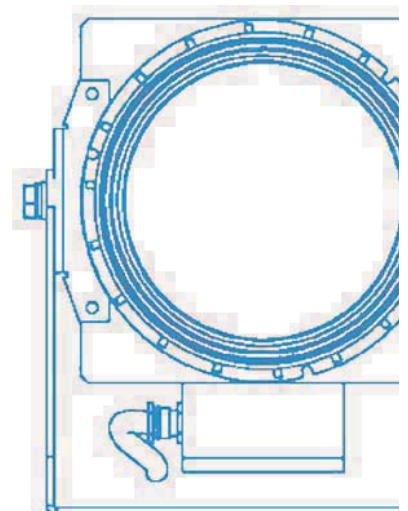
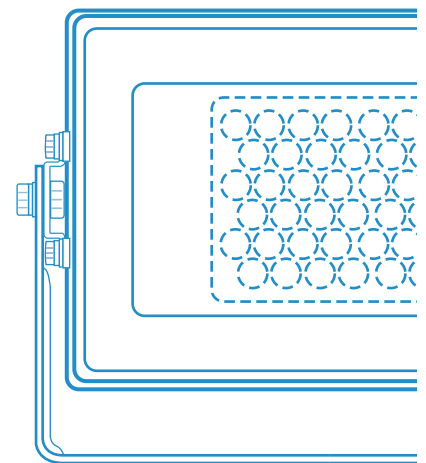
## HIGHLIGHTING THE IMPORTANCE

---

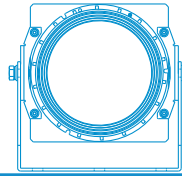
SOP Floodlights are fabricated to provide unparalleled light quality and saves up to 90% energy compared to halogen floodlight. Customized heat sink made from high thermal conductive aluminium material provides superior thermal management, optimizing the LED performances and ensuring long service life under extreme operating temperatures. The professional optical design creates high performance LED floodlight in its class.

IP 65

IP 66



# MODULAR LED FLOODLIGHT



## LF60 1 SERIES



Wide beam model



Narrow beam model



\*Protection guard is optional add-on

### Key Features

- Triac dimming compatible (**220V-240VAC & 100V-120VAC only**)
- Designed with reliable AC driver on board to enhance the service life
- Rapid heat-dissensing design to prolong lamp life and optimise lumen output
- Long service life of 100,000 hours @ 50°C (Ta)
- Compact and lightweight design
- Interchangeable module
- Safety, EMC and IEC compliance



### Application

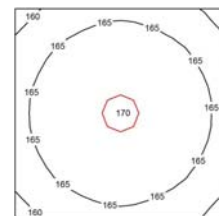
Decks, Marinas, Docks, Ports, Warehouses

### Material

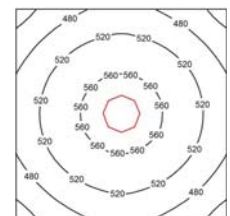
Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover  
Optional protection guard: SUS316 stainless steel

### Weight

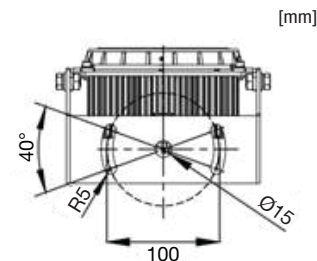
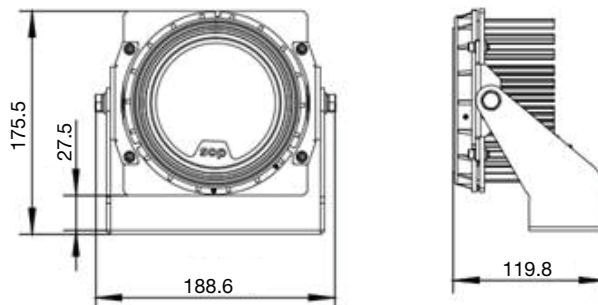
1.9Kg



Wide beam model:  
Average Lux : 166lx  
Mounting Height : 3 Meters  
Measurement Area : 1m²



Narrow beam model:  
Average Lux : 515lx  
Mounting Height : 3 Meters  
Measurement Area : 1m²



## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



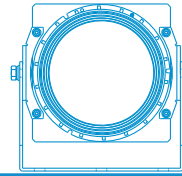
BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LF60F015KA22	LF60-1F	220V - 240V AC	56W	5000K	115°	-40°C ~ +50°C	5500lm
LF60N015KA22	LF60-1N	220V - 240V AC	56W	5000K	45°	-40°C ~ +50°C	5400lm
LF60F015KA11	LF60-1F	100V - 120V AC	56W	5000K	105°	-40°C ~ +50°C	4500lm
LF60N015KA11	LF60-1N	100V - 120V AC	56W	5000K	45°	-40°C ~ +50°C	4500lm
LF60F015KD24	LF60-1F	24V DC	56W	5000K	130°	-40°C ~ +50°C	4900lm
LF60N015KD24	LF60-1N	24V DC	56W	5000K	35°	-40°C ~ +50°C	4600lm

Also available in other CCT and beam angle upon request.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# MODULAR LED BOAT DECK LIGHT



## LF60 1 SERIES



### Key Features

- Designed with reliable driver on board to enhance the service life
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of 100,000 hours @ 50°C (Ta)
- Compact and lightweight design
- Interchangeable module
- Safety, EMC and IEC compliance



### Application

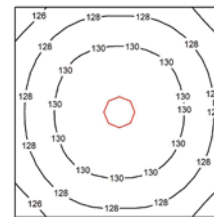
Decks, Lifeboat launching area

### Material

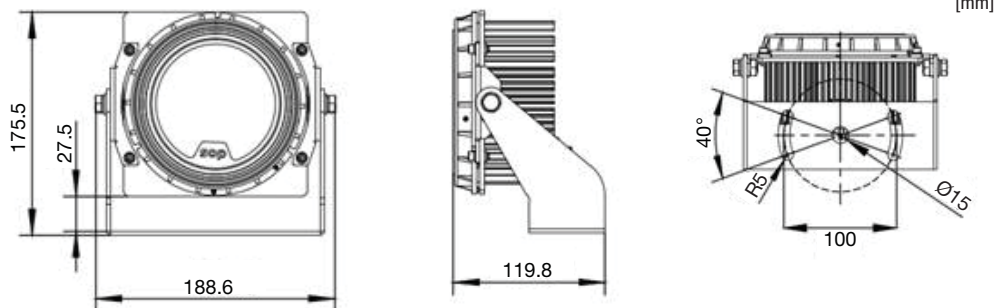
Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

### Weight

1.9Kg



Wide beam model:  
Average Lux : 129lx  
Mounting Height : 3 Meters  
Measurement Area : 1m²



## TECHNICAL SPECIFICATIONS IP 66

Ideal Replacement:

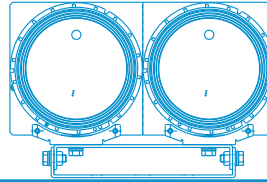


BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LF60F015KD25	LF60-1F	24V DC	56W	5000K	130°	-40°C ~ +50°C	4900lm

Also available in other CCT and beam angle upon request.



# MODULAR LED FLOODLIGHT



## LF60 2 SERIES



Wide beam model



Narrow beam model

### Application

Decks, Marinas, Docks, Ports, Warehouses

### Material

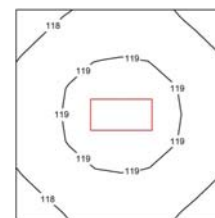
Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

### Weight

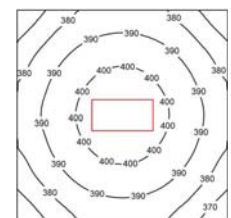
3.5Kg

### Key Features

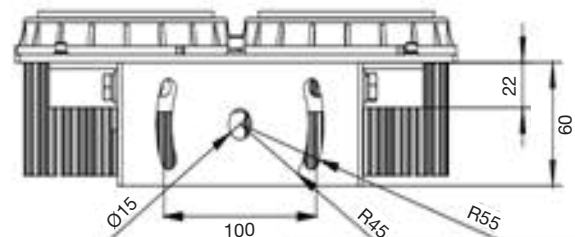
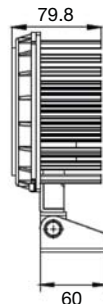
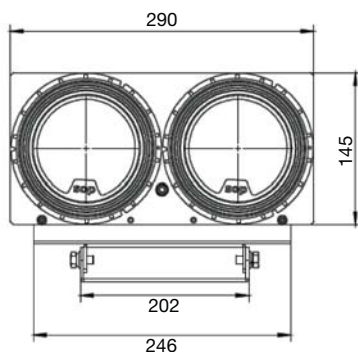
- Triac dimming compatible (**220V-240VAC & 100V-120VAC only**)
- Designed with reliable AC driver on board to enhance the service life
- Rapid heat-dispersing design to prolong lamp life and optimise lumen output
- Long service life of 100,000 hours @ 50°C (Ta)
- Compact and lightweight design
- Interchangeable module
- Safety, EMC and IEC compliance



Wide beam model:  
Average Lux : 119lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²



Narrow beam model:  
Average Lux : 389lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²



[mm]

## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



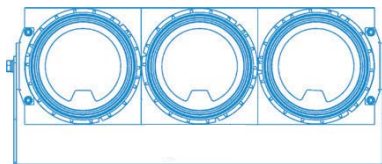
BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LF60F025KA22	LF60-2F	220V - 240V AC	112W	5000K	115°	-40°C ~ +50°C	11000lm
LF60N025KA22	LF60-2N	220V - 240V AC	112W	5000K	45°	-40°C ~ +50°C	10800lm
LF60F025KA11	LF60-2F	100V - 120V AC	112W	5000K	105°	-40°C ~ +50°C	9000lm
LF60N025KA11	LF60-2N	100V - 120V AC	112W	5000K	45°	-40°C ~ +50°C	9000lm
LF60F025KD24	LF60-2F	24V DC	112W	5000K	130°	-40°C ~ +50°C	9800lm
LF60N025KD24	LF60-2N	24V DC	112W	5000K	35°	-40°C ~ +50°C	9200lm

Also available in other CCT and beam angle upon request.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# MODULAR LED FLOODLIGHT



## LF60 3 SERIES



Wide beam model



Narrow beam model

### Key Features

- Triac dimming compatible (**220V-240VAC & 100V-120VAC only**)
- Designed with reliable AC driver on board to enhance the service life
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of 100,000 hours @ 50°C (Ta)
- Compact and lightweight design
- Interchangeable module
- Safety, EMC and IEC compliance



### Application

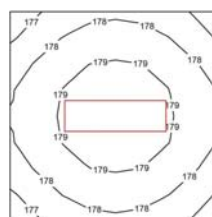
Decks, Marinas, Docks, Ports, Warehouses

### Material

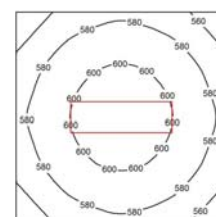
Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

### Weight

5.7Kg

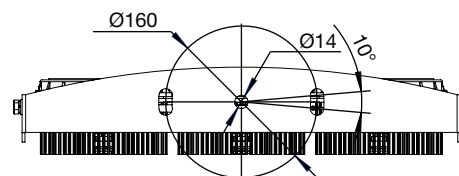
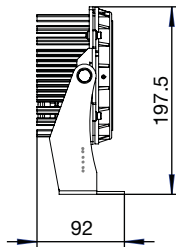
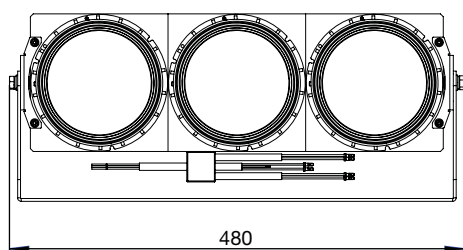


Wide beam model:  
Average Lux : 177lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²



Narrow beam model:  
Average Lux : 584lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²

[mm]



## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



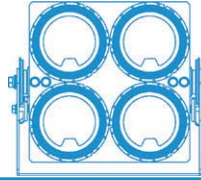
BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LF60F035KA22	LF60-3F	220V - 240V AC	168W	5000K	115°	-40°C ~ +50°C	16500lm
LF60N035KA22	LF60-3N	220V - 240V AC	168W	5000K	45°	-40°C ~ +50°C	16200lm
LF60F035KA11	LF60-3F	100V - 120V AC	168W	5000K	105°	-40°C ~ +50°C	13500lm
LF60N035KA11	LF60-3N	100V - 120V AC	168W	5000K	45°	-40°C ~ +50°C	13500lm
LF60F035KD24	LF60-3F	24V DC	168W	5000K	130°	-40°C ~ +50°C	14700lm
LF60N035KD24	LF60-3N	24V DC	168W	5000K	35°	-40°C ~ +50°C	13800lm

Also available in other CCT and beam angle upon request.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# MODULAR LED FLOODLIGHT



## LF60 4 SERIES



Wide beam model



Narrow beam model

### Key Features

- Triac dimming compatible (**220V-240VAC & 100V-120VAC only**)
- Designed with reliable AC driver on board to enhance the service life
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of 100,000 hours @ 50°C (Ta)
- Compact and lightweight design
- Interchangeable module
- Safety, EMC and IEC compliance



ABS

### Application

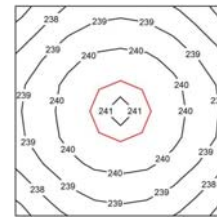
Decks, Marinas, Docks, Ports, Warehouses

### Material

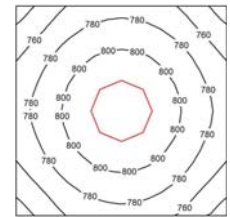
Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

### Weight

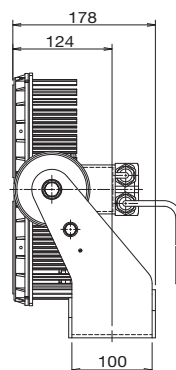
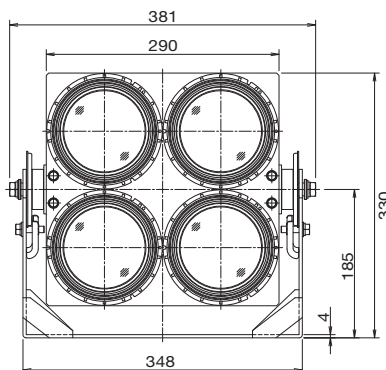
9.3Kg



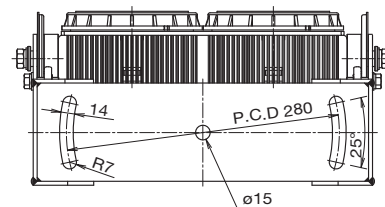
Wide beam model:  
Average Lux : 239lx  
Mounting Height : 5 Meters  
Measurement Area : 1m<sup>2</sup>



Narrow beam model:  
Average Lux : 789lx  
Mounting Height : 5 Meters  
Measurement Area : 1m<sup>2</sup>



[mm]



## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LF60F045KA22	LF60-4F	220V - 240V AC	224W	5000K	115°	-40°C ~ +50°C	22000lm
LF60N045KA22	LF60-4N	220V - 240V AC	224W	5000K	45°	-40°C ~ +50°C	21600lm
LF60F035KA11	LF60-4F	100V - 120V AC	224W	5000K	105°	-40°C ~ +50°C	18000lm
LF60N045KA11	LF60-4N	100V - 120V AC	224W	5000K	45°	-40°C ~ +50°C	18000lm
LF60F045KD24	LF60-4F	24V DC	224W	5000K	130°	-40°C ~ +50°C	19600lm
LF60N045KD24	LF60-4N	24V DC	224W	5000K	35°	-40°C ~ +50°C	18400lm

Also available in other CCT and beam angle upon request.

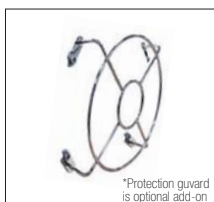
Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# HIGH PERFORMANCE MODULAR LED FLOODLIGHT



## LF90 - 1 SERIES



### Key Features

- Available in 100-240VAC
- Triac Dimming Compatible
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of >50,000 hours L70 @ 50°C (Ta)
- Compact and lightweight design
- Safety, EMC and IEC compliance



### Application

Decks, Marinas, Docks, Ports, Warehouses

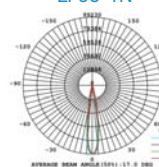
### Material

Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover  
Optional protection guard: SUS316 stainless steel

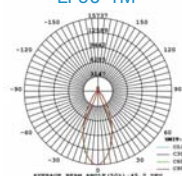
### Weight

4.35Kg

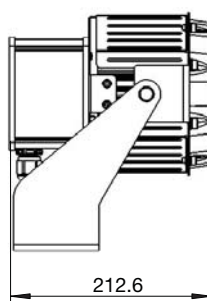
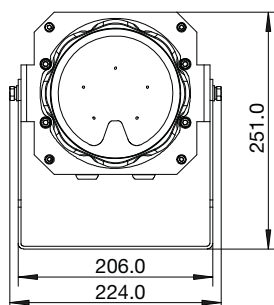
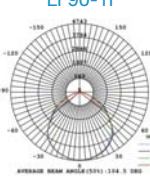
LF90-1N



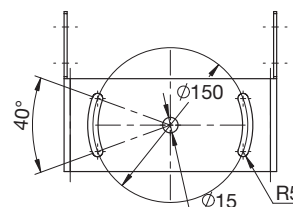
LF90-1M



LF90-1F



[mm]



### TECHNICAL SPECIFICATIONS



Subject to Replacement  
based on Projection Distance:



Type	Modules	Beam Angle (50%)	Beam Angle (10%)	Power	CCT	Ambient Temp (Ta)	Lumen	CD	Projection Distance	Illum. Area (Diameter)
									@200 Lux	
LF90N015KA34	LF90-1N	17°	32°	90W	5000K	-40°C ~ +50°C	11400lm	96800cd	22.0m	6.6m
LF90M015KA34	LF90-1M	45°	87°	90W	5000K	-40°C ~ +50°C	10800lm	14000cd	8.4m	6.9m
LF90F015KA34	LF90-1F	105°	148°	90W	5000K	-40°C ~ +50°C	11700lm	4500cd	4.7m	12.4m

Also available in other CCT and beam angle upon request.

# HIGH PERFORMANCE MODULAR LED FLOODLIGHT



## LF90 - 2 SERIES



### Key Features

- Available in 100-240VAC
- Triac Dimming Compatible
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of >50,000 hours L70 @ 50°C (Ta)
- Compact and lightweight design
- Safety, EMC and IEC compliance



### Application

Decks, Marinas, Docks, Ports, Warehouses

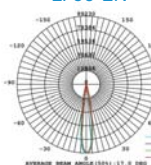
### Material

Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

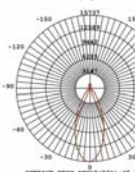
### Weight

8.6Kg

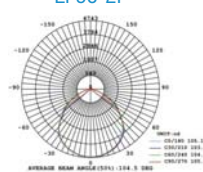
LF90-2N



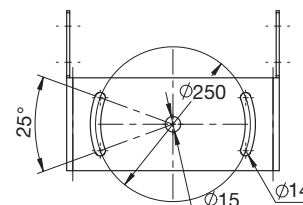
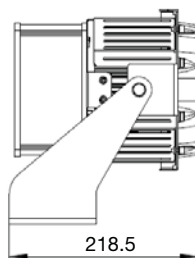
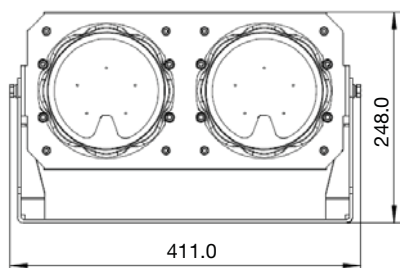
LF90-2M



LF90-2F



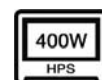
[mm]



### TECHNICAL SPECIFICATIONS



Subject to Replacement  
based on Projection Distance:



Type	Modules	Beam Angle (50%)	Beam Angle (10%)	Power	CCT	Ambient Temp (Ta)	Lumen	CD	Projection Distance	Illum. Area (Diameter)
									@200 Lux	
LF90N025KA34	LF90-2N	17°	32°	180W	5000K	-40°C ~ +50°C	22800lm	193600cd	31.1m	9.3m
LF90M025KA34	LF90-2M	45°	87°	180W	5000K	-40°C ~ +50°C	21600lm	28000cd	11.8m	9.8m
LF90F025KA34	LF90-2F	105°	148°	180W	5000K	-40°C ~ +50°C	23400lm	9000cd	6.7m	17.5m

Also available in other CCT and beam angle upon request.



