

## SO-I Series LED Bay Luminaires

Class I, Div.1, Group A, B, C, D    Hazardous Locations  
 Class II, Div. 1, Group E, F, G    Wet Locations, Type 4X, IP66  
 Class III  
 Class I, Zone1, Zone 2, Ex d



| Model        | Luminous Flux(LM) | Wattage | Lumen/Wattage | Equivalent HID luminaire |
|--------------|-------------------|---------|---------------|--------------------------|
| SO-I-LB-10W  | 1200              | 10W     | 120           | 70-100W                  |
| SO-I-LB-20W  | 2400              | 20W     | 120           | 70-100W                  |
| SO-I-LB-30W  | 3600              | 30W     | 120           | 70-100W                  |
| SO-I-LB-40W  | 4800              | 40W     | 120           | 70-100W                  |
| SO-I-MB-50W  | 6000              | 50W     | 120           | 100-150W                 |
| SO-I-MB-60W  | 7200              | 60W     | 120           | 100-150W                 |
| SO-I-MB-70W  | 8400              | 70W     | 120           | 100-150W                 |
| SO-I-MB-80W  | 9600              | 80W     | 120           | 175-250W                 |
| SO-I-HB-90W  | 10800             | 90W     | 120           | 175-250W                 |
| SO-I-HB-100W | 12000             | 100W    | 120           | 320-400W                 |
| SO-I-HB-120W | 14400             | 120W    | 120           | 320-400W                 |
| SO-I-HB-150W | 18000             | 150W    | 120           | 400-600W                 |
| SO-I-HB-200W | 24000             | 200W    | 120           | 650-750W                 |
| SO-I-HB-240W | 28800             | 240W    | 120           | 750-1000W                |

### Applications

- For areas with mounting heights of 10–50ft (3–15m)
- Oil and gas refineries, drilling rigs, petrochemical facilities, land-based and offshore rigs, mining, areas include derrick, mast, SCR house, top drive, operator' s house, power and pump stations, and where flammable vapors, gases, ignitable dusts, fibers or flying are present
- Locations requiring continuous and consistent light levels in extreme ambient temperatures
- Where extremely corrosive, wet, dusty, hot and/or cold conditions exist; Type 4X, marine, wet locations and hose-down environments
- Classified and hazardous locations



### Standard Materials

Housing: Die cast aluminum with anti-corrosion powder coat, grey  
 Lens: Heat-resistant and impact-resistant tempered glass  
 Gaskets: Silicone

## Features



- Instant illumination and restrike, cold temperature operation/no warm-up required
- Independent chamber for LED module, driver and wiring, high reliability and easy installation
- Die cast aluminium housing reduce the temperature rise and optimize the heat sink performance
- To ease air flow and dust shedding, optimized vertical fins heat dissipation structure for low wattages SOLB-I, SOMB-I, unique annular fins heat dissipation structure for high wattages SOHB-I.
- To meet different needs for light distribution curve, flat type and high type glass for option.
- Latest LED Technology: high efficiency LED ranges 120–150lm/w
- Energy-efficient technology: up to 75% energy savings over HID fixtures
- Various mounting option: ceiling type, pendant type, wall type, pole type, easy wiring.
- Operating Ambient Temperature:  $-40^{\circ}\text{C} \sim +55^{\circ}\text{C}$
- Beam Angel: standard diffused,  $40^{\circ}$  ,  $60^{\circ}$  ,  $90^{\circ}$  ,  $120^{\circ}$  for option

## Compliances

### IEC Standard

IEC60079-0, IEC60079-1, IEC60079-31  
Ex d IIC T6 Gb  
Ex tb IIIC T80°C Db IP66  
Zone 1, Zone2  
Zone 21, Zone 22  
IP66

### EU Standard

EN60079-0, EN60079-1, EN60079-31  
 II 2 G Ex d IIC T6 Gb  
 II 2 D Ex tb IIIC T80°C Db IP66  
Zone 1, Zone2  
Zone 21, Zone 22  
IP66

