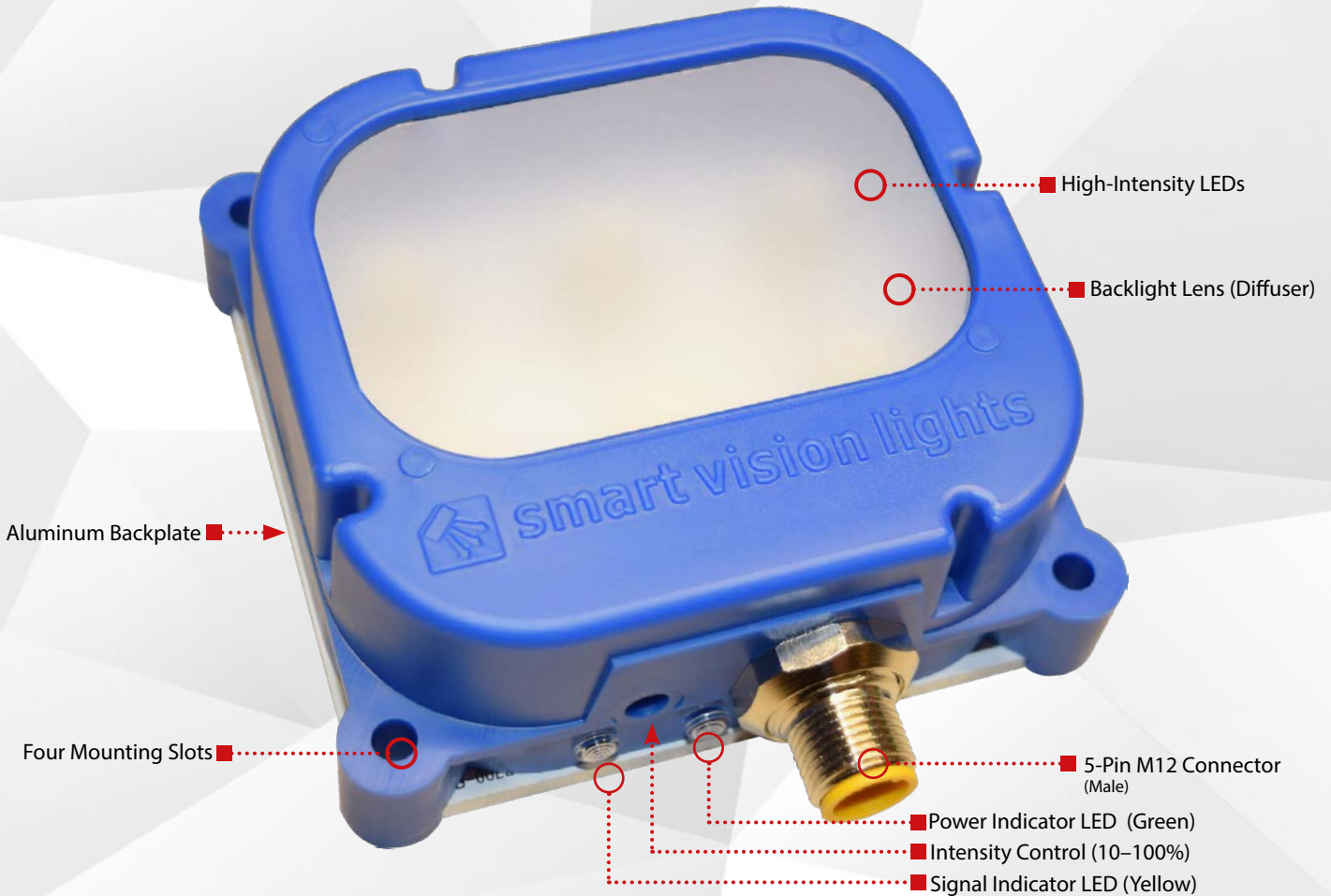




smart vision lights

SB75 Brick Light SPOT LIGHT BACKLIGHT

P R O D U C T D A T A S H E E T



Warranty 10 YEAR	Compliant IEC 62471	Compliant CE RoHS	Rated IP 50	Connector 5-PIN M12
-------------------------------	----------------------------------	--------------------------------	---------------------------------	---

PRODUCT HIGHLIGHTS

- ✓ 5-pin M12 quick connect
- ✓ Built in smart driver
- ✓ PNP and NPN trigger signal input
- ✓ Backlight lens (diffuser) is factory installed
- ✓ Intensity adjustable from 10%–100% using built-in potentiometer



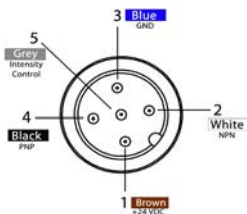
PRODUCT INTRODUCTION

The SB75 Brick Light features an built-in smart driver and a diffused lens, making it a viable option for silhouetting objects. The manual potentiometer control allows the intensity to be adjusted from 10%–100%. A user can also adjust the intensity using the 1–10VDC remote analog signal. Heat is dissipated through the aluminum backplate allows the ODSB75 to be run at a higher current and a greater intensity.

