



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

Electrical Input	24 VDC +/- 5%
Current	Based on size. Contact Smart Vision Lights
Wattage	Based on size. Contact Smart Vision Lights
Strobe Input	PNP ► +3VDC or greater to activate. NPN ► GND (<1VDC) to activate
PNP Line	3.7mA @ 3VDC 6.2mA @ 5VDC 12.6mA @ 10VDC 30.4mA @ 24 VDC
NPN Line	22mA @ Common (0VDC)
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Analog Intensity	The output is adjustable from 10 -100% of brightness by a 0 -10 VDC signal
Connection	5 pin M12 connector
Lifespan	100,000 hrs
Ambient Temp.	-20° - 50° C (-4° - 122° F)
IP Rating	IP50
Compliances	CE and RoHS
Weight	Based on size. Contact Smart Vision Lights
IEC 62471 Rating	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, 530, 625,
850, WHITE

CE and RoHS Compliant



warnings

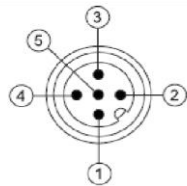


Attention

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



wiring configuration



1 – 24V
2 – NPN
3 – GND
4 – PNP
5 – 0-10V

Standard M12 mating cable color code:

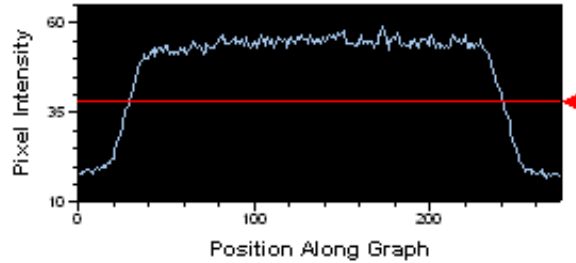
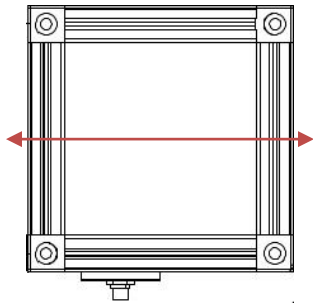
BROWN
WHITE
BLUE
BLACK
*GRAY (GREEN/YELLOW)

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	Wire Color	Function	Signal
1	BROWN	Power	+24 VDC
2	WHITE	NPN Strobe	GND for Active ON
3	BLUE	Ground	GND
4	BLACK	PNP Strobe	4VDC to 30VDC for Active ON
5	GREEN	Analog Intensity Control	0-10 VDC



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
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*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.