### NEC & CEC Standard

Class I, Div.1, Group A, B, C, D  
Class II, Div.1, Group E, F, G  
Class III  
Wet Locations, Type 4X, IP66

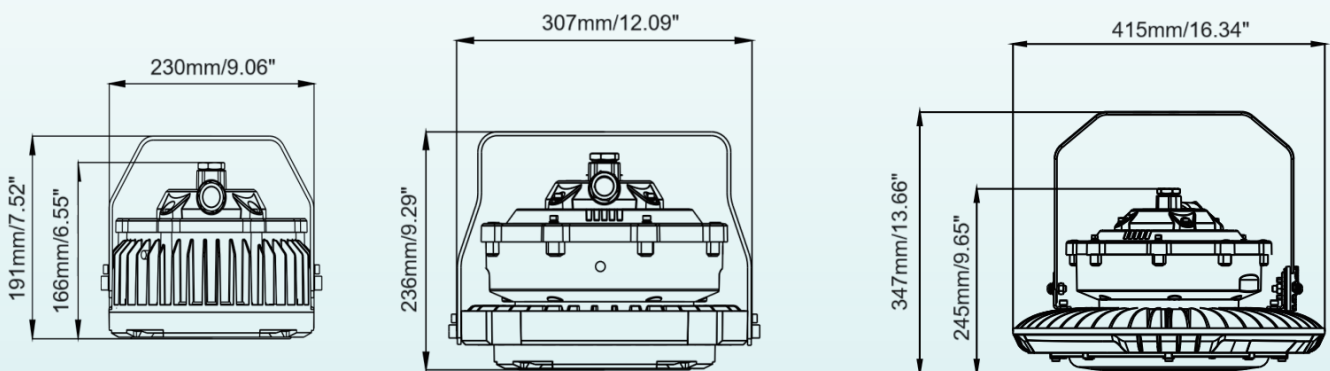
### UL Standard

UL844, UL1598, UL1598A

### CSA Standard

CSA C22.2 No.137

## Mounting Options & Dimensions (mm/inch)



## Technical Datasheet

|                     |   |      |      |      |      |      |      |      |       |       |       |       |       |       |
|---------------------|---|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| Classification      | Class I, Div 1, Group A,B, C, D<br>Class II, Div. 1, Group E F G<br>Class III<br>Zone 1&2; Zone 21&22                 |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Standards           | IEC60079-0, IEC60079-1, IEC60079-31<br>EN60079-0, EN60079-1, EN60079-31<br>UL844, UL1598, UL1598A<br>CSA C22.2 No.137 |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Ex-mark             | II 2 G Ex db IIC T6 Gb<br>II 2 D Ex tb IIC T80°C Db IP66  |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Rated Voltage       | AC 100-277V 50/60Hz<br>AC 277-480V 50/60Hz<br>DC 12-24V   |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Rated Wattage(W)    | 10W   | 20W  | 30W  | 40W  | 50W  | 60W  | 70W  | 80W  | 90W   | 100W  | 120W  | 150W  | 200W  | 240W  |
| Luminous Flux(LM)   | 1200  | 2400 | 3600 | 4800 | 6000 | 7200 | 8400 | 9600 | 10800 | 12000 | 14400 | 18000 | 24000 | 28800 |
| Color Temperature   | 2700K-5000K   |      |      |      |      |      |      |      |       |       |       |       |       |       |
| IP Grade            | Wet Locations, Type 4X, IP66  |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Ambient Temperature | -40°C ~ +55°C / -40° F ~ +131° F  |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Cable Entry         | M25x1.5 or NPT 3/4"   |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Terminals           | Terminals blocks ≤ 2.5mm <sup>2</sup> , cable diameter 10-14mm  |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Installation        | Ceiling / Bracket / Wall / Pendant / S1 Stanchion / S2 Stanchion  |      |      |      |      |      |      |      |       |       |       |       |       |       |
| Beam Angle          | 40° , 60° , 90° , 120°  |      |      |      |      |      |      |      |       |       |       |       |       |       |

## Catalogue Numbering System