# HIGH PERFORMANCE MODULAR LED FLOODLIGHT



## LF90 - 4 SERIES



### Key Features

- Available in 100-240VAC
- Triac Dimming Compatible
- Rapid heat-dissipating design to prolong lamp life and optimise lumen output
- Long service life of >50,000 hours L70 @ 50°C (Ta)
- Compact and lightweight design
- Safety, EMC and IEC compliance



### Application

Decks, Marinas, Docks, Ports, Warehouses

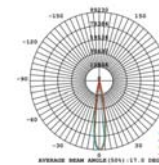
### Material

Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover

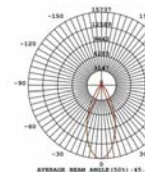
### Weight

17Kg

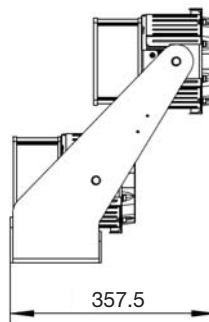
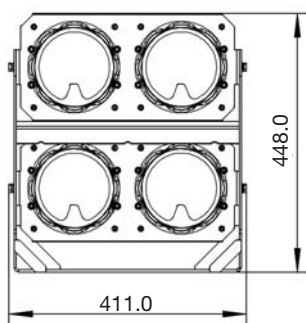
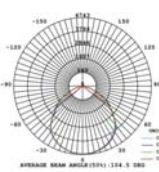
LF90-4 N



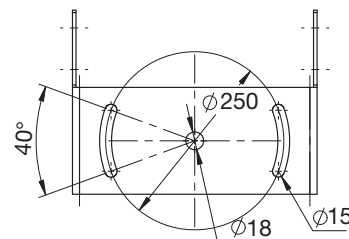
LF90-4M



LF90-4F



[mm]



### TECHNICAL SPECIFICATIONS



Subject to Replacement  
based on Projection Distance:



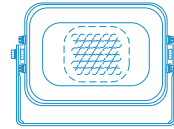
Type	Modules	Beam Angle (50%)	Beam Angle (10%)	Power	CCT	Ambient Temp (Ta)	Lumen	CD	Projection Distance	Illum. Area (Diameter)
									@200 Lux	
LF90N045KA34	LF90-4N	17°	32°	360W	5000K	-40°C ~ +50°C	45600lm	387200cd	44.0m	13.2m
LF90M045KA34	LF90-4M	45°	87°	360W	5000K	-40°C ~ +50°C	43200lm	56000cd	16.7m	13.9m
LF90F045KA34	LF90-4F	105°	148°	360W	5000K	-40°C ~ +50°C	46800lm	18000cd	9.5m	24.7m
LF90NM45KA34	LF90 Hybrid	17°+45°	32°+87°	360W	5000K	-40°C ~ +50°C	45600lm	387200cd	44.0m	13.2m

Also available in other CCT and beam angle upon request.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# HEAVY DUTY LED FLOODLIGHT



## FL 80 SERIES



### Application

Decks, Marinas, Docks

### Material

Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover and high-efficiency optical lens

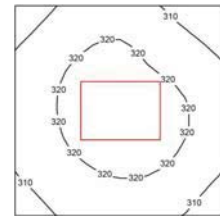
### Weight

FL85NAD/FL85FAD: 7.5Kg

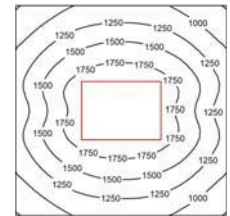
FL80ND/FL80FD: 7.0Kg

### Key Features

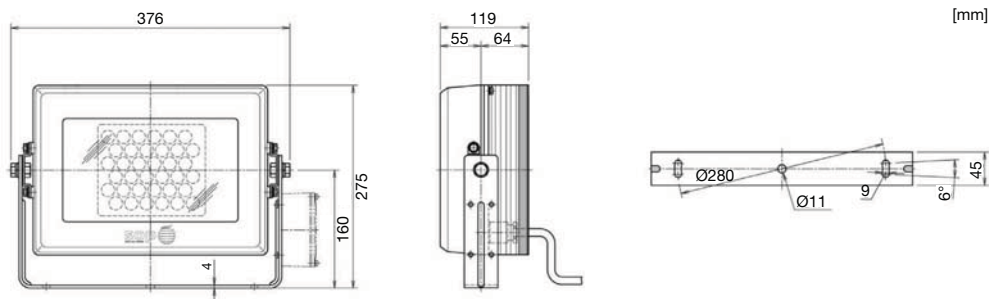
- High efficient constant current AC driver to enhance reliability for AC series
- Vibration-resistant
- Long service life of >50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



Wide beam model:  
Average Lux : 317lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²



Narrow beam model:  
Average Lux : 1419lx  
Mounting Height : 5 Meters  
Measurement Area : 1m²



## TECHNICAL SPECIFICATIONS IP 66

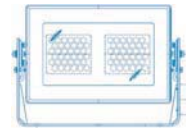
Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LAFL85NAD	FL85NAD	100V - 240V AC/DC	85W	5700K	10°	-20°C ~ +45°C	7550lm
LAFL85FAD	FL85FAD	100V - 240V AC/DC	85W	5700K	50°	-20°C ~ +45°C	7550lm
LAFL80ND	FL80ND	24V DC	80W	5700K	10°	-20°C ~ +45°C	7550lm
LAFL80FD	FL80FD	24V DC	80W	5700K	50°	-20°C ~ +45°C	7550lm

Also available in other CCT.

# HEAVY DUTY LED FLOODLIGHT



## FL 160 SERIES



### Application

Decks, Marinas, Docks

### Material

Marine grade aluminium alloy with powder coating, comes with 4mm tempered glass front cover and high-efficiency optical lens

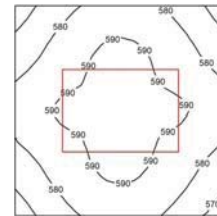
### Weight

FL165NAD/FL165FAD: 16.5Kg

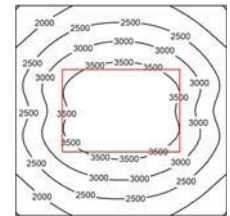
FL160ND/FL160FD: 15.5Kg

### Key Features

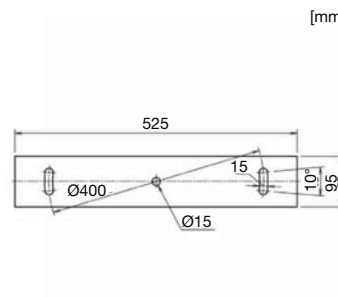
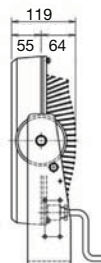
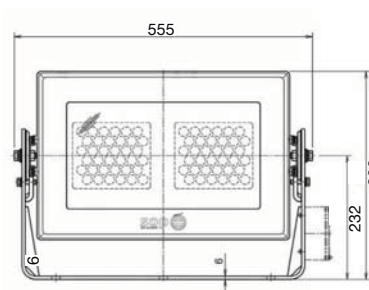
- High efficient constant current AC driver to enhance reliability for AC series
- Vibration-resistant
- Long service life of >50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



Wide beam model:  
Average Lux : 585lx  
Mounting Height : 5 Meters  
Measurement Area : 1m<sup>2</sup>



Narrow beam model:  
Average Lux : 2847lx  
Mounting Height : 5 Meters  
Measurement Area : 1m<sup>2</sup>



[mm]

## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LAFL165NAD	FL165NAD	100V - 240V AC/DC	165W	5700K	10°	-20°C ~ +45°C	15150lm
LAFL165FAD	FL165FAD	100V - 240V AC/DC	165W	5700K	50°	-20°C ~ +45°C	15150lm
LAFL160ND	FL160ND	24V DC	160W	5700K	10°	-20°C ~ +45°C	15150lm
LAFL160FD	FL160FD	24V DC	160W	5700K	50°	-20°C ~ +45°C	15150lm

Also available in other CCT.

# PANEL LIGHT SERIES

## SHAPING THE TRADITION

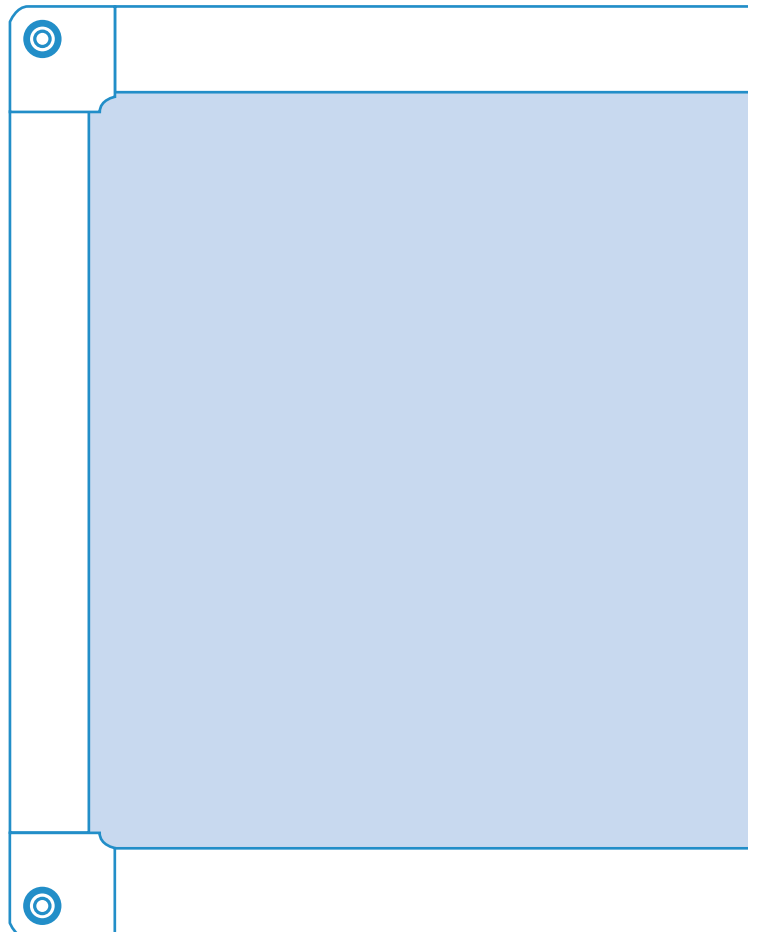
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The slim and sleek design of SOP Panel Light is the best solution for all indoor usage. The simple-to-install panel light is ideal to be an alternative to the T8/T5 ceiling fixture, its high-energy efficiency lowers maintenance cost. More importantly, it creates a beautiful environment and enhances the surrounding with a sense of natural light.

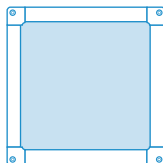
IP 20

IP 22

IP 44



# LED PANEL LIGHT



## PL 353353 SERIES



### Key Features

- Easy installation with no external drivers needed
- Super slim design for surface mounted application
- High-efficiency constant current driver
- 70% more energy-efficient compared to 1X18W fluorescent lighting system
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance

### Application

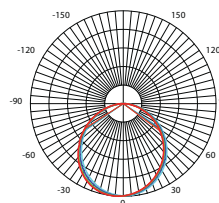
Cabins, Passageways, Galleys, Cafeterias

### Material

Marine grade aluminium, comes with high-efficiency light guide

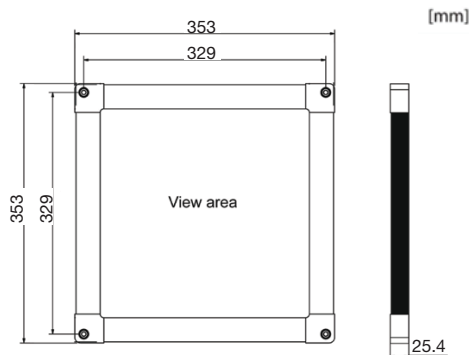
### Weight

2.7Kg



Height	AVR E	Diameter
1.00m	97.35lx	280.75cm
2.00m	24.34lx	561.50cm
3.00m	10.82lx	842.26cm
4.00m	6.08lx	1123.01cm
5.00m	3.89lx	1403.76cm

Angle: 109.1°



## TECHNICAL SPECIFICATIONS

IP 22

IP 44

Ideal Replacement:

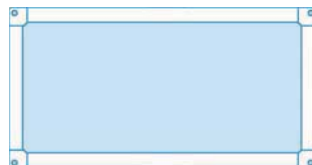


BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP353353A	P353353A	IP22	100V - 240V AC	10W	4000K	350mA	80	-20°C ~ +40°C	850lm
LAPW353353A	PW353353A	IP44							
BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP353353AE	P353353AE	IP22	100V - 240V AC + 24V DC	10W (AC) 5W (DC)	4000K	350mA	80	-20°C ~ +40°C	850lm (AC) >120lm (DC)
LAPW353353AE	PW353353AE	IP44							

Also available in other CCT.



# LED PANEL LIGHT



## PL 625257 SERIES



### Application

Cabins, Passageways, Galleys, Cafeterias

### Material

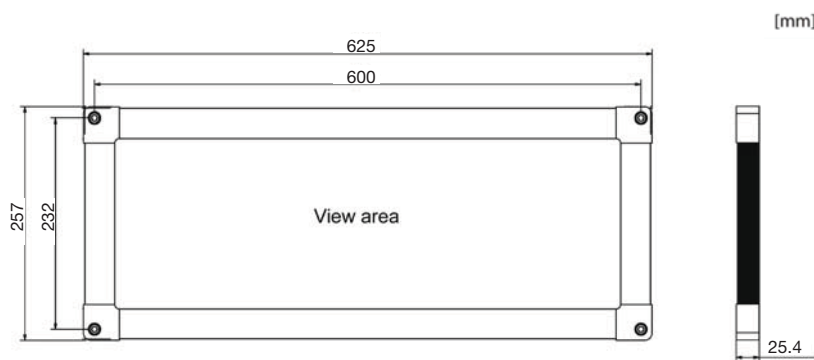
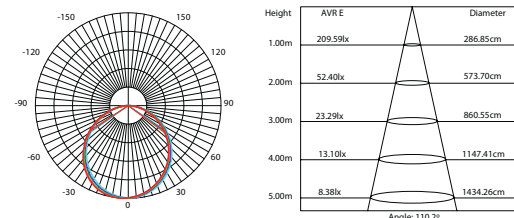
Marine grade aluminium, comes with high-efficiency light guide

### Weight

3.3Kg

### Key Features

- Easy installation with no external drivers needed
- Super slim design for surface mounted application
- High-efficiency constant current driver
- 70% more energy-efficient compared to 2X18W fluorescent lighting system
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance

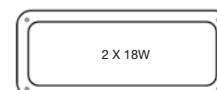


## TECHNICAL SPECIFICATIONS

IP 22

IP 44

Ideal Replacement:

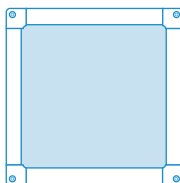


BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP625257A	P625257A	IP22	100V - 240V AC	24W	4000K	800mA	80	-20°C ~ +40°C	1700lm
LAPW625257A	PW625257A	IP44							

BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP625257AE	P625257AE	IP22	100V - 240V AC + 24V DC	24W (AC) 5W (DC)	4000K	800mA	80	-20°C ~ +40°C	1700lm (AC) >120lm (DC)
LAPW625257AE	PW625257AE	IP44							

Also available in other CCT.

# LED PANEL LIGHT



## PL 625625 SERIES



### Application

Cabins, Passageways, Galleys, Cafeterias

### Material

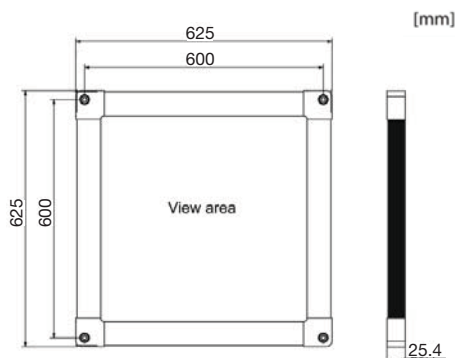
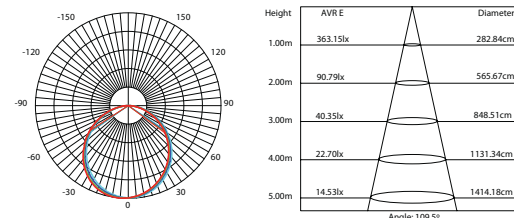
Marine grade aluminium, comes with high-efficiency light guide

### Weight

7.0Kg

### Key Features

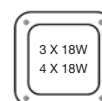
- Easy installation with no external drivers needed
- Super slim design for surface mounted application
- High-efficiency constant current driver
- 70% more energy-efficient compared to 3X18W fluorescent lighting system
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance



## TECHNICAL SPECIFICATIONS



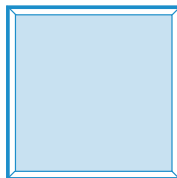
Ideal Replacement:



BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP625625A	P625625A	IP22	100V - 240V AC	47W	4000K	800mA	80	-20°C ~ +40°C	2800lm
LAPW625625A	PW625625A	IP44							
BH Code	Type	IP Rating	Main Voltage	Power	CCT	Driving Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP625625AE	P625625AE	IP22	100V - 240V AC + 24V DC	47W (AC) 5W (DC)	4000K	800mA	80	-20°C ~ +40°C	2800lm (AC) >120lm (DC)
LAPW625625AE	PW625625AE	IP44							

Also available in other CCT.

# LED PANEL LIGHT



## P 46 SERIES



### Application

Office, Cabins, Passageways, Galleys, Cafeterias

### Material

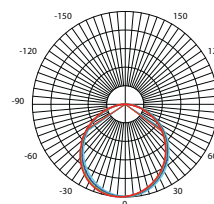
Aluminium housing, comes with high-efficiency light guide

### Weight

3.1Kg (with driver)

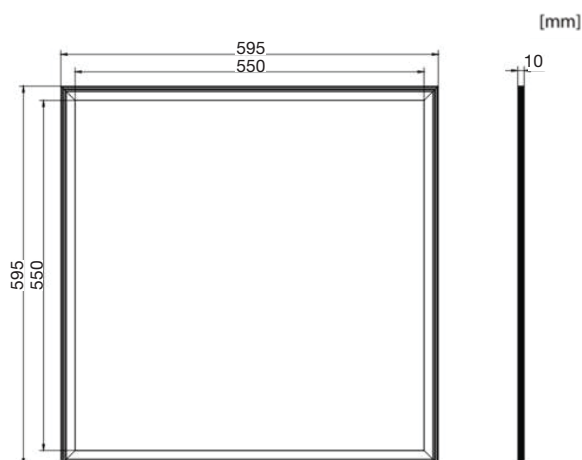
### Key Features

- Easy installation, super slim design for recessed mount application
- High efficiency and with long service life of 50,000 hours @ 40°C (Ta)
- Safety, EMC and IEC compliance



Height	AVR E	Diameter
1.00m	408.10lx	292.09cm
2.00m	102.10lx	584.18cm
3.00m	45.10lx	876.27cm
4.00m	25.10lx	1168.36cm
5.00m	16.10lx	1460.45cm

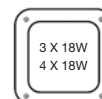
Angle: 111.2°



## TECHNICAL SPECIFICATIONS

IP 20

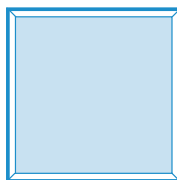
Ideal Replacement:



BH Code	Type	IP Rating	Main Voltage	Power	CCT	Input Current	CRI Index	Ambient Temp (Ta)	System Lumen
LAP465A	P46A	IP20	100V - 240V AC	46W	5000K	193mA	80	-20°C ~ +40°C	3800lm

Also available in other CCT.

# LED PANEL LIGHT



## P0606A SERIES



### Application

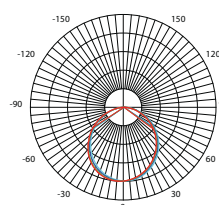
Office, Cabins, Passageways, Galleys,  
Cafeterias

### Material

Aluminium housing, comes with high-efficiency  
light guide

### Weight

2.6Kg (with driver)



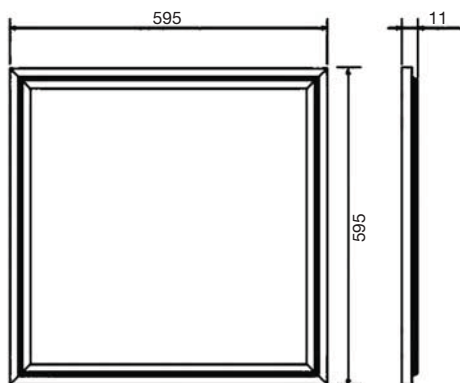
Height	Center E	Diameter
1.00m	1154.74lx	281cm
1.50m	513.22lx	421cm
3.00m	128.30lx	842cm
4.00m	72.17lx	1123cm
5.00m	46.19lx	1404cm

Angle: 109.1°

### Key Features

- Easy installation, super slim design for recessed mount application
- High efficiency and with long service life of 50,000 hours @ 40°C (Ta)
- Safety, EMC and IEC compliance

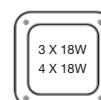
[mm]



## TECHNICAL SPECIFICATIONS

IP 20

Ideal Replacement:



BH Code	Type	Main Voltage	Power	CCT	CRI Index	Ambient Temp (Ta)	System Lumen
LAP06065A	P0606A	100V - 240V AC	45W	5000K	≥75	-20°C ~ +40°C	3200lm

Also available in other CCT.

