



## product introduction

The MOBL Series of backlights have the highest light output of any backlight series in the Smart Vision Lights line-up. The MOBL Series offers a built in driver with PNP or NPN strobe options for overdrive applications. Larger 45mm extrusion allows for greater heat dissipation due to the additional intensity. For continuous ON applications heat sinks are provided. Offered in both constant ON and OverDrive operation.



## product features



- Larger 45mm Industrial Extrusion
- Most Intense and Diffuse Backlight Available
- Offered in Overdrive and Constant ON
- Driver Built In – No External Wiring To A Driver
- PNP and NPN Strobe Input
- Three Available Sizes
- Continuous Operation or Strobe Mode



## 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

# MOBL - XXX x XXX - XXX —» Part Number

Product Family:  
Backlight  
MOBL

Size:  
150x150  
300x150  
300x300

Color:  
470 – Blue  
505 – Cyan  
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

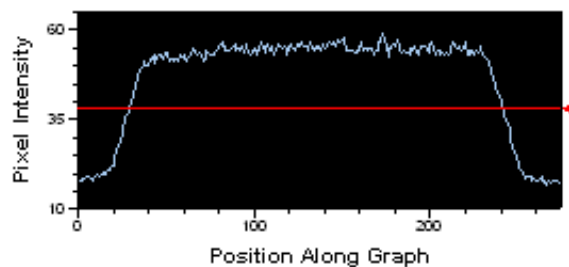
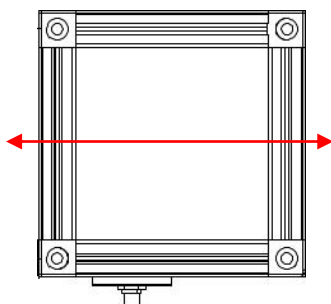
If Analog 0-10 VDC is not used to control light intensity;  
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1

	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 MOBL is the brightest backlight available from Smart Vision Lights and 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

70,000 lux\*

\*Lux measurement taken at surface of MOBL.



## mounting & accessories

All mounting is provided by the standard 45mm 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: 625 and 850.

### 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, 505, 530, and WHI.