



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

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

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

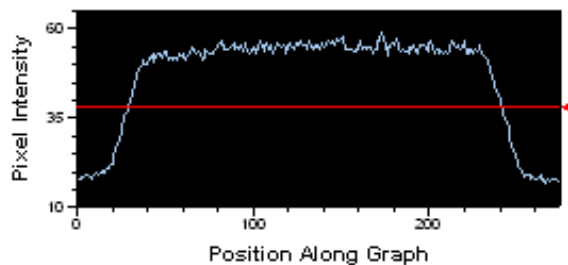
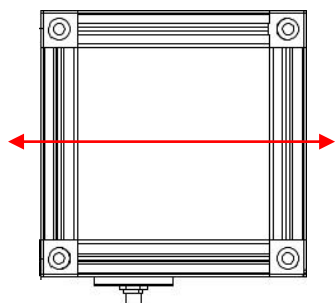
If Analog 0-10 VDC is not used to control light intensity;
+VDC (24VDC) must be connected to Analog Input - Jumper pin 5 to pin 1

	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.

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 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.