# LED PANEL LIGHT



## P0312A SERIES



### Application

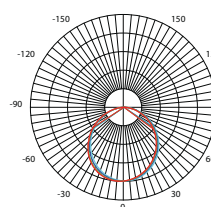
Office, Cabins, Passageways, Galleys, Cafeterias

### Material

Aluminium housing, comes with high-efficiency light guide

### Weight

2.6Kg (with driver)

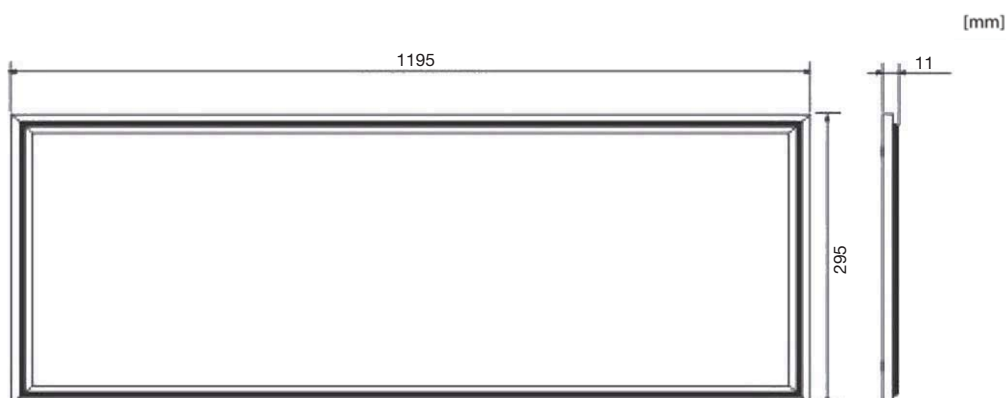


Height	Center E	Diameter
1.00m	547.61lx	293cm
1.50m	243.38lx	439cm
3.00m	60.85lx	878cm
4.00m	34.23lx	1171cm
5.00m	21.90lx	1464cm

Angle: 110.8°

### Key Features

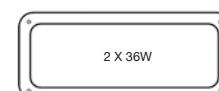
- Easy installation, super slim design for recessed mount application
- High efficiency and with long service life of 50,000 hours @ 40°C (Ta)
- Safety, EMC and IEC compliance



## TECHNICAL SPECIFICATIONS

IP 20

Ideal Replacement:

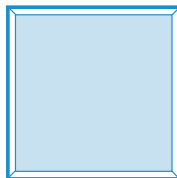


BH Code	Type	Main Voltage	Power	CCT	CRI Index	Ambient Temp (Ta)	System Lumen
LAP03125A	P0312A	100V - 240V AC	45W	5000K	≥75	-20°C ~ +40°C	3200lm

Also available in other CCT.



# LED PANEL LIGHT



## DAMPA SERIES



### Application

Office, Cabins, Passageways, Galleys, Cafeterias

### Material

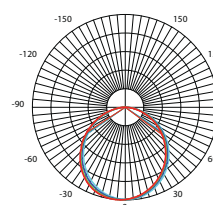
Marine grade aluminium alloy housing, come with PMMA light guide

### Weight

3.1Kg (with driver)

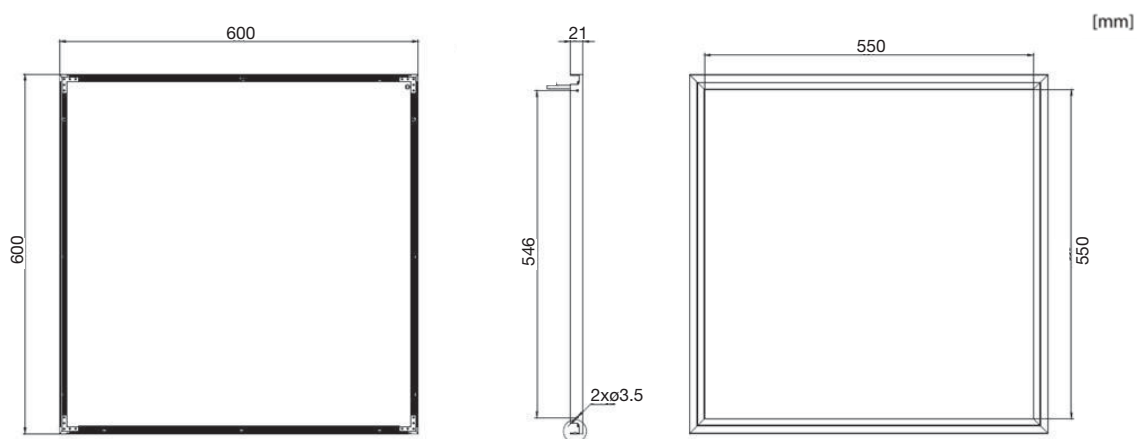
### Key Features

- Easy installation, super slim design for recessed mount application
- High efficiency and with long service life of 50,000 hours @ 40°C (Ta)
- Safety, EMC and IEC compliance



Height	AVR E	Diameter
1.00m	408.10lx	292.09cm
2.00m	102.10lx	584.18cm
3.00m	45.10lx	876.27cm
4.00m	25.10lx	1168.36cm
5.00m	16.10lx	1460.45cm

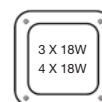
Angle: 111.2°



## TECHNICAL SPECIFICATIONS

IP 20

Ideal Replacement:



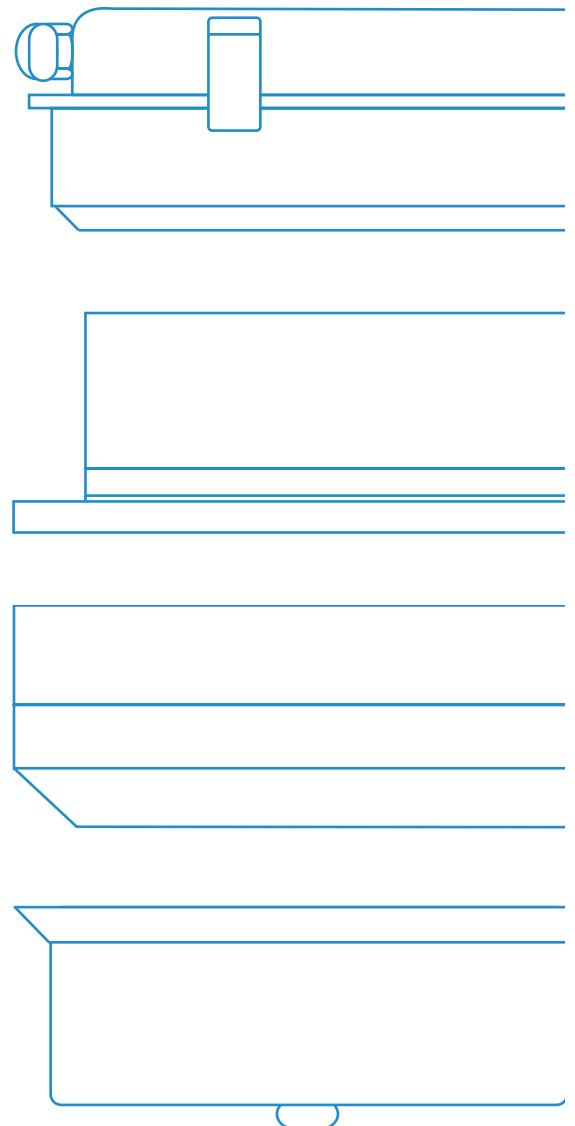
BH Code	Type	IP Rating	Main Voltage	Power	CCT	CRI Index	Ambient Temp	System Lumen
LADP600600A	DP600600A	IP20	100V - 240V AC	46W	4000K	80	-20°C ~ +40°C	4600lm
LADPW600600A	DPW600600A	IP44	100V - 240V AC	46W	4000K	80	-20°C ~ +40°C	4600lm

Also available in other CCT.

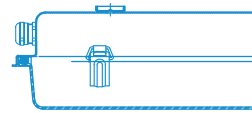
# LED LUMINAIRE SERIES

## BRAND NEW EXPERIENCE

SOP Technical Luminaire Series serves as the perfect lighting solution that is suitable for various application in the maritime environment. Both indoor and outdoor lighting solutions provide excellent service life with strong vibration resistance.



# LED WATERTIGHT LUMINAIRE



## LWS SERIES



\*Protection guard is optional add-on

### Application

Decks, Engine rooms, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated white

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

### Weight

LWS21: 3.1Kg LWS22: 3.3Kg

LWS41: 5.1Kg LWS42: 5.5Kg

With 3Hr emergency backup battery: Add 0.18Kg

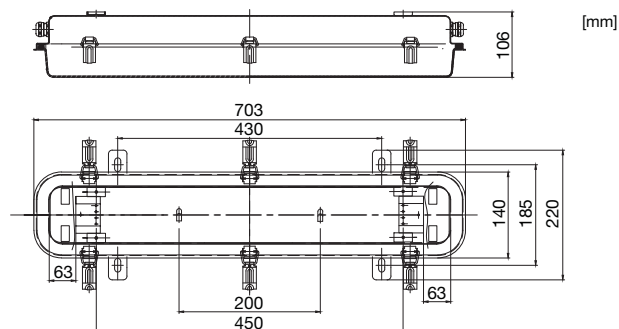
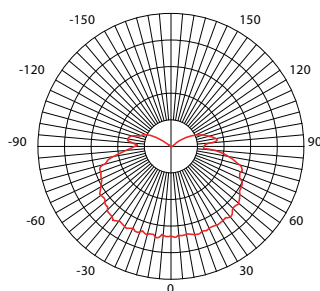
### Key Features

- Triac dimming compatible
- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

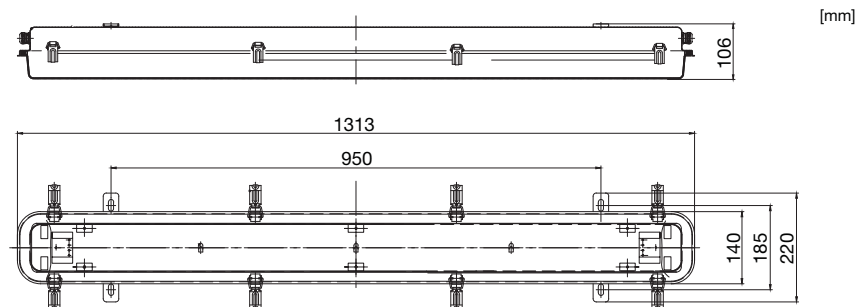
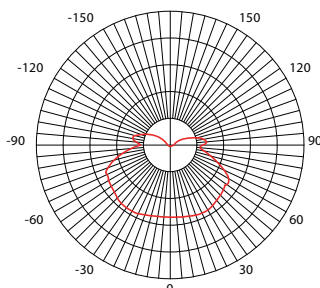


\*For AC models only

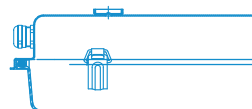
### LWS21/LWS22



### LWS41/LWS42



# LED WATERTIGHT LUMINAIRE



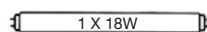
## LWS SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

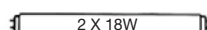
### TECHNICAL SPECIFICATIONS



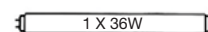
Ideal Replacement:



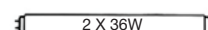
LWS21 for 1X18W



LWS22 for 2X18W



LWS41 for 1X36W



LWS42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS21SP5KA1S	LWS21-S	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21SP5KA1B	LWS21-SB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21SP5KA1E	LWS21-SE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21ZP5KA1S	LWS21-Z	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS21ZP5KA1B	LWS21-ZB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS21ZP5KA1E	LWS21-ZE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS22SP5KA1S	LWS22-S	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22SP5KA1B	LWS22-SB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22SP5KA1E	LWS22-SE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22ZP5KA1S	LWS22-Z	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWS22ZP5KA1B	LWS22-ZB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWS22ZP5KA1E	LWS22-ZE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

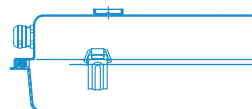
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS41SP5KA1S	LWS41-S	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41SP5KA1B	LWS41-SB	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41SP5KA1E	LWS41-SE	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41ZP5KA1S	LWS41-Z	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS41ZP5KA1B	LWS41-ZB	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS41ZP5KA1E	LWS41-ZE	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS42SP5KA1S	LWS42-S	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42SP5KA1B	LWS42-SB	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42SP5KA1E	LWS42-SE	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42ZP5KA1S	LWS42-Z	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWS42ZP5KA1B	LWS42-ZB	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWS42ZP5KA1E	LWS42-ZE	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



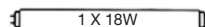
## LWS SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

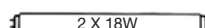
### TECHNICAL SPECIFICATIONS



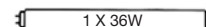
Ideal Replacement:



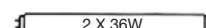
LWS21 for 1X18W



LWS22 for 2X18W



LWS41 for 1X36W



LWS42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS21SP5KA2S	LWS21-S	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21SP5KA2B	LWS21-SB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21SP5KA2E	LWS21-SE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWS21ZP5KA2S	LWS21-Z	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS21ZP5KA2B	LWS21-ZB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS21ZP5KA2E	LWS21-ZE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWS22SP5KA2S	LWS22-S	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22SP5KA2B	LWS22-SB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22SP5KA2E	LWS22-SE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWS22ZP5KA2S	LWS22-Z	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWS22ZP5KA2B	LWS22-ZB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWS22ZP5KA2E	LWS22-ZE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

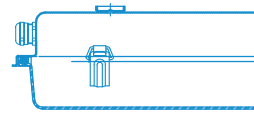
BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS41SP5KA2S	LWS41-S	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41SP5KA2B	LWS41-SB	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41SP5KA2E	LWS41-SE	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	SUS316 Stainless Steel
LWS41ZP5KA2S	LWS41-Z	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS41ZP5KA2B	LWS41-ZB	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS41ZP5KA2E	LWS41-ZE	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWS42SP5KA2S	LWS42-S	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42SP5KA2B	LWS42-SB	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42SP5KA2E	LWS42-SE	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	SUS316 Stainless Steel
LWS42ZP5KA2S	LWS42-Z	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWS42ZP5KA2B	LWS42-ZB	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWS42ZP5KA2E	LWS42-ZE	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.



# LED WATERTIGHT LUMINAIRE



## LWS SERIES (LITE)



\*Protection guard is optional add-on

### Application

Decks, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated white

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

### Weight

LWS21: 2.6Kg LWS22: 2.7Kg

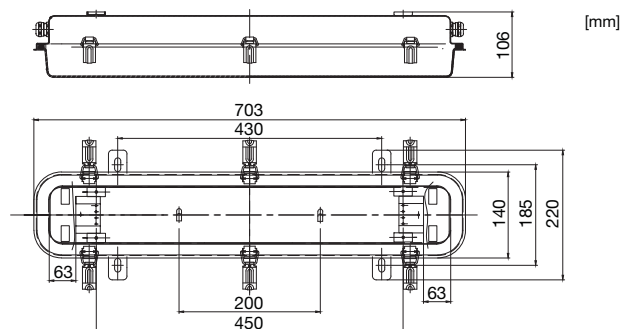
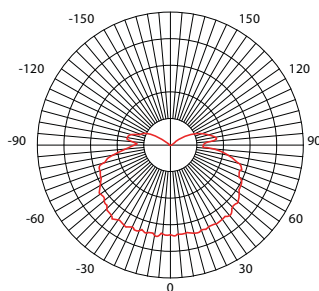
LWS41: 4.8Kg LWS42: 5.0Kg

With 3Hr emergency backup battery: Add 0.18Kg

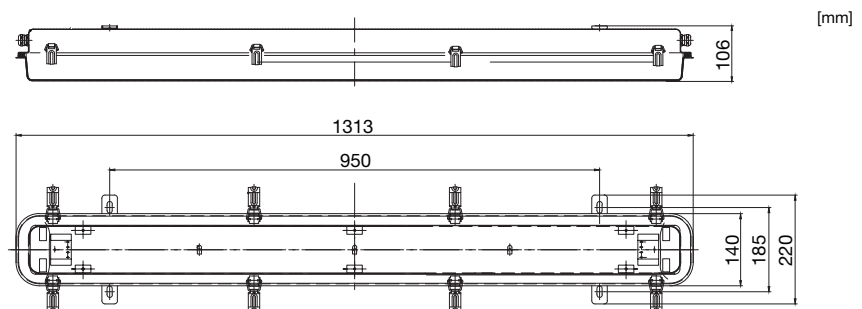
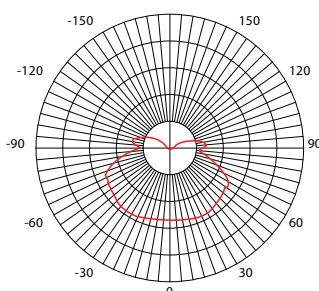
### Key Features

- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

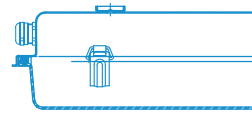
### LWS21/LWS22



### LWS41/LWS42



# LED WATERTIGHT LUMINAIRE



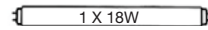
## LWS SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

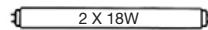
### TECHNICAL SPECIFICATIONS



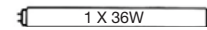
Ideal Replacement:



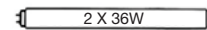
LWS21 for 1X18W



LWS22 for 2X18W



LWS41 for 1X36W



LWS42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS21SX6KA1S	LWS21-S	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21SX6KA1B	LWS21-SB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21SX6KA1E	LWS21-SE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21ZX6KA1S	LWS21-Z	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS21ZX6KA1B	LWS21-ZB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS21ZX6KA1E	LWS21-ZE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS22SX6KA1S	LWS22-S	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22SX6KA1B	LWS22-SB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22SX6KA1E	LWS22-SE	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22ZX6KA1S	LWS22-Z	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS22ZX6KA1B	LWS22-ZB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS22ZX6KA1E	LWS22-ZE	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

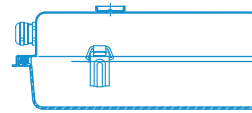
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS41SX6KA1S	LWS41-S	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41SX6KA1B	LWS41-SB	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41SX6KA1E	LWS41-SE	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41ZX6KA1S	LWS41-Z	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS41ZX6KA1B	LWS41-ZB	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS41ZX6KA1E	LWS41-ZE	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS42SX6KA1S	LWS42-S	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42SX6KA1B	LWS42-SB	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42SX6KA1E	LWS42-SE	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42ZX6KA1S	LWS42-Z	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWS42ZX6KA1B	LWS42-ZB	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWS42ZX6KA1E	LWS42-ZE	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



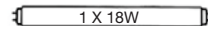
## LWS SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

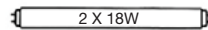
### TECHNICAL SPECIFICATIONS



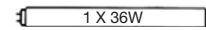
Ideal Replacement:



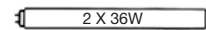
LWS21 for 1X18W



LWS22 for 2X18W



LWS41 for 1X36W



LWS42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS21SX6KA2S	LWS21-S	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21SX6KA2B	LWS21-SB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21SX6KA2E	LWS21-SE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWS21ZX6KA2S	LWS21-Z	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS21ZX6KA2B	LWS21-ZB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS21ZX6KA2E	LWS21-ZE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWS22SX6KA2S	LWS22-S	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22SX6KA2B	LWS22-SB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22SX6KA2E	LWS22-SE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS22ZX6KA2S	LWS22-Z	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS22ZX6KA2B	LWS22-ZB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS22ZX6KA2E	LWS22-ZE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

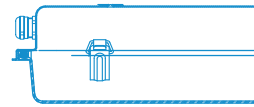
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWS41SX6KA2S	LWS41-S	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41SX6KA2B	LWS41-SB	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41SX6KA2E	LWS41-SE	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWS41ZX6KA2S	LWS41-Z	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS41ZX6KA2B	LWS41-ZB	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS41ZX6KA2E	LWS41-ZE	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWS42SX6KA2S	LWS42-S	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42SX6KA2B	LWS42-SB	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42SX6KA2E	LWS42-SE	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	SUS316 Stainless Steel
LWS42ZX6KA2S	LWS42-Z	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWS42ZX6KA2B	LWS42-ZB	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWS42ZX6KA2E	LWS42-ZE	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



## LWE SERIES



\*Protection guard is optional add-on

### Application

Decks, Engine rooms, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated white

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

### Weight

LWE21: 3.1Kg LWE22: 3.3Kg

With 3Hr emergency backup battery: Add 0.18Kg

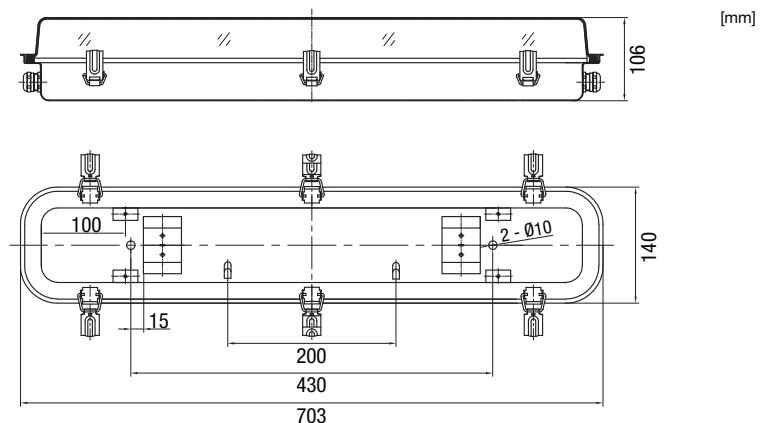
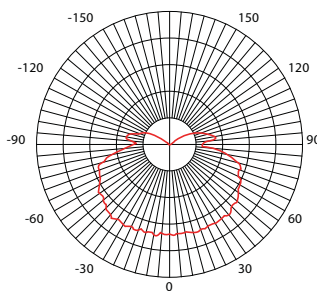
### Key Features

- Triac dimming compatible
- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

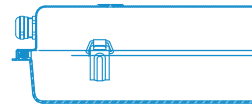


\*For AC models only

## LWE21/LWE22



# LED WATERTIGHT LUMINAIRE



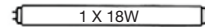
## LWE SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

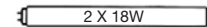
### TECHNICAL SPECIFICATIONS



Ideal Replacement:



LWE21 for 1X18W



LWE22 for 2X18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWE21SP5KA1S	LWE21-S	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21SP5KA1B	LWE21-SB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21SP5KA1E	LWE21-SE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21ZP5KA1S	LWE21-Z	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE21ZP5KA1B	LWE21-ZB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE21ZP5KA1E	LWE21-ZE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE22SP5KA1S	LWE22-S	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22SP5KA1B	LWE22-SB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22SP5KA1E	LWE22-SE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22ZP5KA1S	LWE22-Z	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWE22ZP5KA1B	LWE22-ZB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWE22ZP5KA1E	LWE22-ZE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

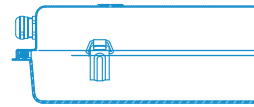
BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWE21SP5KA2S	LWE21-S	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21SP5KA2B	LWE21-SB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21SP5KA2E	LWE21-SE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWE21ZP5KA2S	LWE21-Z	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE21ZP5KA2B	LWE21-ZB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE21ZP5KA2E	LWE21-ZE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWE22SP5KA2S	LWE22-S	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22SP5KA2B	LWE22-SB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22SP5KA2E	LWE22-SE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWE22ZP5KA2S	LWE22-Z	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWE22ZP5KA2B	LWE22-ZB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWE22ZP5KA2E	LWE22-ZE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.



