



## product introduction

The SOBL Backlight series of lights are an innovative and highly versatile light with many custom sizes available. The SOBL Series of backlights offers backlit LED's for a more intense and highly diffuse lighting option. With its built in driver, no external wiring is needed and its narrow depth of just 30mm allows for mounting in tight locations. Active area dimensions (mm) include but are not limited to 150x50, 150x150, 300x150, 300x300, 450x300, 450x450, and 600mm x 600mm. Contact Smart Vision Lights for more details on sizing.



## product features



- 30mm Industrial Extrusion
- Driver Built In – No External Wiring To A Driver
- PNP and NPN Strobe Input
- Continuous Operation or Strobe Mode
- Analog Intensity 0-10VDC Signal
- Limited Custom Sizes Available
- Offered in White, Red, Green, Blue, IR



## product specifications

|                         |  |
|-------------------------|--|
| <b>Electrical Input</b> | 24 VDC +/- 5%  |
| <b>Current</b>          | Based on size. Contact Smart Vision Lights                                 |
| <b>Wattage</b>          | Based on size. Contact Smart Vision Lights                                 |
| <b>Strobe Input</b>     | PNP ► +3VDC or greater to activate.   NPN ► GND (<1VDC) to activate        |
| <b>PNP Line</b>         | 3.7mA @ 3VDC   6.2mA @ 5VDC   12.6mA @ 10VDC   30.4mA @ 24 VDC             |
| <b>NPN Line</b>         | 22mA @ Common (0VDC)   |
| <b>Continuous Mode</b>  | Light will be in continuous mode by leaving signal on strobe input active  |
| <b>Analog Intensity</b> | The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal |
| <b>Connection</b>       | 5 pin M12 connector  |
| <b>Lifespan</b>         | 100,000 hrs  |
| <b>Ambient Temp.</b>    | -20° - 50° C (-4° - 122° F)  |
| <b>IP Rating</b>        | IP50   |
| <b>Compliances</b>      | CE and RoHS  |
| <b>Weight</b>           | Based on size. Contact Smart Vision Lights                                 |
| <b>IEC 62471 Rating</b> | See page 3   |



## product number key

# SOBL – XXX x XXX - XXX –» Part Number Key

**Product Family:**  
Backlight  
SOBL

**Dimension:**  
Measured active area. (mm)  
Contact SVL for more details

**Color:**  
470 – Blue  
530 – Green  
625 – Red  
850 – IR  
WHI - White

CE and RoHS Compliant



## warnings



### Attention

Please note that the power requirements vary according to size. Contact Smart Vision Lights for more information regarding current and wattage ratings.



## wiring configuration

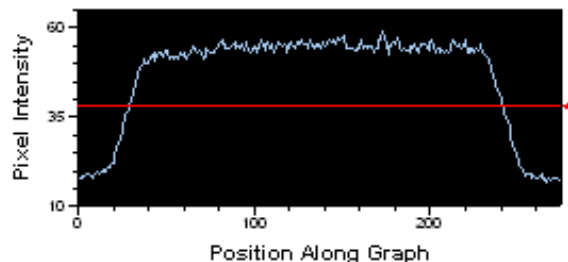
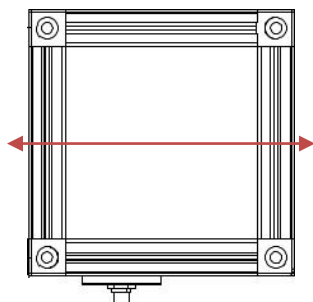
**If Analog 0-10 VDC is not used to control light intensity;  
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1**

|  | Pin | Function          | Signal          | Wire Color |
|--|-----|-------------------|-----------------|------------|
|  | 1   | Power In          | +24VDC          | BROWN      |
|  | 2   | NPN               | Sinking Signal  | WHITE      |
|  | 3   | GND               | Ground          | BLUE       |
|  | 4   | PNP               | Sourcing Signal | BLACK      |
|  | 5   | Intensity Control | 0-10VDC         | GREY †     |

† Some cables use green with yellow stripe for 0-10V adjustment



## optical performance



The SOBL offers a very diffuse light pattern at any defined working distance. The Pixel Graph representation shows a steep drop off in intensity outside of the active area with a very diffuse light pattern inside.

**Average Intensity Rating**

**30,000 lux**

\*Lux measurement taken at surface of SOBL.



## mounting & accessories

All mounting is provided by the standard 30mm industrial extrusion.

### Mounting

Polarizer options are available. Contact Smart Vision Lights for more information.

### Polarizer



## risk group

According to IEC 62471:2006. Full documentation upon request.

### Notice

**Exempt Group:** No photo biological hazard to eyes or skin even for continuous, unrestricted use.  
Applicable for wavelengths: 530, 625, 850 and WHI.

### Caution

**Risk Group 1:** Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eye. Safe for most applications except prolonged exposures.  
Applicable for wavelengths: 470.