



## product introduction

The MOBL RGB Series features three independent and fully controllable colors; red, green, and blue. Each color has a specific color coded wire used to identify the positive anode connection and the negative cathode connection. The three colors of LEDs are fully controllable in that any color can be replicated by modulating each of the three primary colors. Additional heatsinking allows the MOBL RGB to remain cool at maximum intensity even in above average ambient temperatures. The 12-pin M12 connector with flying leads and the 45mm industrial extrusion housing allow for ease of installation and a secure mounting option.



## product features



- Larger 45mm Industrial Extrusion
- Most intense and diffuse backlight available
- Red, Green, and Blue wavelengths
- 12-pin M12 connector
- Heatsinking for use in hotter environments



## product specifications

<b>Current</b>	Max. 900mA/channel   Max. 2.7A / all channels
<b>Wattage</b>	Based on color. Contact Smart Vision Lights
<b>Connection</b>	12-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>	4.1kg
<b>IEC 62471 Rating</b>	See page 3



## product number key

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

**Product Family:**  
Backlight  
MOBL

**Size:**  
225x150

**Color:**  
RGB  
RED, GREEN, BLUE

CE and RoHS Compliant



## warnings



### Attention

No current protection for driving LEDs. Do not apply an unregulated current source. Make sure current is limited to 900mA per color, 1.8A for two colors, and 2.7A for three colors.



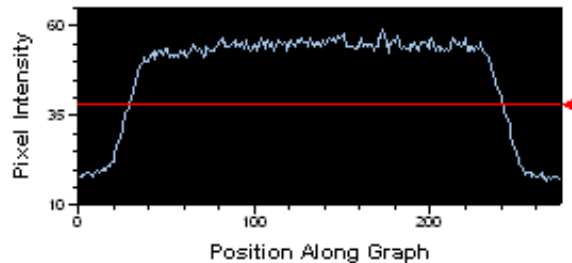
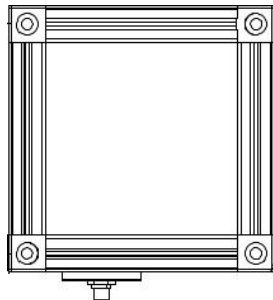
## wiring configuration

Internal Wire Color/Pin		External Cable Color Wiring Code:			
	1 – N/C	7 – GRAY	<b>RED LEDs</b>	<b>GREEN LEDs</b>	<b>BLUE LEDs</b>
	2 – WHITE	8 – N/C	Red – RCI	Green – GCI	Blue – BCI
	3 – N/C	9 – GREEN	Pink – RCO	White – GCO	Gray – BCO
	4 – RED	10 – N/C			
	5 – BLUE	11 – N/C			
	6 – PINK	12 – N/C			

PIN	Wire Color	Function	Signal
2	White	Green LED Cathode	GCO (-V)
4	RED	Red LED Anode	RCI (+V)
5	BLUE	Blue LED Anode	BCI (+V)
6	PINK	Red LED Cathode	RCO (-V)
7	GRAY	Blue LED Cathode	BCO (-V)
9	GREEN	Green LED Anode	GCI (+V)



## 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.



## mounting & accessories

All mounting is provided by the standard 45mm industrial extrusion.

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

### Mounting

### 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.

**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, 530.