# LED WATERTIGHT LUMINAIRE



## LWE SERIES (LITE)



\*Protection guard is optional add-on

### Application

Decks, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated white

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

### Weight

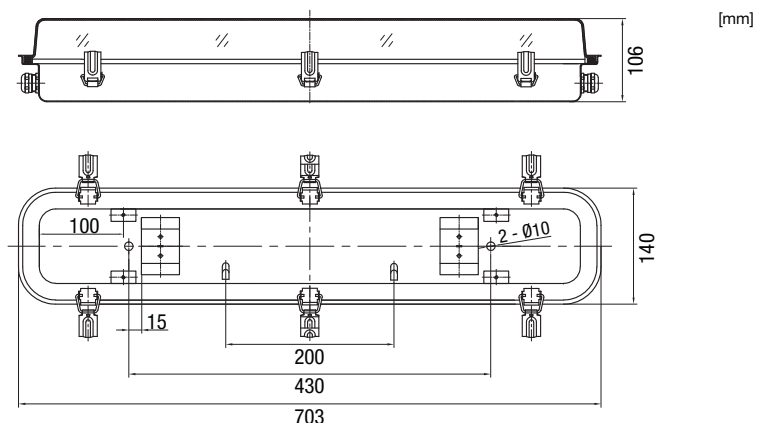
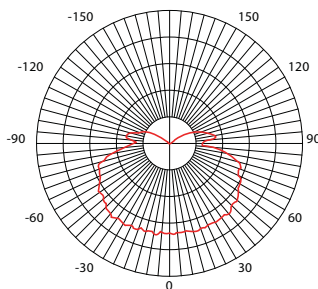
LWE21: 2.6Kg LWE22: 2.7Kg

With 3Hr emergency backup battery: Add 0.18Kg

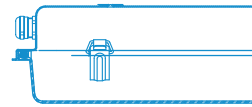
### Key Features

- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

### LWE21/LWE22



# LED WATERTIGHT LUMINAIRE



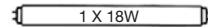
## LWE SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

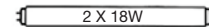
### TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement:



LWE21 for 1X18W



LWE22 for 2X18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWE21SX6KA1S	LWE21-S	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21SX6KA1B	LWE21-SB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21SX6KA1E	LWE21-SE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21ZX6KA1S	LWE21-Z	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE21ZX6KA1B	LWE21-ZB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE21ZX6KA1E	LWE21-ZE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE22SX6KA1S	LWE22-S	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22SX6KA1B	LWE22-SB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22SX6KA1E	LWE22-SE	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22ZX6KA1S	LWE22-Z	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWE22ZX6KA1B	LWE22-ZB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWE22ZX6KA1E	LWE22-ZE	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

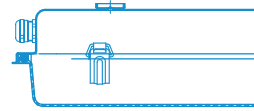
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWE21SX6KA2S	LWE21-S	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21SX6KA2B	LWE21-SB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21SX6KA2E	LWE21-SE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWE21ZX6KA2S	LWE21-Z	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE21ZX6KA2B	LWE21-ZB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE21ZX6KA2E	LWE21-ZE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWE22SX6KA2S	LWE22-S	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22SX6KA2B	LWE22-SB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22SX6KA2E	LWE22-SE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWE22ZX6KA2S	LWE22-Z	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWE22ZX6KA2B	LWE22-ZB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWE22ZX6KA2E	LWE22-ZE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



## LWJ SERIES



### Application

Decks, Engine rooms, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated green

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

24V DC

### Weight

LWJ21: 3.1Kg LWJ22: 3.3Kg

LWJ41: 5.1Kg LWJ42: 5.5Kg

With 3Hr emergency backup battery: Add 0.18Kg

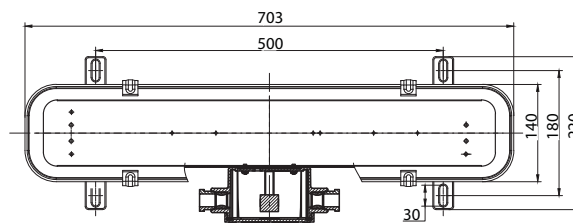
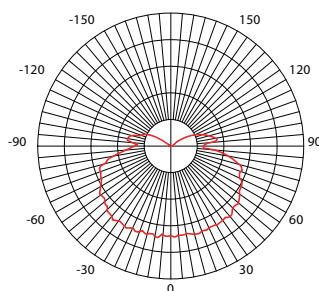
### Key Features

- Triac dimming compatible
- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting



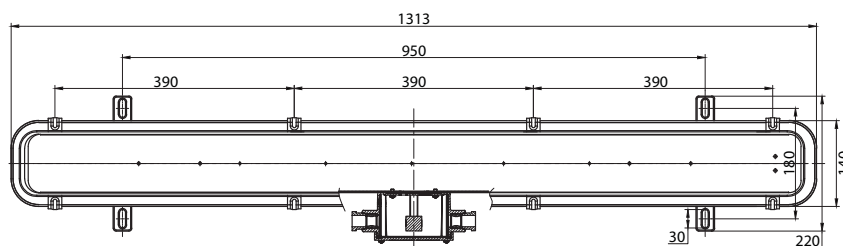
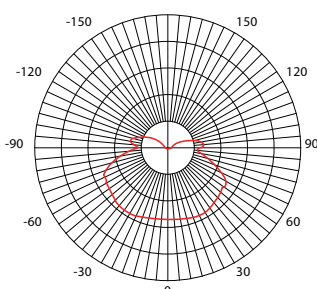
\*For AC models only

### LWJ21/LWJ22



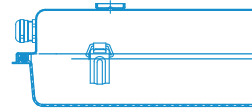
[mm]

### LWJ41/LWJ42



[mm]

# LED WATERTIGHT LUMINAIRE



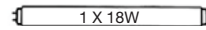
## LWJ SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

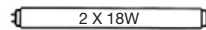
### TECHNICAL SPECIFICATIONS



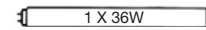
Ideal Replacement:



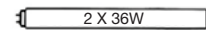
LWJ21 for 1X18W



LWJ22 for 2X18W



LWJ41 for 1X36W



LWJ42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ21SP5KA1S	LWJ21-S	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21SP5KA1B	LWJ21-SB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21SP5KA1E	LWJ21-SE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21ZP5KA1S	LWJ21-Z	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ21ZP5KA1B	LWJ21-ZB	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ21ZP5KA1E	LWJ21-ZE	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ22SP5KA1S	LWJ22-S	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22SP5KA1B	LWJ22-SB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22SP5KA1E	LWJ22-SE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22ZP5KA1S	LWJ22-Z	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWJ22ZP5KA1B	LWJ22-ZB	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWJ22ZP5KA1E	LWJ22-ZE	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

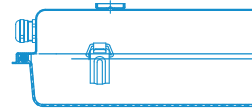
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ41ZP5KA1S	LWJ41-Z	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ41ZP5KA1B	LWJ41-ZB	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ41ZP5KA1E	LWJ41-ZE	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ42ZP5KA1S	LWJ42-Z	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWJ42ZP5KA1B	LWJ42-ZB	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWJ42ZP5KA1E	LWJ42-ZE	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



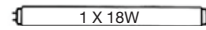
## LWJ SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

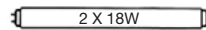
### TECHNICAL SPECIFICATIONS



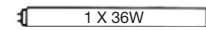
Ideal Replacement:



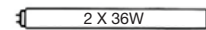
LWJ21 for 1X18W



LWJ22 for 2X18W



LWJ41 for 1X36W



LWJ42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ21SP5KA2S	LWJ21-S	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21SP5KA2B	LWJ21-SB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21SP5KA2E	LWJ21-SE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21ZP5KA2S	LWJ21-Z	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ21ZP5KA2B	LWJ21-ZB	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ21ZP5KA2E	LWJ21-ZE	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ22SP5KA2S	LWJ22-S	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22SP5KA2B	LWJ22-SB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22SP5KA2E	LWJ22-SE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22ZP5KA2S	LWJ22-Z	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWJ22ZP5KA2B	LWJ22-ZB	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel
LWJ22ZP5KA2E	LWJ22-ZE	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ41ZP5KA2S	LWJ41-Z	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ41ZP5KA2B	LWJ41-ZB	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ41ZP5KA2E	LWJ41-ZE	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	2200lm	Zinc Coated Steel
LWJ42ZP5KA2S	LWJ42-Z	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWJ42ZP5KA2B	LWJ42-ZB	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel
LWJ42ZP5KA2E	LWJ42-ZE	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	4400lm	Zinc Coated Steel

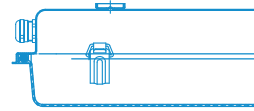
Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ21SP5KD2S	LWJ21-S	24V DC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	SUS316 Stainless Steel
LWJ21ZP5KD2S	LWJ21-Z	24V DC	1x12.5W	5000K	-30°C ~ +45°C	1150lm	Zinc Coated Steel
LWJ22SP5KD2S	LWJ22-S	24V DC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	SUS316 Stainless Steel
LWJ22ZP5KD2S	LWJ22-Z	24V DC	2x12.5W	5000K	-30°C ~ +45°C	2300lm	Zinc Coated Steel

Also available in other CCT.

# LED WATERTIGHT LUMINAIRE



## LWJ SERIES (LITE)



### Application

Decks, Yards, Coldrooms

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate

Housing: SUS316 stainless steel or

Zinc coated steel, Powder coated green

Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

100V ~ 120V AC

220V ~ 240V AC

### Weight

LWJ21: 2.6Kg LWJ22: 2.7Kg

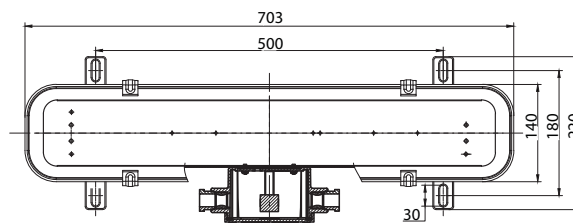
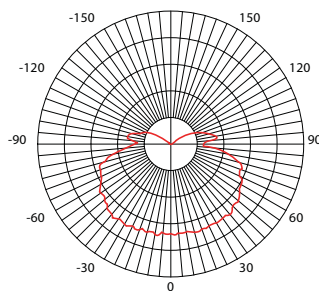
LWJ41: 4.8Kg LWJ42: 5.0Kg

With 3Hr emergency backup battery: Add 0.18Kg

### Key Features

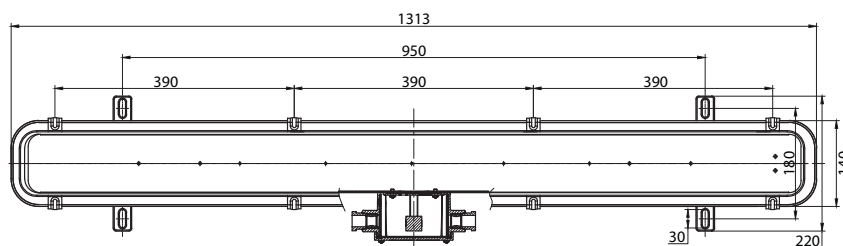
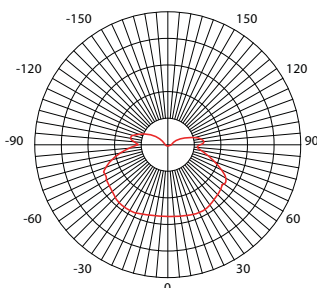
- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

### LWJ21/LWJ22



[mm]

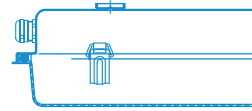
### LWJ41/LWJ42



[mm]



# LED WATERTIGHT LUMINAIRE



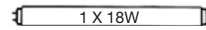
## LWJ SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

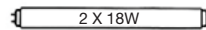
### TECHNICAL SPECIFICATIONS



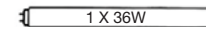
Ideal Replacement:



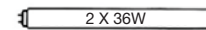
LWJ21 for 1X18W



LWJ22 for 2X18W



LWJ41 for 1X36W



LWJ42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ21SX6KA1S	LWJ21-S	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21SX6KA1B	LWJ21-SB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21SX6KA1E	LWJ21-SE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21ZX6KA1S	LWJ21-Z	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ21ZX6KA1B	LWJ21-ZB	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ21ZX6KA1E	LWJ21-ZE	100V - 120V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ22SX6KA1S	LWJ22-S	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22SX6KA1B	LWJ22-SB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22SX6KA1E	LWJ22-S	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22ZX6KA1S	LWJ22-Z	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ22ZX6KA1B	LWJ22-ZB	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ22ZX6KA1E	LWJ22-ZE	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

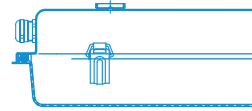
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ41ZX6KA1S	LWJ41-Z	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ41ZX6KA1B	LWJ41-ZB	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ41ZX6KA1E	LWJ41-ZE	100V - 120V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ42ZX6KA1S	LWJ42-Z	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWJ42ZX6KA1B	LWJ42-ZB	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWJ42ZX6KA1E	LWJ42-ZE	100V - 120V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED WATERTIGHT LUMINAIRE



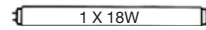
## LWJ SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr battery backup
- E Denotes : With DC24V emergency LED

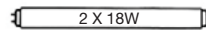
### TECHNICAL SPECIFICATIONS



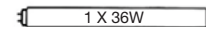
Ideal Replacement:



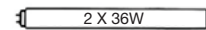
LWJ21 for 1X18W



LWJ22 for 2X18W



LWJ41 for 1X36W



LWJ42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ21SX6KA2S	LWJ21-S	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21SX6KA2B	LWJ21-SB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21SX6KA2E	LWJ21-SE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	SUS316 Stainless Steel
LWJ21ZX6KA2S	LWJ21-Z	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ21ZX6KA2B	LWJ21-ZB	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ21ZX6KA2E	LWJ21-ZE	220V - 240V AC	1x10W	6500K	-30°C ~ +45°C	1000lm	Zinc Coated Steel
LWJ22SX6KA2S	LWJ22-S	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22SX6KA2B	LWJ22-SB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22SX6KA2E	LWJ22-SE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	SUS316 Stainless Steel
LWJ22ZX6KA2S	LWJ22-Z	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ22ZX6KA2B	LWJ22-ZB	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ22ZX6KA2E	LWJ22-ZE	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel

Also available in other CCT.

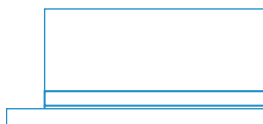
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWJ41ZX6KA2S	LWJ41-Z	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ41ZX6KA2B	LWJ41-ZB	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ41ZX6KA2E	LWJ41-ZE	220V - 240V AC	1x20W	6500K	-30°C ~ +45°C	2000lm	Zinc Coated Steel
LWJ42ZX6KA2S	LWJ42-Z	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWJ42ZX6KA2B	LWJ42-ZB	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel
LWJ42ZX6KA2E	LWJ42-ZE	220V - 240V AC	2x20W	6500K	-30°C ~ +45°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED RECESSED LUMINAIRE



## RC SERIES



Ice Crystal Diffuser



### Key Features

- Triac dimming compatible
- Integrated with LED linear module(s) to provide high illumination performance
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting



### Application

Accommodation areas, Passageways, Cabins

### Mounting Method

4 mounting brackets,  
Hole cut out (2ft): 638 X 211 mm  
Hole cut out (4ft): 1247 X 211 mm

### Material

Diffuser: PMMA ice crystal  
Housing: Zinc coated steel, Powder coated white

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Protection Class

IP44 in conjunction with ceiling

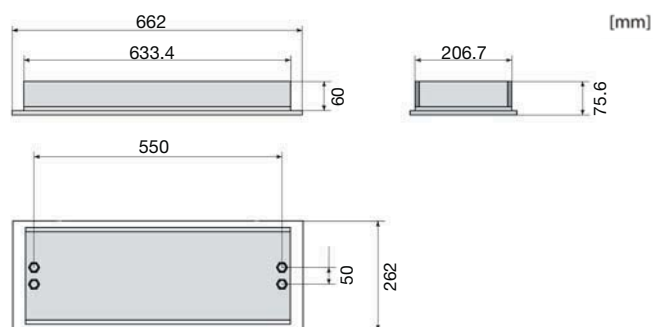
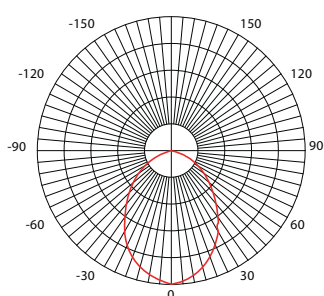
### Options

100V ~ 120V AC

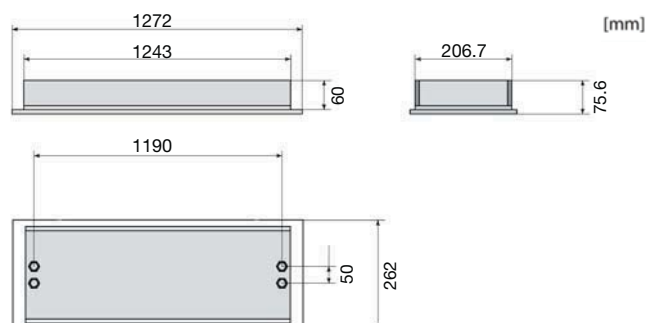
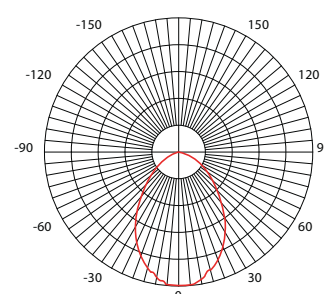
### Weight

RC21: 3.7Kg RC22: 4.0Kg  
RC41: 6.9Kg RC42: 7.5Kg

### RC21/RC22



### RC41/RC42



# LED RECESSED LUMINAIRE



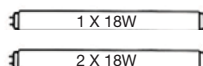
## RC SERIES

- B Denotes : With battery backup
- E Denotes : With DC24V emergency LED

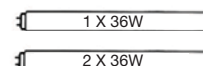
### TECHNICAL SPECIFICATIONS



Ideal Replacement:



RC21 for 1X18W  
RC22 for 2X18W



RC41 for 1X36W  
RC42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLARC215A1	RC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC215A1B	RC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC215A1E	RC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC225A1	RC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLARC225A1B	RC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLARC225A1E	RC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLARC415A1	RC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC415A1B	RC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC415A1E	RC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC425A1	RC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLARC425A1B	RC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLARC425A1E	RC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED RECESSED LUMINAIRE



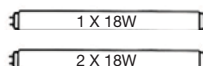
## RC SERIES

- B Denotes : With battery backup
- E Denotes : With DC24V emergency LED

### TECHNICAL SPECIFICATIONS

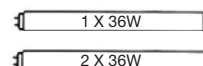


Ideal Replacement:



RC21 for 1X18W

RC22 for 2X18W



RC41 for 1X36W

RC42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLARC215A2	RC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC215A2B	RC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC215A2E	RC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLARC225A2	RC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLARC225A2B	RC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLARC225A2E	RC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLARC415A2	RC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC415A2B	RC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC415A2E	RC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLARC425A2	RC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLARC425A2B	RC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLARC425A2E	RC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED SURFACE LUMINAIRE



## SC SERIES



### Key Features

- Triac dimming compatible
- Special designed polycarbonate diffuser to optimize the LED lighting performance
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting

### Application

Passageways, Cabins, Lounges, Dining rooms, Accommodation areas

### Mounting Method

4 mounting holes ø5.5mm

### Material

Diffuser: Polycarbonate  
Housing: Zinc coated steel, Powder coated white

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

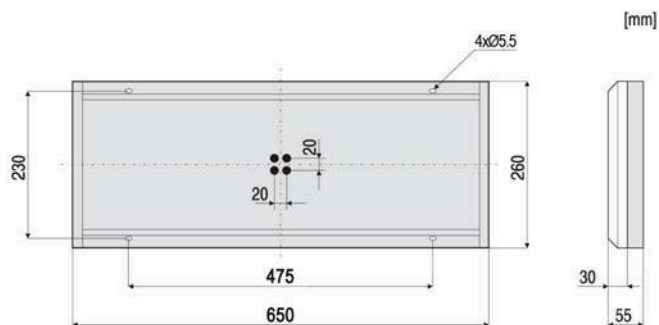
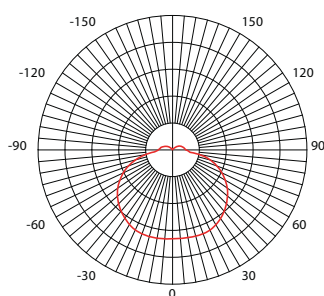
100V ~ 120V AC

### Weight

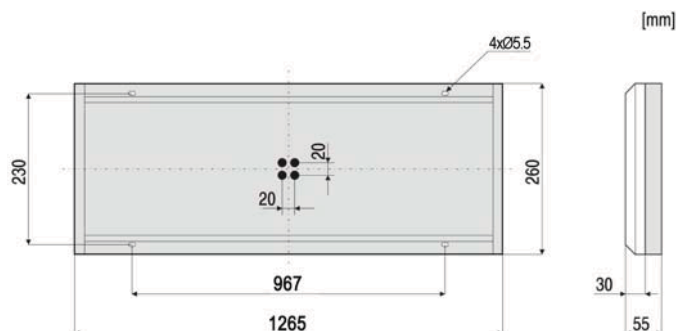
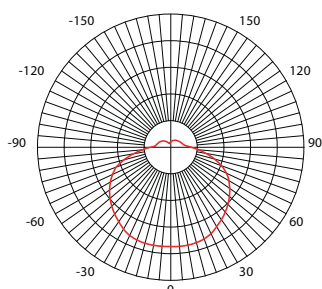
SC21: 2.5Kg SC22: 2.8Kg  
SC41: 5.0Kg SC42: 5.6Kg



### SC21/SC22

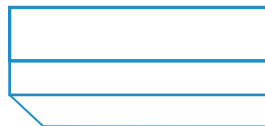


### SC41/SC42





# LED SURFACE LUMINAIRE



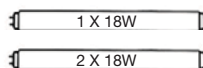
## SC SERIES

- B Denotes : With battery backup
- E Denotes : With DC24V emergency LED

### TECHNICAL SPECIFICATIONS

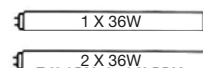


Ideal Replacement:



SC21 for 1X18W

SC22 for 2X18W



SC41 for 1X36W

SC42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLASC215A1	SC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC215A1B	SC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC215A1E	SC21	100V - 120V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC225A1	SC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLASC225A1B	SC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLASC225A1E	SC22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm

Also available in other CCT.

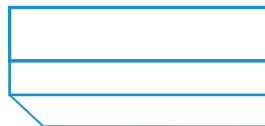
\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLASC415A1	SC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC415A1B	SC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC415A1E	SC41	100V - 120V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC425A1	SC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLASC425A1B	SC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLASC425A1E	SC42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3800lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED SURFACE LUMINAIRE



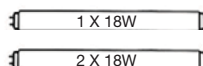
## SC SERIES

- B Denotes : With battery backup
- E Denotes : With DC24V emergency LED

### TECHNICAL SPECIFICATIONS

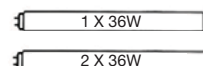


Ideal Replacement:



SC21 for 1X18W

SC22 for 2X18W



SC41 for 1X36W

SC42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLASC215A2	SC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC215A2B	SC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC215A2E	SC21	220V - 240V AC	1x12.5W	5000K	-30°C ~ +45°C	950lm
IGLASC225A2	SC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLASC225A2B	SC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm
IGLASC225A2E	SC22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1900lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLASC415A2	SC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC415A2B	SC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC415A2E	SC41	220V - 240V AC	1x24W	5000K	-30°C ~ +45°C	1900lm
IGLASC425A2	SC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLASC425A2B	SC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm
IGLASC425A2E	SC42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3800lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

# LED SURFACE LUMINAIRE



## LNS SERIES (LITE)



### Key Features

- Triac dimming compatible
- Special designed polycarbonate diffuser to optimize the LED lighting performance
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting



\*For AC models only



### Application

Passageways, Cabins, Lounges, Dining rooms, Accommodation areas

### Mounting Method

4 mounting holes ø5.5mm

### Material

Diffuser: Polycarbonate

Housing: Marine grade Aluminium AL6063

### Electrical

Flexible wiring, Heat resistant up to 105°C

### Options

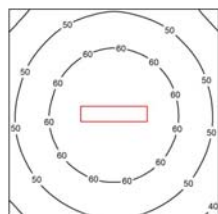
100V ~ 120V AC

220V ~ 240V AC

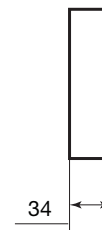
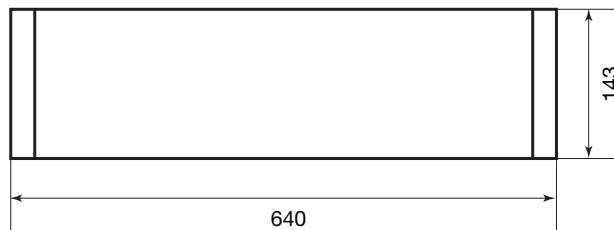
24V DC

### Weight

LNS22: 0.9Kg



LNS22 (2x10W) model:  
Average Lux : 55lx  
Mounting Height : 2.3 Meters  
Measurement Area : 2m²

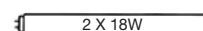


[mm]

## TECHNICAL SPECIFICATIONS IP 20

- S Denotes : Standard lighting
- B Denotes : With 3Hr NiMH battery backup
- E Denotes : With DC24V emergency LED

Ideal Replacement:



LNS22 for 2X18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LNS22AXA13KS	LNS22	100V - 120V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA13KB	LNS22-B	100V - 120V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA13KE	LNS22-E	100V - 120V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA14KS	LNS22	100V - 120V AC	2x10W	4000K	-30°C ~ +45°C	1700lm
LNS22AXA14KB	LNS22-B	100V - 120V AC	2x10W	4000K	-30°C ~ +45°C	1700lm
LNS22AXA14KE	LNS22-E	100V - 120V AC	2x10W	4000K	-30°C ~ +45°C	1700lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

Due to our continuous development and product improvement policy, we reserve the rights to revise the specifications of all products without prior notice.



# LED SURFACE LUMINAIRE



## LNS SERIES (LITE)

- S Denotes : Standard lighting
- B Denotes : With 3Hr NiMH battery backup
- E Denotes : With DC24V emergency LED

## TECHNICAL SPECIFICATIONS IP 20

Ideal Replacement:

 LNS22 for 2X18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LNS22AXA16KS	LNS22	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	1700lm
LNS22AXA16KB	LNS22-B	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	1700lm
LNS22AXA16KE	LNS22-E	100V - 120V AC	2x10W	6500K	-30°C ~ +45°C	1700lm

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LNS22AXA23KS	LNS22	220V - 240V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA23KB	LNS22-B	220V - 240V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA23KE	LNS22-E	220V - 240V AC	2x10W	2700K	-30°C ~ +45°C	1700lm
LNS22AXA24KS	LNS22	220V - 240V AC	2x10W	4000K	-30°C ~ +45°C	1700lm
LNS22AXA24KB	LNS22-B	220V - 240V AC	2x10W	4000K	-30°C ~ +45°C	1700lm
LNS22AXA24KE	LNS22-E	220V - 240V AC	2x10W	4000K	-30°C ~ +45°C	1700lm
LNS22AXA26KS	LNS22	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	1700lm
LNS22AXA26KB	LNS22-B	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	1700lm
LNS22AXA26KE	LNS22-E	220V - 240V AC	2x10W	6500K	-30°C ~ +45°C	1700lm

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LNS22AXD25KS	LNS22	24V DC	2x10W	5000K	-30°C ~ +45°C	1700lm

# LED KITCHEN LUMINAIRE



## GL SERIES



### Key Features

- Triac dimming compatible
- Built-in with high thermal efficient linear module that allows lighting to operate at ambient temperature of up to 45°C
- Special designed clear polycarbonate diffuser to optimize the LED light transmission
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance
- Available with battery backup system and emergency lighting



### Application

Galley, Pantries, Cafeterias, Provision rooms, Kitchens

### Mounting Method

6 mounting holes  $\varnothing 5\text{mm}$  (GL22)  
8 mounting holes  $\varnothing 5\text{mm}$  (GL42)

### Material

Diffuser: Polycarbonate  
Base plate: Stainless steel  
Gasket: Silicone rubber

### Cable Entry

2 plastic cable glands M20  
Cable max  $\varnothing 13\text{ mm}$

### Electrical

Flexible wiring, Heat resistance up to 105°C

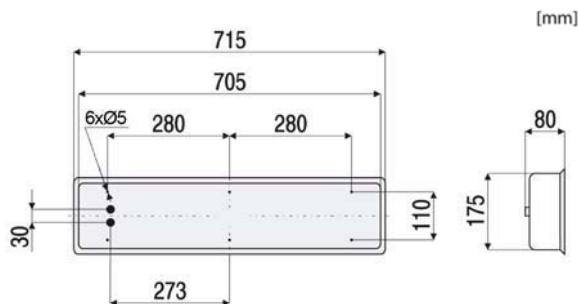
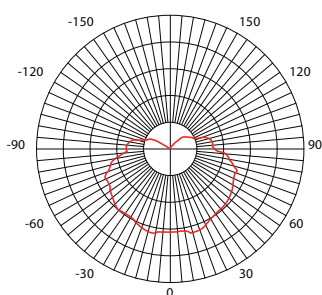
### Options

100V ~ 120V AC

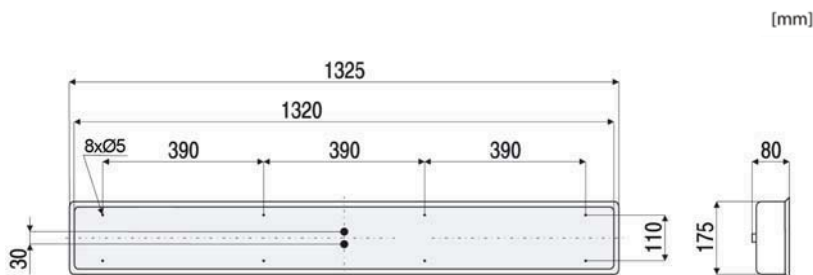
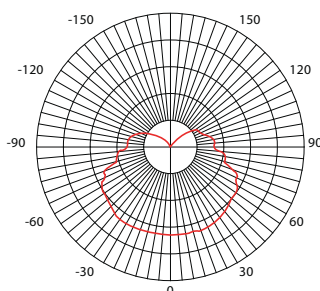
### Weight

GL22: 4.2Kg GL42: 6.3Kg

### GL22



### GL42



# LED KITCHEN LUMINAIRE

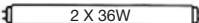


## GL SERIES

- B Denotes : With battery backup
- E Denotes : With DC24V emergency LED

## TECHNICAL SPECIFICATIONS IP 55

 GL22 for 2X18W

Ideal Replacement:  GL42 for 2X36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLAGL225A1	GL22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm
IGLAGL225A1B	GL22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm
IGLAGL225A1E	GL22	100V - 120V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLAGL425A1	GL42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3880lm
IGLAGL425A1B	GL42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3880lm
IGLAGL425A1E	GL42	100V - 120V AC	2x24W	5000K	-30°C ~ +45°C	3880lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLAGL225A2	GL22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm
IGLAGL225A2B	GL22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm
IGLAGL225A2E	GL22	220V - 240V AC	2x12.5W	5000K	-30°C ~ +45°C	1940lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLAGL425A2	GL42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3880lm
IGLAGL425A2B	GL42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3880lm
IGLAGL425A2E	GL42	220V - 240V AC	2x24W	5000K	-30°C ~ +45°C	3880lm

Also available in other CCT.

\*Ambient Temperature is not applicable for Battery Backup System and Emergency Lighting.



# LED AIRTIGHT LUMINAIRE



## AT SERIES



### Key Features

- Triac dimming compatible
- Special designed polycarbonate diffuser to optimize the LED light transmission
- Slim profile design that is easily mounted to provide illumination performance while using significantly less energy
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance



### Application

Open decks, Deck rails

### Material

Polycarbonate diffuser and end cap

### Electrical

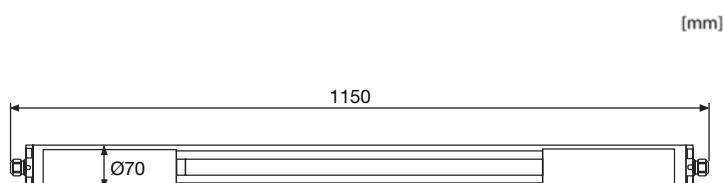
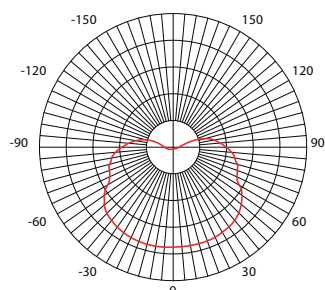
Flexible wiring, Heat resistance up to 105°C

### Options

100V ~ 120V AC

### Weight

3.3Kg



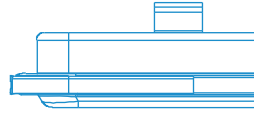
## TECHNICAL SPECIFICATIONS IP 68

Ideal Replacement: 

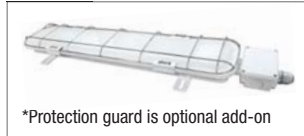
BH Code	Type	Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
IGLATA4110A1	ATA-411	100V - 120V AC	1x12.5W	5000K	-20°C ~ +40°C	970lm
IGLATA4110	ATA-411	220V - 240V AC	1x12.5W	5000K	-20°C ~ +40°C	970lm

Also available in other CCT.

# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES



### Key Features

- Super thin light weight design
- Superior thermal design to allow the luminaire to operate at high ambient temperature up to 60°C, suitable for usage even in hot engine room
- Designed with reliable AC driver on board to enhance the service life
- Designed with junction box for fast termination
- Polycarbonate diffuser prevents glare for better eye comfort
- Supports dual voltage AC100V-120V / 220V-240V. Option for DC20V-32V available
- Long service life of 50,000 hours @ 50°C (Ta)
- Marine class compliance



### Application

Decks, Engine rooms, Marinas, Docks, Ports, Warehouses

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate  
Housing: Zinc coated steel or SUS316 stainless steel, Powder coated white  
Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

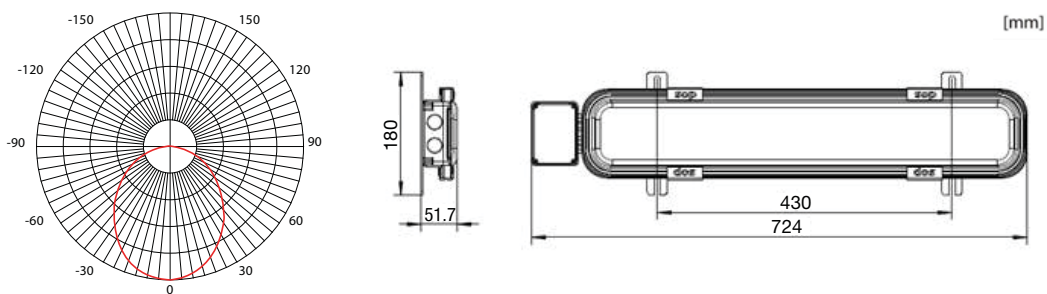
### Options

20V-32V DC

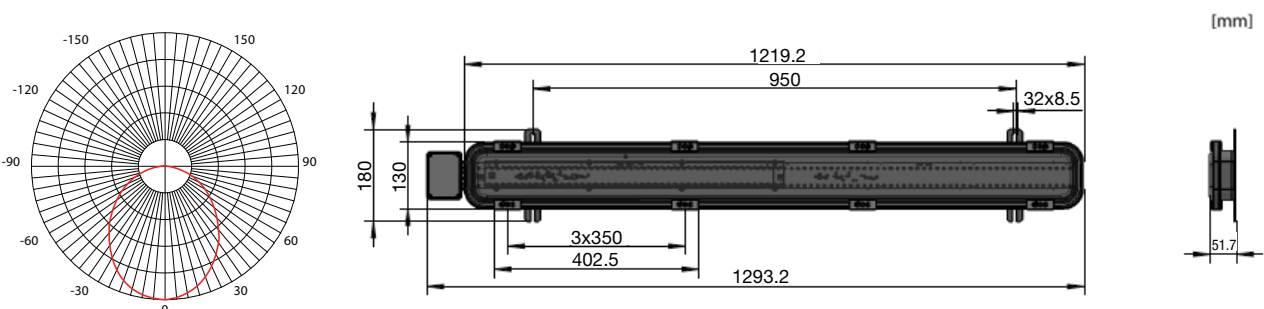
### Weight

LWM20 (ZCS): 2.0Kg LWM20 (SUS316): 2.1Kg  
LWM40 (ZCS): 3.7Kg LWM40 (SUS316): 3.8Kg  
With 2nd Junction Box: Add 0.2Kg  
With LWM20 Protection Guard: Add 0.2Kg  
With LWM40 Protection Guard: Add 0.4Kg

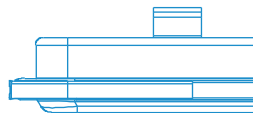
### LWM20



### LWM40



# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES

- 1\*\*\*\*S Denotes : Standard lighting with 1 junction box
- 1\*\*\*\*B Denotes : With 3Hr NiMH battery backup & 1 junction box
- 1\*\*\*\*E Denotes : With DC24V emergency LED & 1 junction box

## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement: 2 X 18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM20S15KA3S	LWM20-S1	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS15KA3S	LWM20-S1G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S15KA3B	LWM20-S1B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS15KA3B	LWM20-S1BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S15KA3E	LWM20-S1E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS15KA3E	LWM20-S1EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20Z15KA3S	LWM20-Z1	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ15KA3S	LWM20-Z1G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z15KA3B	LWM20-Z1B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ15KA3B	LWM20-Z1BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z15KA3E	LWM20-Z1E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ15KA3E	LWM20-Z1EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z15KD2S	LWM20-Z1	20V - 32V DC	22W	5000K	-30°C ~ +60°C	2200lm	Zinc Coated Steel
LWM20GZ15KD2S	LWM20-Z1G	20V - 32V DC	22W	5000K	-30°C ~ +60°C	2200lm	Zinc Coated Steel
LWM20Z15KD2E	LWM20-Z1E	20V - 32V DC	22W	5000K	-30°C ~ +60°C	2200lm	Zinc Coated Steel

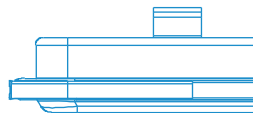
Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

\*\*Optional 93×68×39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

\*\*\*A "G" added at the end of Type code to indicate luminaire with SUS316 stainless steel protection guard.

# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES

- 2\*\*\*\*S Denotes : Standard lighting with 2 junction box
- 2\*\*\*\*B Denotes : With 3Hr NiMH battery backup & 2 junction box
- 2\*\*\*\*E Denotes : With DC24V emergency LED & 2 junction box

## TECHNICAL SPECIFICATIONS

IP 66

Ideal Replacement: 2 X 18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM20S25KA3S	LWM20-S2	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS25KA3S	LWM20-S2G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S25KA3B	LWM20-S2B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS25KA3B	LWM20-S2BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S25KA3E	LWM20-S2E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS25KA3E	LWM20-S2EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20Z25KA3S	LWM20-Z2	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ25KA3S	LWM20-Z2G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z25KA3B	LWM20-Z2B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ25KA3B	LWM20-Z2BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z25KA3E	LWM20-Z2E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ25KA3E	LWM20-Z2EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel

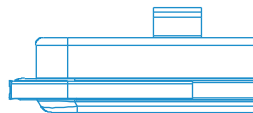
Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

\*\*Optional 93x68x39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

\*\*\*A "G" added at the end of Type code to indicate luminaire with SUS316 stainless steel protection guard.

# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES

- 1\*\*\*\*S Denotes : Standard lighting with 1 junction box
- 1\*\*\*\*B Denotes : With 3Hr NiMH battery backup & 1 junction box
- 1\*\*\*\*E Denotes : With DC24V emergency LED & 1 junction box

- 2\*\*\*\*S Denotes : Standard lighting with 2 junction box
- 2\*\*\*\*B Denotes : With 3Hr NiMH battery backup & 2 junction box
- 2\*\*\*\*E Denotes : With DC24V emergency LED & 2 junction box

## TECHNICAL SPECIFICATIONS IP 66

Ideal Replacement: 2 X 36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM40S15KA3S	LWM40-S1	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S15KA3B	LWM40-S1B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S15KA3E	LWM40-S1E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40Z15KA3S	LWM40-Z1	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z15KA3B	LWM40-Z1B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z15KA3E	LWM40-Z1E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

\*\*Optional 93×68×39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

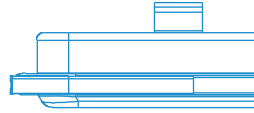
BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM40S25KA3S	LWM40-S2	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S25KA3B	LWM40-S2B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S25KA3E	LWM40-S2E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40Z25KA3S	LWM40-Z2	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z25KA3B	LWM40-Z2B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z25KA3E	LWM40-Z2E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

\*\*Optional 93×68×39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES



### Key Features

- Super thin light weight design
- Superior thermal design to allow the luminaire to operate at high ambient temperature up to 60°C, suitable for usage even in hot engine room
- Designed with reliable AC driver on board to enhance the service life
- Designed with junction box for fast termination
- Polycarbonate diffuser prevents glare for better eye comfort
- Supports dual voltage AC100V-120V / 220V-240V. Option for DC20V-32V available
- Long service life of 50,000 hours @ 50°C (Ta)
- Marine class compliance



### Application

Decks, Engine rooms, Marinas, Docks, Ports, Warehouses

### Mounting Method

Surface mounted

### Material

Diffuser: Polycarbonate  
Housing: Zinc coated steel or SUS316 stainless steel, Powder coated green  
Optional protection guard: SUS316 stainless steel

### Electrical

Flexible wiring, Heat resistant up to 105°C

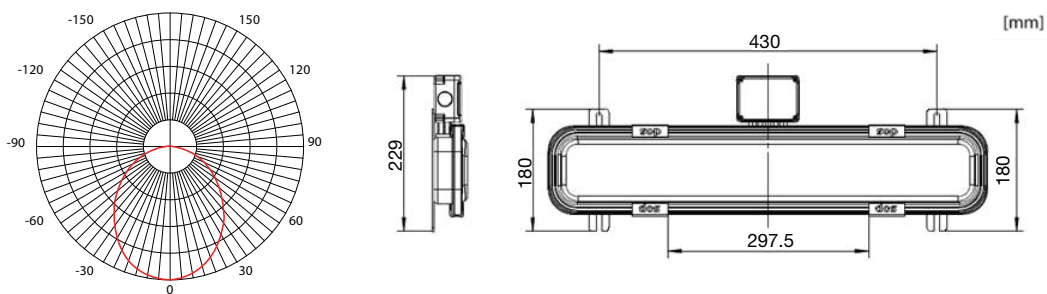
### Options

20V-32V DC

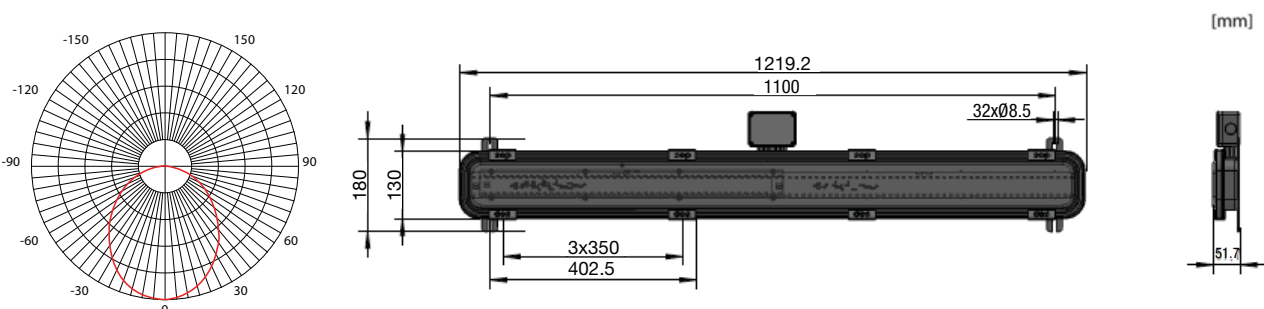
### Weight

LWM20 (ZCS): 2.0Kg LWM20 (SUS316): 2.1Kg  
LWM40 (ZCS): 3.7Kg LWM40 (SUS316): 3.8Kg  
With 2nd Junction Box: Add 0.2Kg  
With LWM20 Protection Guard: Add 0.2Kg  
With LWM40 Protection Guard: Add 0.4Kg

### LWM20

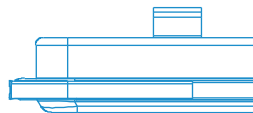


### LWM40





# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr NiMH battery backup
- E Denotes : With DC24V emergency LED

## TECHNICAL SPECIFICATIONS IP 66

Ideal Replacement: 2 X 18W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM20S35KA3S	LWM20-S3	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS35KA3S	LWM20-S3G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S35KA3B	LWM20-S3B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS35KA3B	LWM20-S3BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20S35KA3E	LWM20-S3E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20GS35KA3E	LWM20-S3EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	SUS316 Stainless Steel
LWM20Z35KA3S	LWM20-Z3	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ35KA3S	LWM20-Z3G	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z35KA3B	LWM20-Z3B	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ35KA3B	LWM20-Z3BG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z35KA3E	LWM20-Z3E	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20GZ35KA3E	LWM20-Z3EG	100V - 120V / 220V - 240V AC	20W	5000K	-30°C ~ +60°C	2000lm	Zinc Coated Steel
LWM20Z35KD2S	LWM20-Z3	20V - 32V DC	22W	5000K	-30°C ~ +60°C	2200lm	Zinc Coated Steel
LWM20GZ35KD2S	LWM20-Z3G	20V - 32V DC	22W	5000K	-30°C ~ +60°C	2200lm	Zinc Coated Steel

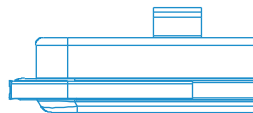
Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

\*\*Optional 93x68x39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

\*\*\*A "G" added at the end of Type code to indicate luminaire with SUS316 stainless steel protection guard.

# LED WATERTIGHT LINEAR LUMINAIRE



## LWM SERIES

- S Denotes : Standard lighting
- B Denotes : With 3Hr NiMH battery backup
- E Denotes : With DC24V emergency LED

## TECHNICAL SPECIFICATIONS IP 66

Ideal Replacement: 2 X 36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen	Housing
LWM40S35KA3S	LWM40-S3	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S35KA3B	LWM40-S3B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40S35KA3E	LWM40-S3E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	SUS316 Stainless Steel
LWM40Z35KA3S	LWM40-Z3	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z35KA3B	LWM40-Z3B	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel
LWM40Z35KA3E	LWM40-Z3E	100V - 120V / 220V - 240V AC	40W	5000K	-30°C ~ +60°C	4000lm	Zinc Coated Steel

Also available in other CCT.

\*Ambient Temperature is not applicable for the 3Hr NiMH Battery Backup System and Emergency Lighting.

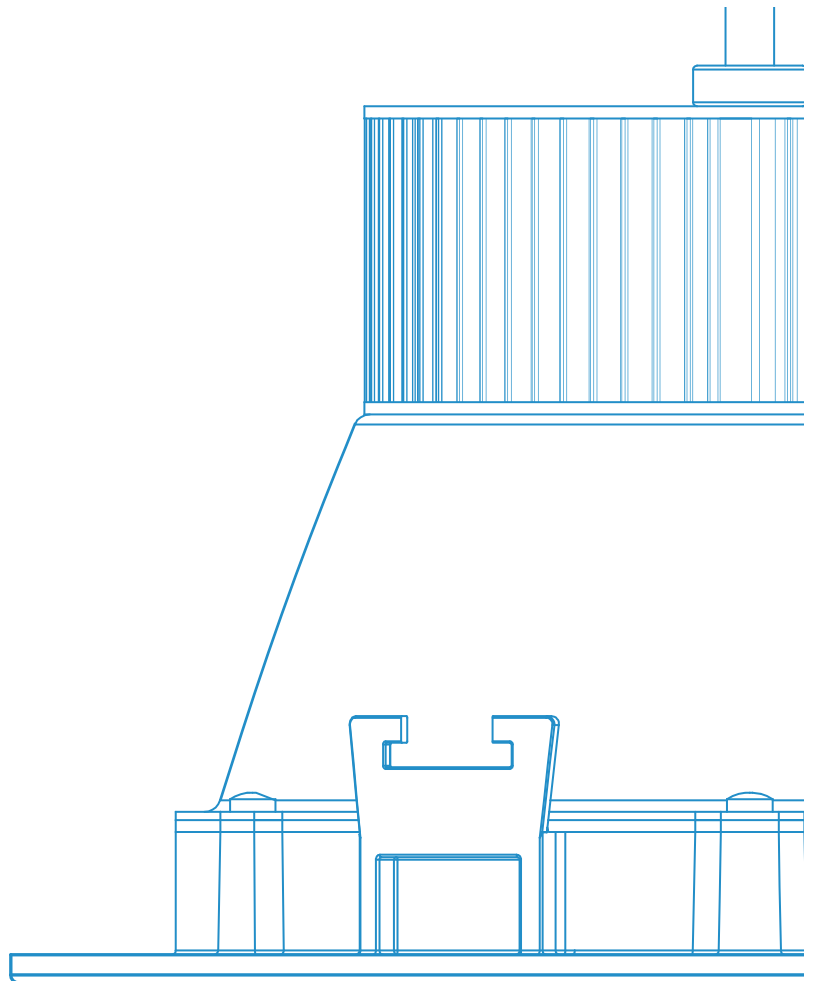
\*\*Optional 93×68×39.5mm 3Hr NiMH Battery Backup module or Emergency Lighting module is installed on the junction box to IP67 rating.

# DOWNLIGHT SERIES

## REDEFINING STANDARDS

SOP LED Downlight Series takes conventional lightings to a whole new dimension. The designing concept revolves around energy-efficiency and durability with true colour quality. The robust construction and stylish finishing makes it suitable for a wide range of applications.

IP 44



# LED SWING DOWNLIGHT



## LDAS SERIES



### Key Features

- Triac dimming compatible (AC voltage model only)
- Built-in with integrated driver for ease of installation
- Swingable to adjust light angle
- Vibration-resistant
- Energy savings of up to 86% compared to 50W halogen
- Superior heat sink designed to enhance the service life
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance

### Application

Cabins, Passageways, Galleys, Meeting rooms

### Material

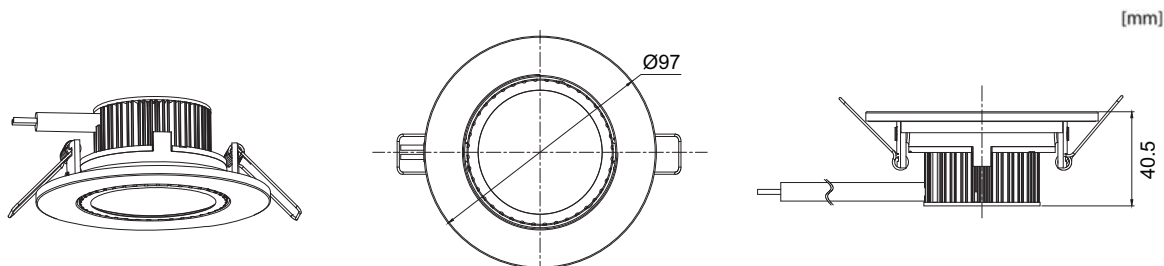
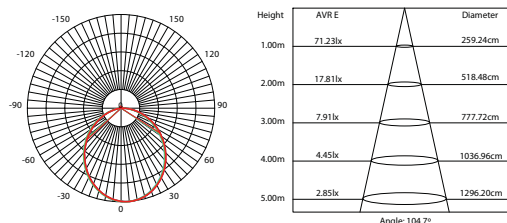
Marine grade aluminium alloy with powder coating, comes with polycarbonate diffuser

### Protection Class

IP44 in conjunction with ceiling

### Weight

0.2Kg



## TECHNICAL SPECIFICATIONS



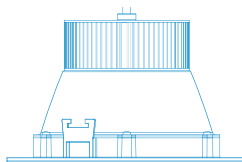
Ideal Replacement:



BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDAS074KA22W	LDAS-7	220V - 240V AC	7W	4000K	105°	-20°C ~ +40°C	566lm
LDAS074KD24W	LDAS-7	24V DC	7W	4000K	105°	-20°C ~ +40°C	560lm

Also available in other CCT.

# LED DOWNLIGHT



## LDAF SERIES



### Application

Cabins, Passageways, Galleys, Meeting rooms

### Material

Marine grade aluminium alloy with powder coating, comes with polycarbonate diffuser

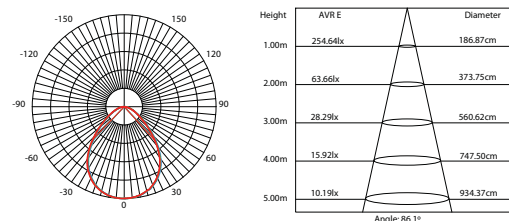
### Protection Class

IP44 in conjunction with ceiling

### Weight

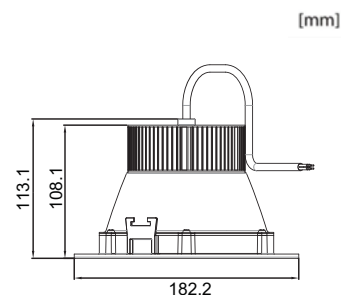
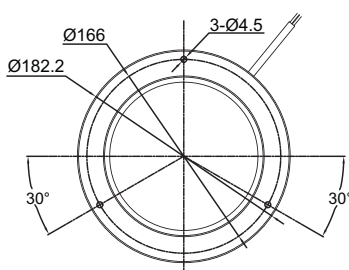
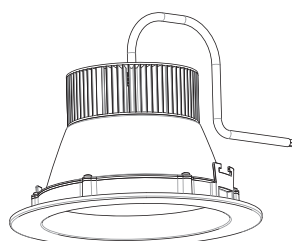
DL12A2: 1.2Kg

DL15A2 / DL15A1 / DL15D: 1.3Kg



### Key Features

- Triac dimming compatible (AC voltage models only)
- Designed with reliable AC driver on board to enhance the service life
- Vibration-resistant
- Energy savings of up to 60% compared to compact fluorescent system
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance



## TECHNICAL SPECIFICATIONS



Ideal Replacement: DL12A2 for 18W CFL DL15A2 / DL15A1 / DL15D for 26W CFL

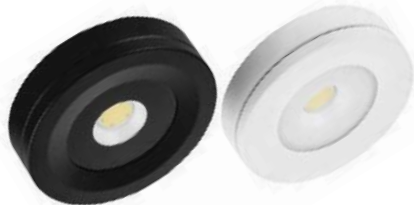
BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDAF124KA22W	LDAF-12	220V - 240V AC	12W	4000K	85°	-20°C ~ +40°C	820lm
LDAF154KA22W	LDAF-15	220V - 240V AC	15W	4000K	85°	-20°C ~ +40°C	1050lm
LDAF154KA11W	LDAF-15	100V - 120V AC	15W	4000K	85°	-20°C ~ +40°C	1050lm
LDAF154KD24W	LDAF-15	24V DC	15W	4000K	85°	-20°C ~ +40°C	1050lm

Also available in other CCT.

# LED MINI SURFACE DOWNLIGHT



## SL SERIES



### Key Features

- Light, compact and ultra-thin
- Built-in integrated driver for ease of installation
- More than 90% energy savings compared with 35W halogen
- Vibration-resistant
- Dimmable LED
- Long service life of 35,000 hours
- Safety compliance

### Application

Cabins, Lounges, Accommodation areas, Restrooms

### Material

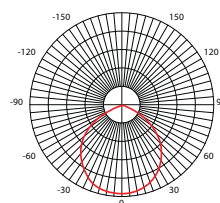
Corrosion-resistant aluminium housing with toughened glass diffuser

### Protection Class

IP44

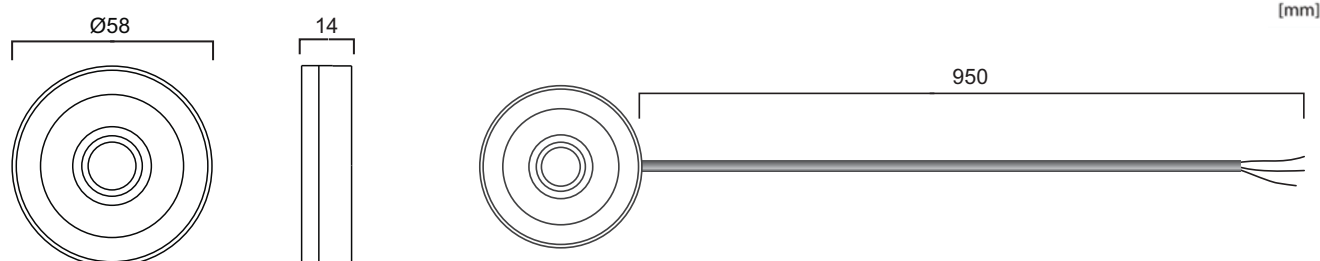
### Weight

0.15Kg



Height	AVR E	Diameter
1.50m	14.73lx	377.62cm
2.00m	8.29lx	502.7cm
4.00m	2.07lx	1005.39cm
4.50m	1.64lx	1131.07cm
6.00m	0.92lx	1508.09cm

Angle: 103°



## TECHNICAL SPECIFICATIONS

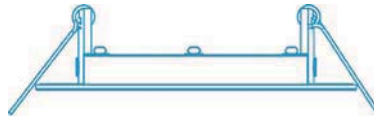
IP 44

BH Code	Type	Housing Colour	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LASL33BA2	SL3A2	Black	220V - 240V AC	3W	3000K	90°	-20°C ~ +40°C	295lm
LASL33WA2	SL3A2	White	220V - 240V AC	3W	3000K	90°	-20°C ~ +40°C	295lm

Also available in other CCT.  
100V-120V AC model option available.



# LED MINI DOWNLIGHT



## DC SERIES



### Key Features

- Light, compact and ultra-thin
- Built-in integrated driver for ease of installation
- 85% energy savings compared with 20W halogen
- Also suitable as a DC24V emergency LED
- Vibration-resistant
- TRIAC and PWM dimming compatible
- Safety compliance

### Application

Cabins, Lounges, Accommodation areas

### Material

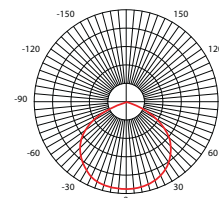
Corrosion-resistant aluminium housing with PMMA diffuser

### Protection Class

IP20

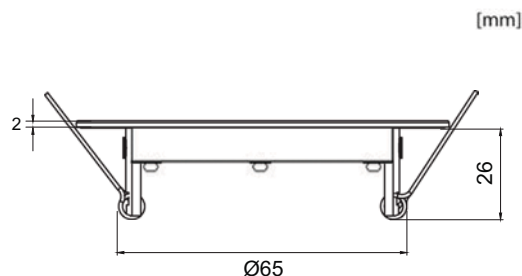
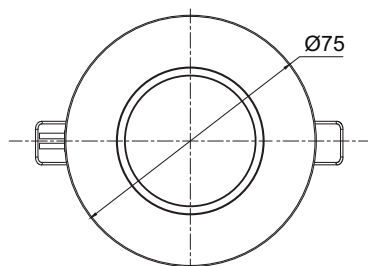
### Weight

0.1Kg



Height	AVR E	Diameter
1.00m	14.05lx	361.52cm
2.00m	3.51lx	723.05cm
3.00m	1.56lx	1084.57cm
4.00m	0.88lx	1446.09cm
5.00m	0.56lx	1807.62cm

Angle: 122.1°



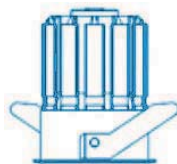
## TECHNICAL SPECIFICATIONS



BH Code	Type	Housing Colour	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LADC34BD	DC3BD	Black	24V DC	3W	4000K	120°	-20°C ~ +40°C	210lm
LADC34WD	DC3WD	White	24V DC	3W	4000K	120°	-20°C ~ +40°C	210lm

Also available in other CCT.

# LED COB DOWNLIGHT



## DLC SERIES



### Application

Cabins, Galleys, Lounges, Corridors, Lobbies

### Material

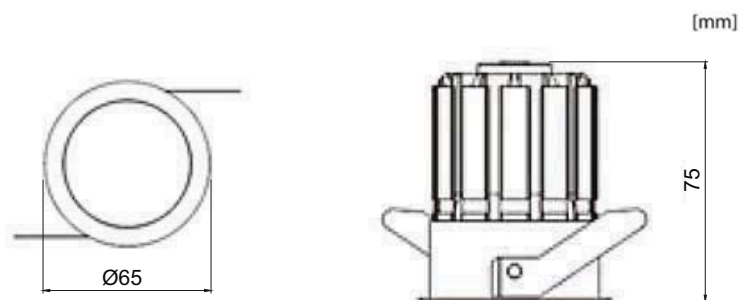
Aluminium alloy with powder coating

### Protection Class

IP40

### Key Features

- Energy savings of up to 40% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70
- CE Marking, EMC safety compliance



## TECHNICAL SPECIFICATIONS

IP 40

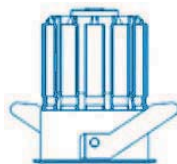


Ideal Replacement:  15W CFL

BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LADLC93A2	DLC9A2	220V - 240V AC	9W	3000K	36°	-30°C ~ +40°C	670lm

Also available in other CCT.

# LED COB DOWNLIGHT



## DLC SERIES



### Application

Cabins, Galleys, Lounges, Corridors, Lobbies

### Material

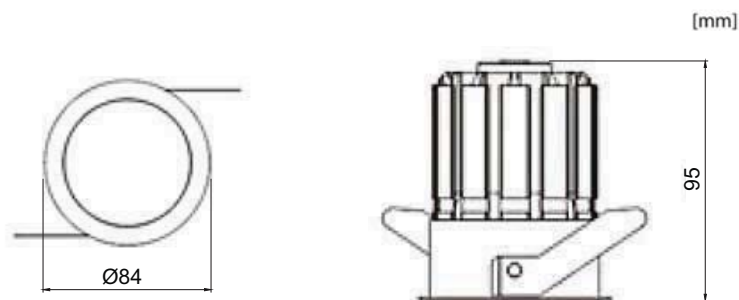
Aluminium alloy with powder coating

### Protection Class

IP40

### Key Features

- Energy savings of up to 40% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70
- CE Marking, EMC safety compliance



## TECHNICAL SPECIFICATIONS

IP 40

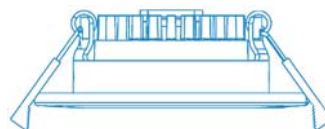


Ideal Replacement:  26W CFL

BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LADLC153A2	DLC15A2	220V - 240V AC	15W	3000K	38°	-30°C ~ +40°C	1100lm

Also available in other CCT.

# FIRE RATED LED DOWNLIGHT



## LDDS SERIES



### Key Features

- Fire-rated for 30, 60 and 90 minutes (BS 476-21:1987)
- Low profile suitable for shallow ceiling voids
- Triac dimming compatible
- 25° swingable to adjust light tilt angle
- 3 Selectable CCT: 3000K / 4000K / 6000K
- Default bezel in white. Optional bezel colours in chrome, nickel or black
- Energy savings of up to 55% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- CE Marking, EMC safety compliance

### Application

Cabins, Galleys, Meeting rooms, Bathrooms

### Material

Steel body with powder coating, aluminium heatsink, PMMA diffuser and polycarbonate bezel

### Protection Class

IP65

### Weight

0.3Kg

### Optional Coloured Bezels



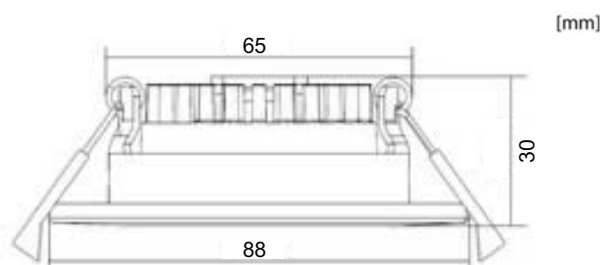
Chrome



Nickel



Black



## TECHNICAL SPECIFICATIONS

IP 65



Ideal Replacement: 18W CFL

BH Code	Type	Voltage	Power	Bezel Colour	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDDS08XKA22W	LDDS-8	220V - 240V AC	8W	White	3000K/4000K/6000K Selectable	60°	-20°C ~ +40°C	900lm
LDDS08XKA22C	LDDS-8	220V - 240V AC	8W	Chrome	3000K/4000K/6000K Selectable	60°	-20°C ~ +40°C	900lm
LDDS08XKA22N	LDDS-8	220V - 240V AC	8W	Nickel	3000K/4000K/6000K Selectable	60°	-20°C ~ +40°C	900lm
LDDS08XKA22B	LDDS-8	220V - 240V AC	8W	Black	3000K/4000K/6000K Selectable	60°	-20°C ~ +40°C	900lm

# LED DOWNLIGHT



## LDDF SERIES



### Application

Cabins, Passageways, Galleys, Meeting rooms

### Material

Powder coated aluminium alloy body and heatsink with PMMA diffuser

### Protection Class

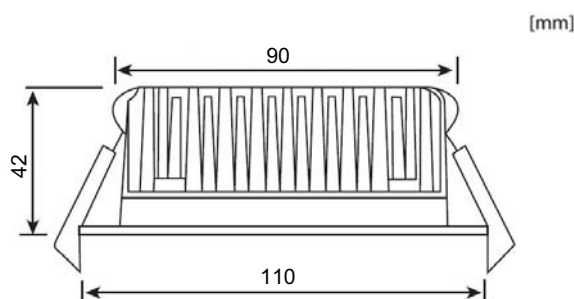
IP44

### Weight

0.4Kg

### Key Features

- Low profile suitable for shallow ceiling voids
- Triac dimming compatible
- 3 Selectable CCT: 3000K / 4000K / 6000K
- Energy savings of up to 50% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- CE Marking, EMC safety compliance



## TECHNICAL SPECIFICATIONS



Ideal Replacement:  26W CFL

BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDDF13XKA22W	LDDF-13	220V - 240V AC	13W	3000K/4000K/6000K Selectable	90°	-20°C ~ +40°C	1100lm
LDDF13XKD24W	LDDF-13	24V - 28V DC	13W	3000K/4000K/6000K Selectable	90°	-20°C ~ +40°C	1100lm

# LED DOWNLIGHT



## LDDF SERIES



### Application

Cabins, Passageways, Galleys, Meeting rooms

### Material

Powder coated aluminium alloy body and heatsink with PMMA diffuser

### Protection Class

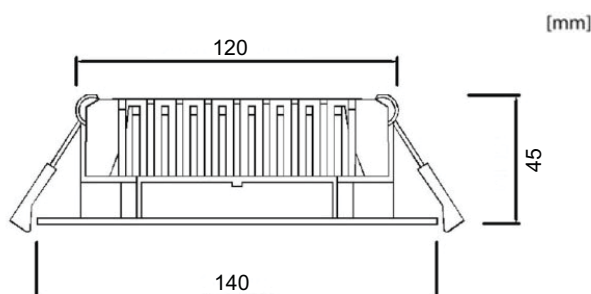
IP44

### Weight

0.7Kg

### Key Features

- Low profile suitable for shallow ceiling voids
- Triac dimming compatible
- 3 Selectable CCT: 3000K / 4000K / 6000K
- Energy savings of up to 50% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- CE Marking, EMC safety compliance



## TECHNICAL SPECIFICATIONS

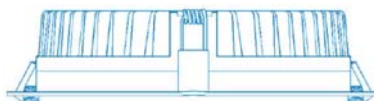


Ideal Replacement:  32W CFL

BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDDF16XKA22W	LDDF-16	220V - 240V AC	16W	3000K/4000K/6000K Selectable	90°	-20°C ~ +40°C	1450lm
LDDF16XKD24W	LDDF-16	24V - 28V DC	16W	3000K/4000K/6000K Selectable	90°	-20°C ~ +40°C	1450lm



# LED DOWNLIGHT



## LDDF SERIES



### Application

Cabins, Passageways, Galleys, Meeting rooms

### Material

Powder coated aluminium alloy body and heatsink with PMMA diffuser

### Protection Class

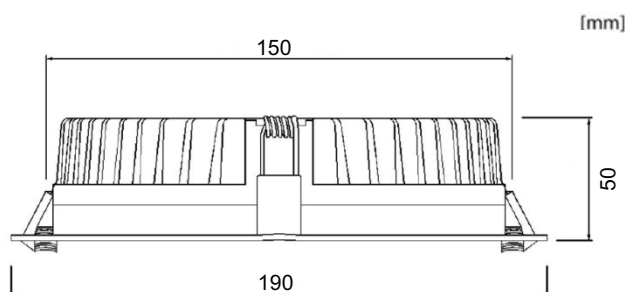
IP44

### Weight

0.9Kg


### Key Features

- Low profile suitable for shallow ceiling voids
- Triac dimming compatible
- 3 Selectable CCT: 3000K / 4000K / 6000K
- Energy savings of up to 52% compared to compact fluorescent system
- Vibration-resistant
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- CE Marking, EMC safety compliance



## TECHNICAL SPECIFICATIONS



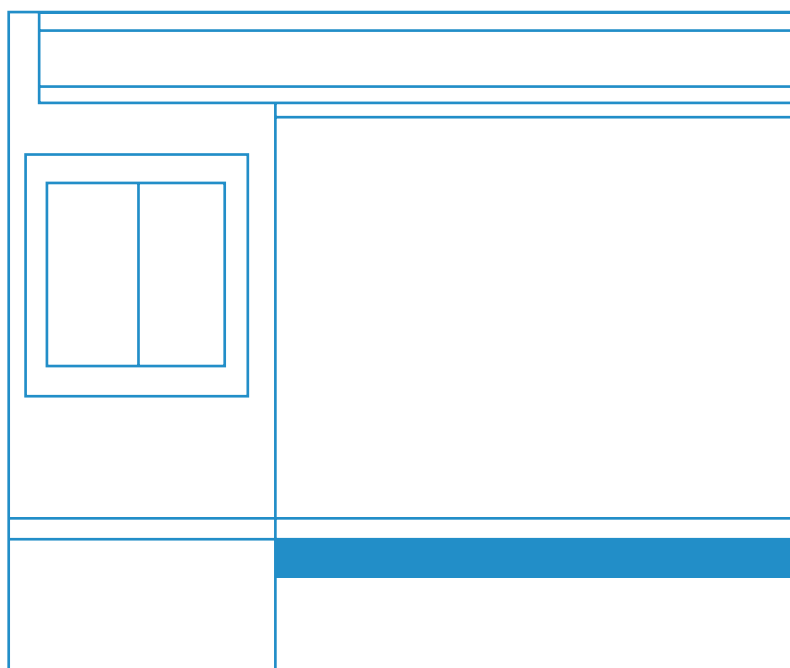
Ideal Replacement:  42W CFL

BH Code	Type	Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LDDF20XKA22W	LDDF-20	220V - 240V AC	20W	3000K/4000K/6000K Selectable	90°	-20°C ~ +40°C	1700lm

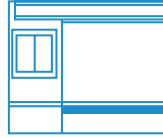
# LED DECORATIVE LIGHT SERIES

## CREATING THE PERFECT AMBIENCE

LED Decorative Light Series - coupled with energy-efficiency and durability, our decorative lights create the mood and ambience of any living space. Selection of the right lighting can help you achieve a perfect balance between stylish yet functional interiors.



# LED BERTH LIGHT



## BL SERIES



### Application

Passageways, Cabins, Lounges, Dining rooms, Accommodation areas

### Mounting Method

2 mounting holes ø5.5mm

### Material

Diffuser: Polycarbonate

Housing: Galvanized steel, Powder coated white

### Electrical

Flexible wiring, Heat resistance up to 105°C

### Weight

0.25Kg

### Key Features

- Special design polycarbonate diffuser to optimize the LED light transmission
- Slim profile design that is easily mounted to provide illumination performance while using significantly less energy
- Long service life of 50,000 hours L70 @ 40°C (Ta)
- Safety, EMC and IEC compliance

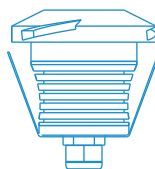


## TECHNICAL SPECIFICATIONS IP 20

BH Code	Type	Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LABL44A2	BL44A2	220V - 240V AC	4W	4000K	-20°C ~ +40°C	280lm
LABL44A1	BL44A1	100V - 120V AC	4W	4000K	-20°C ~ +40°C	280lm

Also available in other CCT.

# LED RECESSED TORNADO FLOORLIGHT



## TF SERIES



### Key Features

- Attractive tornado style light effect on installation surface
- Low profile body when embedded
- Built-in integrated driver for ease of installation
- Weather-proof with IP67 protection
- Strong housing can withstand pressure more than 300kg
- Vibration-resistant
- Long service life of 35,000 hours
- Safety compliance

### Applications

Deck floor, Staircase, Passageway, Side wall, Lounge

### Materials

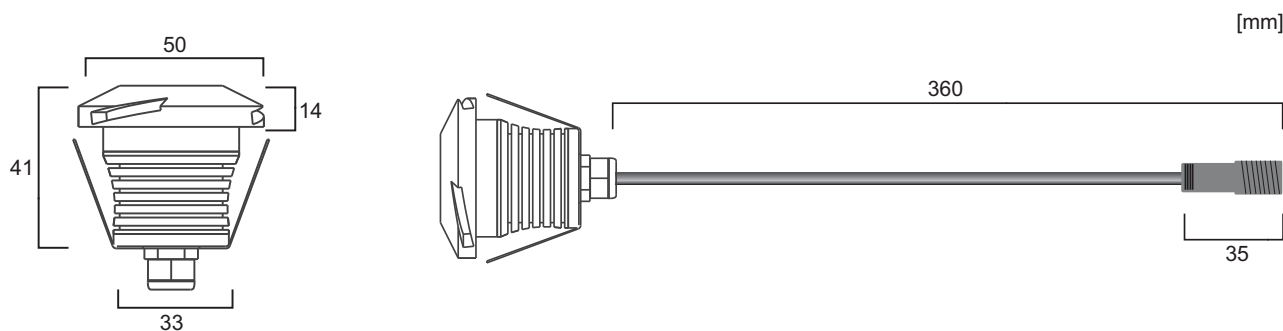
Corrosion-resistant aluminium housing with stainless steel installation clamps

### Protection Class

IP67

### Weight

0.14Kg



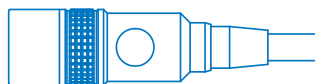
## TECHNICAL SPECIFICATIONS

IP 67

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LATF33D	TF3D	24V DC	3W	3000K	-20°C ~ +40°C	235lm

Also available in other CCT.

# FLEXIBLE LED CHART TABLE LIGHT



## CL55A SERIES



USB Type-C port



USB Type-C  
Power Adaptor



With Red Diffuser  
(Optional)

### Key Features

- 53cm long flexible gooseneck
- High quality CREE XP-G LED light source
- 3-step dimming
- Push-pull focusing lens
- Wall mount or desk mount
- Long LED L70 lifespan of 60,000 hours
- Vibration-resistant
- USB Type-C power input (adaptor included)
- EMC safety compliance to EN 55015, EN 61547, EN 61000-3-2 and EN 61000-3-3 standards

### Applications

Bridge, Cabins

### Materials

Anodized aluminum body

### Protection Class

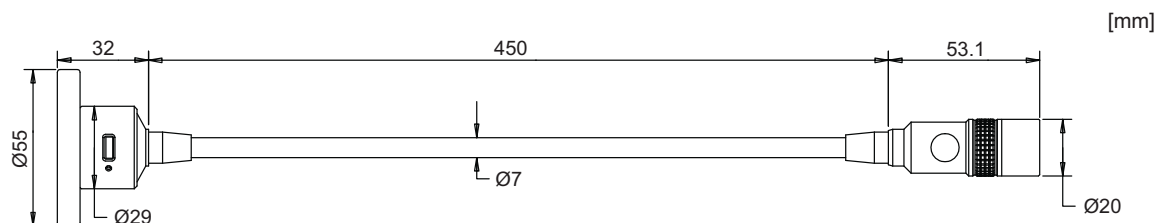
IP20

### Options

With red diffuser

### Weight

0.216Kg



## TECHNICAL SPECIFICATIONS

IP 20

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LACL55A	CL55A	100V - 240V AC	2W	6500K	-20°C ~ + 40°C	200lm

### DIMMING SETTINGS

Brightness level	100%	60%	30%
Lumens output	200lm	120lm	60lm

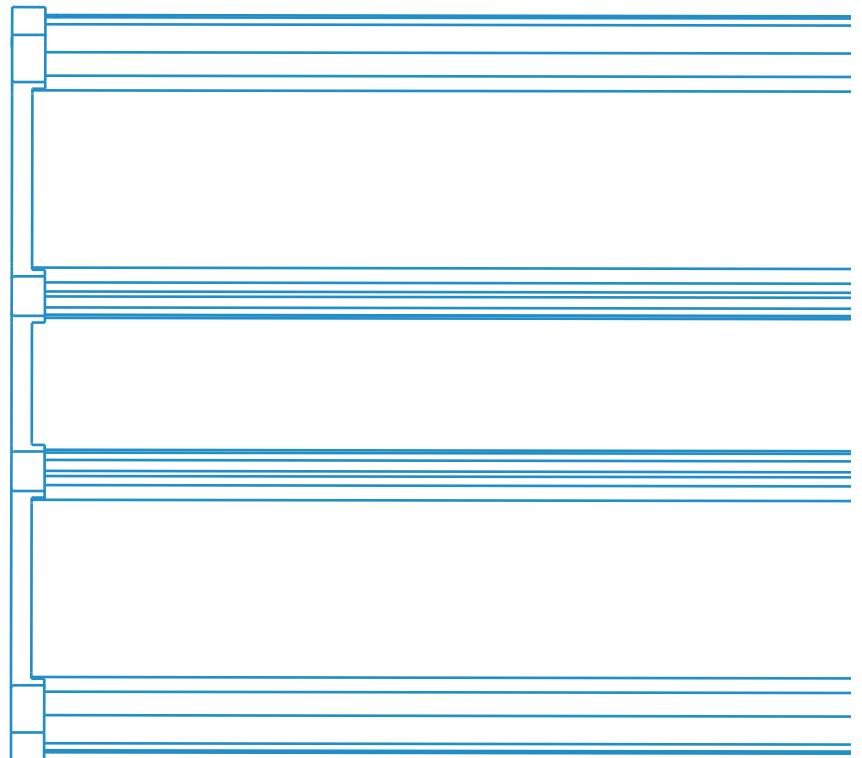
\*Half-press button to toggle dimming levels. Full-press button to turn On/Off.

# LED HIGH BAY SERIES

## LUMINANCE FROM ABOVE

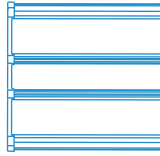
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SOP LED High Bay Series provides high efficacy, reduced input power compared to HID or fluorescent system, and the excellent lighting quality needed for task visibility, material characteristic and colour differentiation. With a remarkable energy savings high light output LEDs, SOP LED High Bay is an ideal tool for general lighting in warehouses and manufacturing facilities.





# LED HIGH BAY



## HBAYI SERIES



### Application

Warehouses, Manufacturing facilities,  
Gymnasiums, Conventions center,  
Large open commercial spaces

### Mounting Method

Surface mount, cable mount or rigid stem  
mount

### Material

Housing: Extruded aluminium, Polycarbonate  
Lens: Optical clear or diffused acrylic

### Options

Control: 0-10V / Zigbee / Wifi / Bluetooth

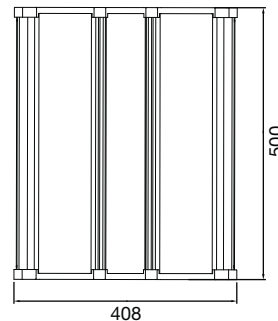
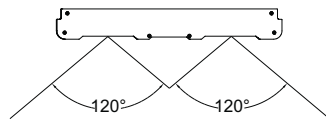
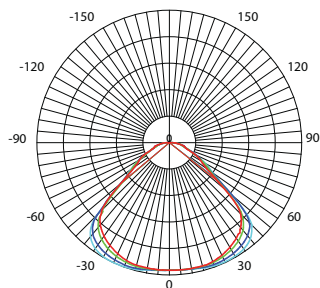
Mounting: Hook & Chain / Aircraft cable /  
Rigid stem

Sensor: Motion / Daylight

24V DC emergency system

### Key Features

- Efficient optical design provides one-to-one replacement of metal halide and fluorescent high bays with substantial energy savings >40%
- High efficacy LEDs provide up to 140lm/w
- Extremely low profile
- Quick and simple mounting systems
- Access cover in channel for easy wiring access
- Optional "Plug and Play" occupancy and daylight sensors
- Long service life of 60,000 hours L80 @ 40°C (Ta)
- Safety, EMC and IEC/UL compliance



[mm]



## TECHNICAL SPECIFICATIONS IP 20



HB88 for  
4XT8 / 250W HID

Ideal Replacement:

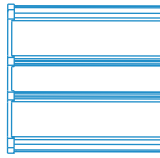


HB127 for 4XT5HO /  
6XT8 / 400W HID

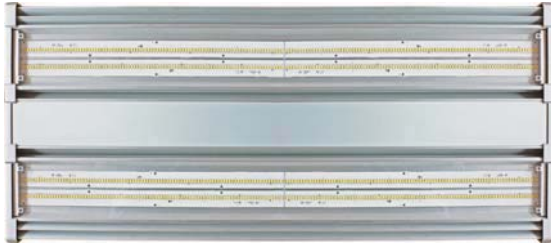
• E Denotes : With DC24V emergency LED

BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LAHB884A3	HB88A3	110V - 277V AC	88W	4000K	120°	-20°C ~ +40°C	13400lm
LAHB884A3E	HB88A3E	110V - 277V AC	88W	4000K	120°	-20°C ~ +40°C	13400lm
LAHB885A3	HB88A3	110V - 277V AC	88W	5000K	120°	-20°C ~ +40°C	13800lm
LAHB885A3E	HB88A3E	110V - 277V AC	88W	5000K	120°	-20°C ~ +40°C	13800lm
LAHB1274A3	HB127A3	110V - 277V AC	127W	4000K	120°	-20°C ~ +40°C	20100lm
LAHB1274A3E	HB127A3E	110V - 277V AC	127W	4000K	120°	-20°C ~ +40°C	20100lm
LAHB1275A3	HB127A3	110V - 277V AC	127W	5000K	120°	-20°C ~ +40°C	20700lm
LAHB1275A3E	HB127A3E	110V - 277V AC	127W	5000K	120°	-20°C ~ +40°C	20700lm

# LED HIGH BAY



## HBAY II SERIES



### Application

Warehouses, Manufacturing facilities,  
Gymnasiums, Conventions center,  
Large open commercial spaces

### Mounting Method

Surface mount, cable mount or rigid stem  
mount

### Material

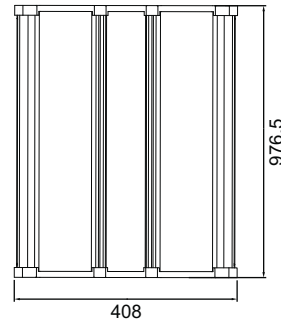
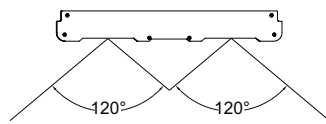
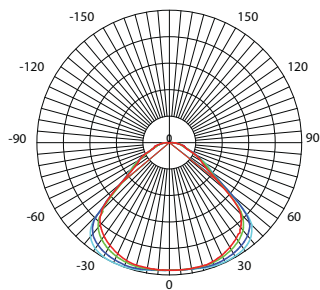
Housing: Extruded aluminium, Polycarbonate  
Lens: Optical clear or diffused acrylic

### Options

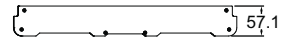
Control: 0-10V / Zigbee / Wifi / Bluetooth  
Mounting: Hook & Chain / Aircraft cable /  
Rigid stem  
Sensor: Motion / Daylight  
24V DC emergency system

### Key Features

- Efficient optical design provides one-to-one replacement of metal halide and fluorescent high bays with substantial energy savings >40%
- High efficacy LEDs provide up to 140lm/w
- Extremely low profile
- Quick and simple mounting systems
- Access cover in channel for easy wiring access
- Optional "Plug and Play" occupancy and daylight sensors
- Long service life of 60,000 hours L80 @ 40°C (Ta)
- Safety, EMC and IEC/UL compliance



[mm]



## TECHNICAL SPECIFICATIONS IP 20

• E Denotes : With DC24V emergency LED

6 X T5HO / 8 X T8

HB176 for  
6XT5HO / 8XT8

Ideal Replacement:

8 X T5HO



HB264 for  
8XT5HO / 750W HID

BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LAHB1764A3	HB176A3	110V - 277V AC	176W	4000K	120°	-20°C ~ +40°C	26800lm
LAHB1764A3E	HB176A3E	110V - 277V AC	176W	4000K	120°	-20°C ~ +40°C	26800lm
LAHB1765A3	HB176A3	110V - 277V AC	176W	5000K	120°	-20°C ~ +40°C	27600lm
LAHB1765A3E	HB176A3E	110V - 277V AC	176W	5000K	120°	-20°C ~ +40°C	27600lm
LAHB2644A3	HB264A3	110V - 277V AC	264W	4000K	120°	-20°C ~ +40°C	40350lm
LAHB2644A3E	HB264A3E	110V - 277V AC	264W	4000K	120°	-20°C ~ +40°C	40350lm
LAHB2645A3	HB264A3	110V - 277V AC	264W	5000K	120°	-20°C ~ +40°C	41500lm
LAHB2645A3E	HB264A3E	110V - 277V AC	264W	5000K	120°	-20°C ~ +40°C	41500lm

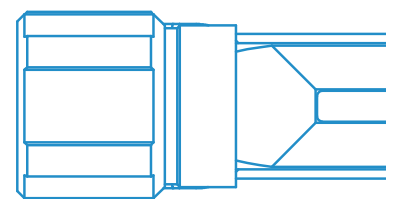
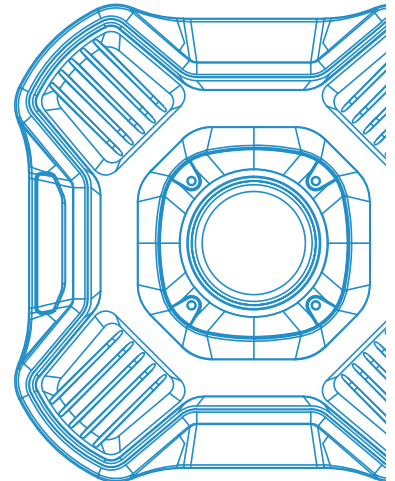
# RECHARGEABLE LED PORTABLE SERIES

## LIGHTING THE WAY

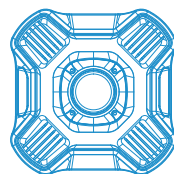
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SOP rechargeable portable LEDs offer lightweight lighting mobility for busy crew on the go. Removed from power cable, you can bring the lights to the darkest remote corner. Deployment on-site is easy with various mounting options. Dimmable and weatherproof, SOP rechargeable LEDs are your perfect portable lighting solution.

IP 54



# RECHARGEABLE LED PORTABLE FLOODLIGHT



## MX3 SERIES



Power Adaptor

### Application

Decks, Marinas, Docks, Ports, Warehouses

### Material

Aluminium alloy LED front frame, polycarbonate diffuser and ABS plastic housing

### Protection Class

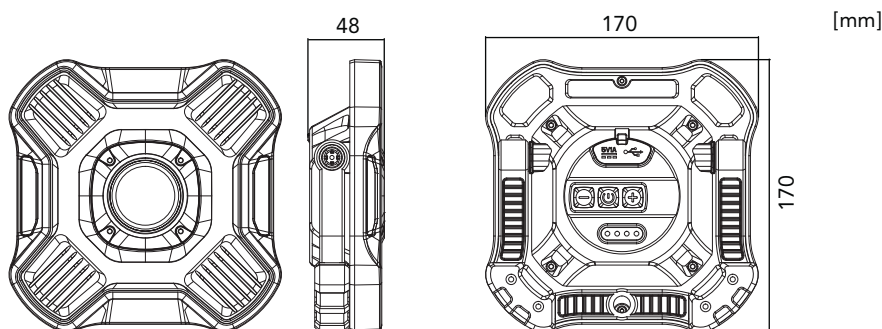
IP54

### Weight

0.7Kg

### Key Features

- High performance COB LED with rechargeable lithium ion battery
- 5-step dimming
- Compact and lightweight
- Vibration and impact resistant
- 50,000 hours LED lifespan, battery life up to 500 charges
- USB power bank function for emergency charging of mobile devices
- Indicator lights show battery level and charging status
- Swivel stand can rotate 180°
- Safety compliance, RoHS.



## TECHNICAL SPECIFICATIONS

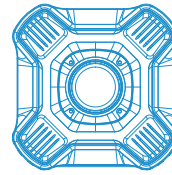
IP 54

BH Code	Type	Main Voltage	Power	CCT	Charging Time	Ambient Temp (Ta)	System Lumen
LAMX3FA	MX3	100V - 240V AC	20W	5000K	6 hrs	-20°C ~ +50°C	2600lm

### DIMMING SETTINGS

Brightness level	100%	80%	60%	40%	20%
Lumens output	2600lm	2080 lm	1560 lm	1040 lm	520lm
Light run-time	1.5 hrs	2 hrs	5 hrs	7 hrs	9 hrs

# RECHARGEABLE LED PORTABLE FLOODLIGHT



## MX5 SERIES



Power Adaptor

### Application

Decks, Marinas, Docks, Ports, Warehouses

### Material

Aluminium alloy LED front frame, polycarbonate diffuser and ABS plastic housing

### Protection Class

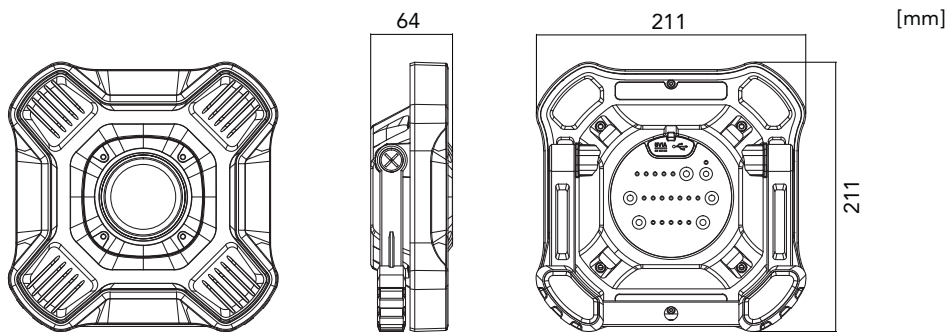
IP54

### Weight

1.5Kg

### Key Features

- High performance COB LED with rechargeable lithium ion battery
- 7-step dimming
- Compact and lightweight
- Vibration and impact resistant
- 50,000 hours LED lifespan, battery life up to 500 charges
- USB power bank function for emergency charging of mobile devices
- Indicator lights show battery level and charging status
- Swivel stand can rotate 180°
- Safety compliance, RoHS.



## TECHNICAL SPECIFICATIONS

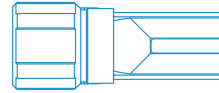
IP 54

BH Code	Type	Main Voltage	Power	CCT	Charging Time	Ambient Temp (Ta)	System Lumen
LAMX5FA	MX5	100V - 240V AC	40W	5000K	3 hrs	-20°C ~ +50°C	5000lm

## DIMMING SETTINGS

Brightness level	100%	86%	72%	58%	44%	30%	16%
Lumens output	5000lm	4300lm	3600lm	2900lm	2200lm	1500lm	800lm
Light run-time	2 hrs	2.3 hrs	2.7 hrs	3.4 hrs	4.5hrs	6.5hrs	12 hrs

# RECHARGEABLE LED PORTABLE WORK LIGHT



## MS3 SERIES



### Application

Engine rooms, Low visibility areas, Decks, Warehouses, Yards

### Material

Aluminium alloy handle, polycarbonate diffuser and thermoplastic rubber at both ends for impact protection

### Protection Class

IP54

### Weight

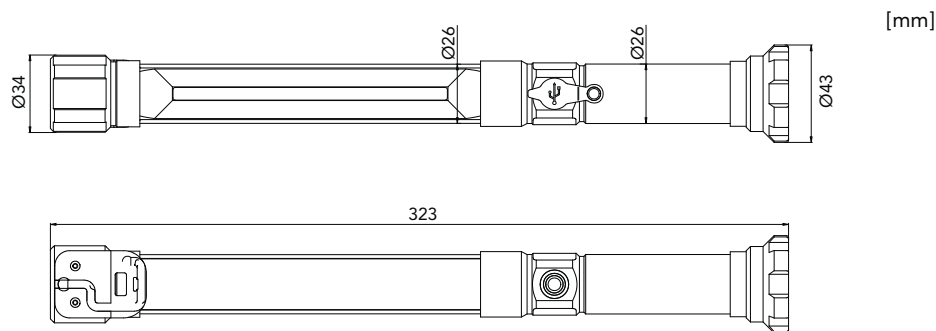
0.3Kg

### Mounting Method



### Key Features

- Heavy duty COB LED
- Lithium ion battery rechargeable by 5V 1A Micro USB port (power adapter included)
- 2-step dimming + torch mode (LED at the top)
- Ultra-compact and lightweight
- Vibration and impact resistant
- Hanger hook and magnetic base for easy mounting
- 50,000 hours LED lifespan, battery life up to 500 charges
- Indicator light turns red when power is low
- Safety compliance, RoHS.



## TECHNICAL SPECIFICATIONS IP 54

BH Code	Type	Main Voltage	Power	CCT	Charging Time	Ambient Temp (Ta)	System Lumen
LAMS3A	MS3	100V - 240V AC	3W	5000K	3 hrs	-20°C ~ +50°C	300lm

## DIMMING SETTINGS

Brightness level	100%	30%	Torch mode
Lumens output	300lm	100lm	50lm
Light run-time	2.5 hrs	10 hrs	24 hrs

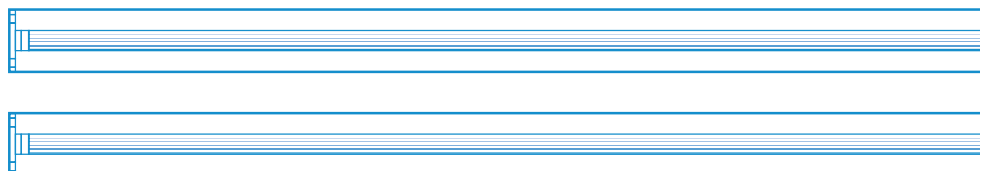
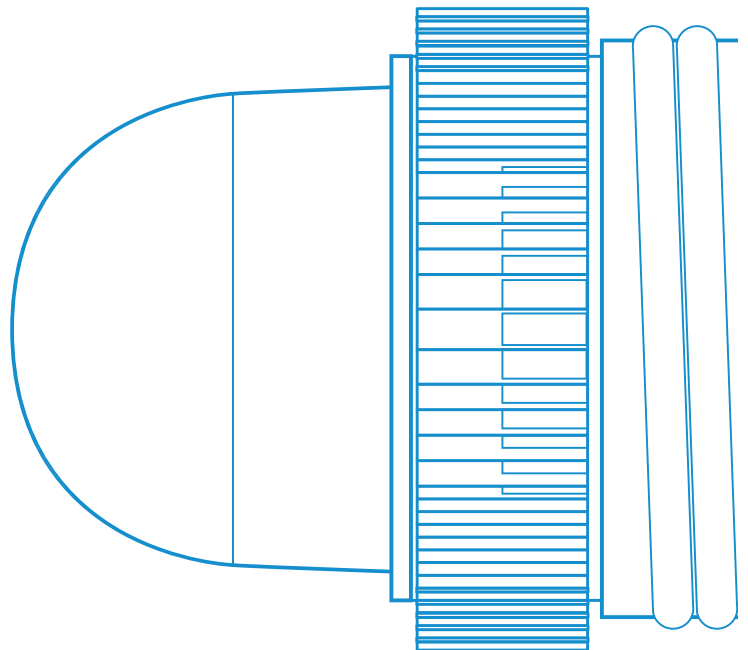
# RETROFITTING SOLUTIONS

## TAILORING TO YOUR NEEDS

Customize to your retrofitting requirements and achieve the expected Return-On-Investment. Our retrofitting solutions are tested and comply to relevant industry standards to provide you with an ease of mind and safety.

IP 20

IP 56





# LED L SERIES MODULE



## L SERIES



LS105



LS305



### Applications

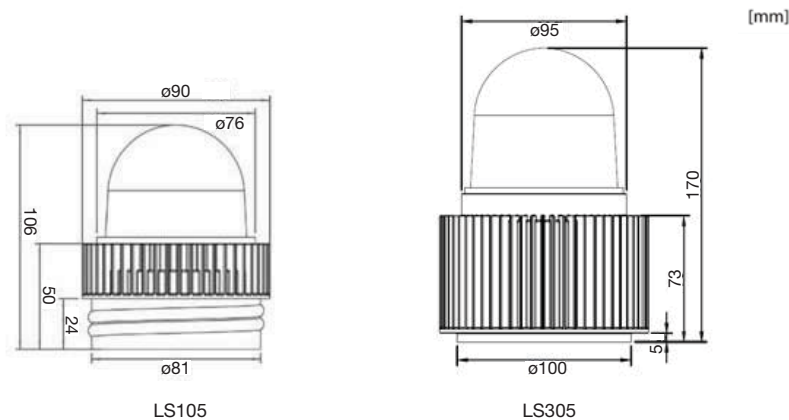
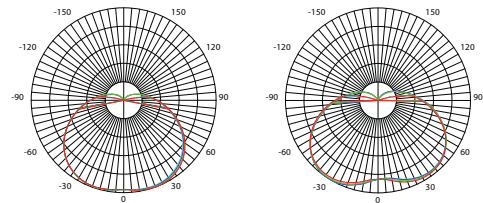
Retrofitting for Incandescent and Halogen Lightings

### Materials

Marine grade aluminium alloy with powder coating and polycarbonate diffuser

### Key Features

- Triac dimming compatible (12W and 13W only)
- Complete solution with heat sink, driver and polycarbonate diffuser
- Vibration-resistant
- Alternative to 100W and 300W incandescent bulb
- Energy savings of up to 90% compared to incandescent bulb
- Long service life of 50,000 hours L70 @ 45°C (Ta)
- Safety, EMC and IEC compliance



## TECHNICAL SPECIFICATIONS IP 56



BH Code	Type	Main Voltage	Power	CCT	Beam Angle	Ambient Temp (Ta)	System Lumen
LALS105A2	LS105A2	220V - 240V AC	13W	5000K	160°	-40°C ~ +45°C	900lm
LALS105A1	LS105A1	100V - 120V AC	12W	5000K	160°	-40°C ~ +45°C	900lm
LALS105D	LS105D	24V DC	10W	5000K	160°	-40°C ~ +45°C	950lm
LALS305AD	LS305AD	100V - 240V AC/DC	30W	5000K	180°	-40°C ~ +45°C	2900lm

Also available in other CCT.

# LED LINEAR MODULE



## LM SERIES



Mounting Clips

Mounting Plate

### Applications

Retrofitting for fluorescent lightings

### Mounting Methods

Mounting Clips or Mounting Plate

### Materials

Diffuser cover: Polycarbonate

Base plate: Aluminium

### Mounting Clips

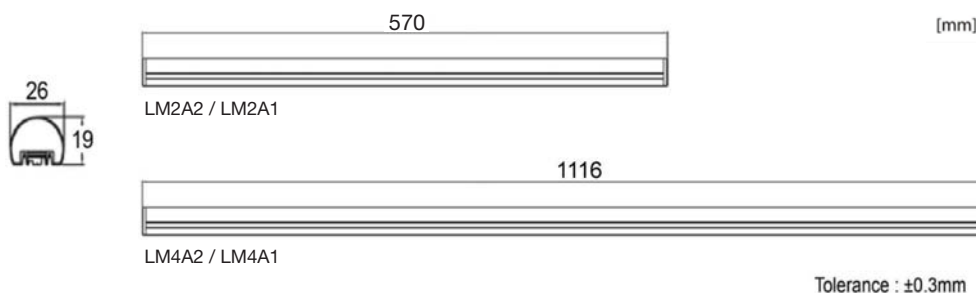


### Mounting Plate



### Key Features

- Triac dimming compatible
- Build-in high thermal efficient heat sink that allows the LED linear module to operate at ambient temperature of up to 55°C
- Special design polycarbonate diffuser to optimize the LED light transmission
- Long service life of 100,000 hours @ 50°C (Ta)
- Safety, EMC and IEC compliance

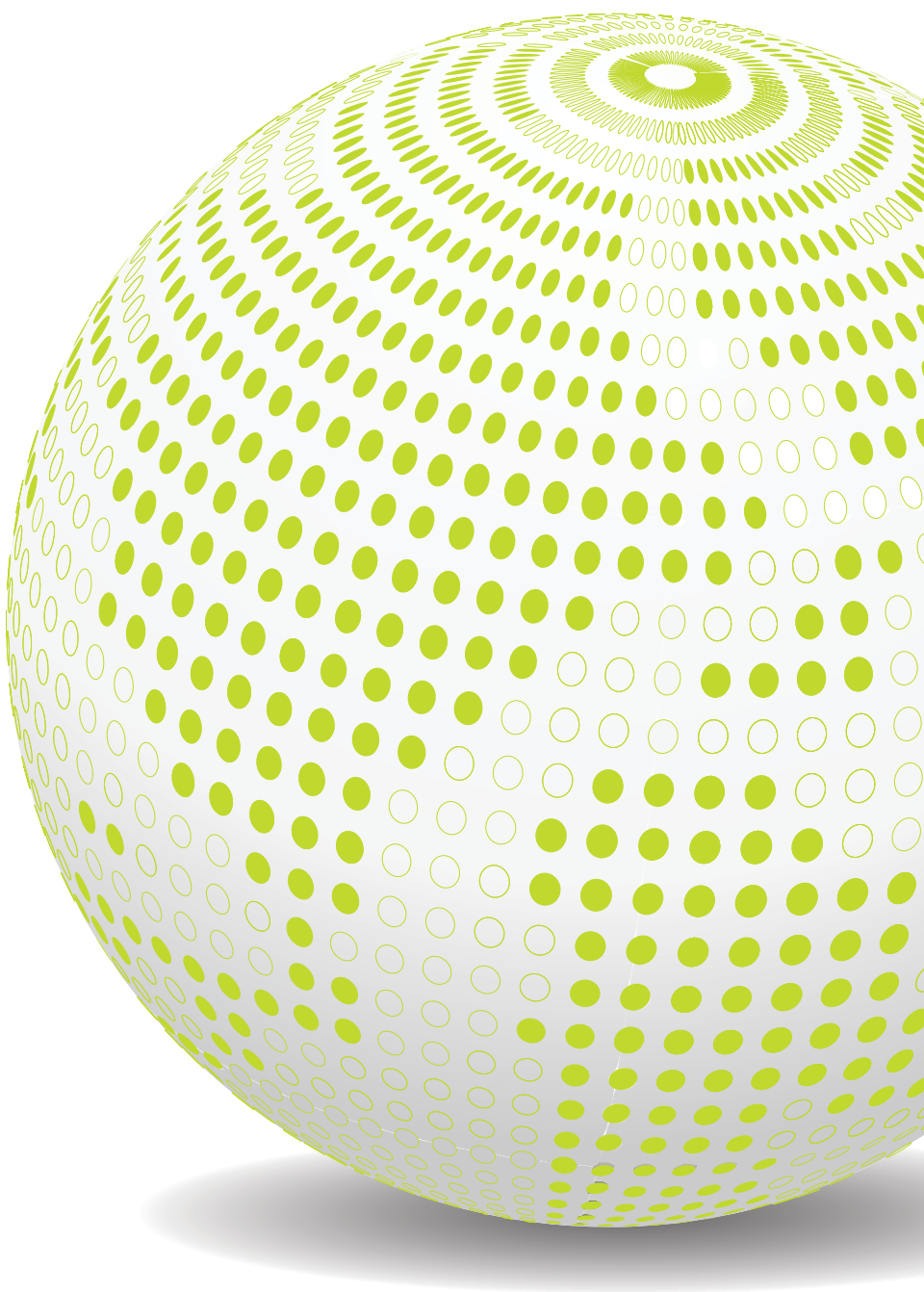


## TECHNICAL SPECIFICATIONS

IP 20

Ideal Replacement: 1 X 18W, 1 X 36W

BH Code	Type	Main Voltage	Power	CCT	Ambient Temp (Ta)	System Lumen
LMSOP12A225K	LMSOP12-5K	220V - 240V AC	12.5W	5000K	-40°C ~ +55°C	1000lm
LMSOP12A223K	LMSOP12-3K	220V - 240V AC	12.5W	3000K	-40°C ~ +55°C	1000lm
LMSOP12A115K	LMSOP12-5K	100V - 120V AC	12.5W	5000K	-40°C ~ +55°C	1000lm
LMSOP12A113K	LMSOP12-3K	100V - 120V AC	12.5W	3000K	-40°C ~ +55°C	1000lm
LMSOP24A225K	LMSOP24-5K	220V - 240V AC	24W	5000K	-40°C ~ +55°C	2100lm
LMSOP24A223K	LMSOP24-3K	220V - 240V AC	24W	3000K	-40°C ~ +55°C	2100lm
LMSOP24A115K	LMSOP24-5K	100V - 120V AC	24W	5000K	-40°C ~ +55°C	2100lm
LMSOP24A113K	LMSOP24-3K	100V - 120V AC	24W	3000K	-40°C ~ +55°C	2100lm
LMSOP12D245K	LMSOP12-5K	24V DC	12.5W	5000K	-40°C ~ +55°C	1000lm
LMSOP24D245K	LMSOP24-5K	24V DC	24W	5000K	-40°C ~ +55°C	2100lm



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