PRODUCT SPECIFICATIONS

Electrical Input	24VDC +/- 5%
Input Current	Max. 375 mA
Wattage	Max. 9.0 W
On/Off Input	PNP : +4VDC or greater to activate NPN : GND (<1VDC) to activate
PNP Line	4 mA @ 4VDC 10 mA @ 12VDC 20 mA @ 24VDC
NPN Line	15 mA @ Ground (0VDC)
Yellow Indicator LED	LED Strobe Indicator ON = light active
Green Indicator LED	ON = power
Continuous Mode	NPN can be tied to ground OR PNP can be tied to 24 V DC (not both)
Potentiometer	270° turn pot — Intensity control of 10%–100%. Turn clockwise to increases intensity
Analog Intensity	The output is adjustable from 10%–100% of brightness by a 1–10VDC signal (Jumpering pin 5 to pin 1 will provide maximum intensity)
Connection	5-pin M12 connector
Ambient Temperature	-18°–40° C (0°–104° F)
IP Rating	IP50
Weight	~155g
Compliances	CE, RoHS, IEC 62471
Warranty	10 years. For complete warranty information, visit smartvisionlights.com/warranty

WIRING CONFIGURATION



Pin layout for light (Male Connector)

Pins	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	1-10VDC	GREY*

* Some cables use green/yellow for pin 5

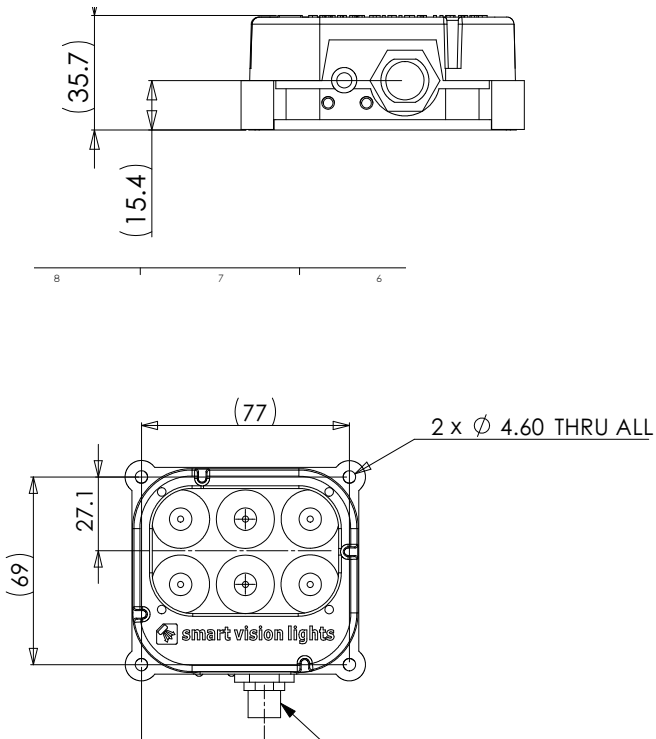
For maximum intensity, it is possible to tie pin 5 to pin 1 at +24VDC. Potentiometer intensity level needs to be set to 100%.

OPTIONAL

For maximum intensity, connect pin 5 to pin 1 at +24VDC.
Potentiometer intensity needs to be set to 100%.

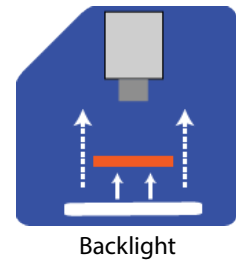
PRODUCT DRAWING

CAD files available on our website.
Dimensions are in mm.



ILLUMINATION

SB75 Series of Linear Lights works best for:



EYE SAFETY

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



Notice

Exempt Group: No photobiological hazard to eyes or skin even for continuous, unrestricted use. Applicable for wavelengths 625, 850, and 940.

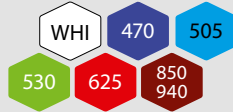
Caution

Risk Group 1: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to eyes. Safe for most applications except prolonged exposure. Applicable for wavelengths 470, 505, 530, and WHI.

PART NUMBER

SB75 -

COLOR:



Additional wavelengths options available upon request.

Part Number Examples:

SB75-625 (SB75, 625 nm Red Wavelength)



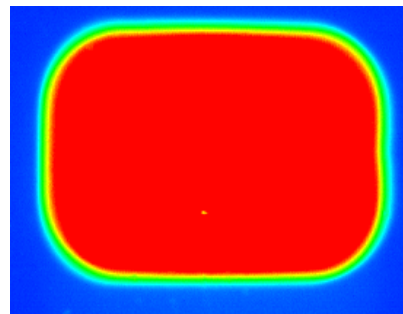
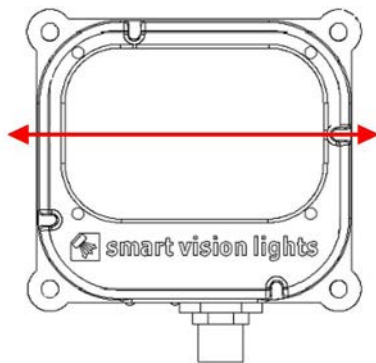
This light is available in our SWIR LEDs (1050 nm, 1200 nm, 1300 nm, 1450 nm, 1550 nm)

OPTICAL PERFORMANCE

Smart Vision Lights recommends that the SB75 be used at a working distance between 50 mm and 300 mm.

OPTICAL PERFORMANCE FOR THE SB75

Rating	Illuminance (Lux)
Average Intensity Rating	6500
<i>Lux measurement taken at surface of SB75</i>	

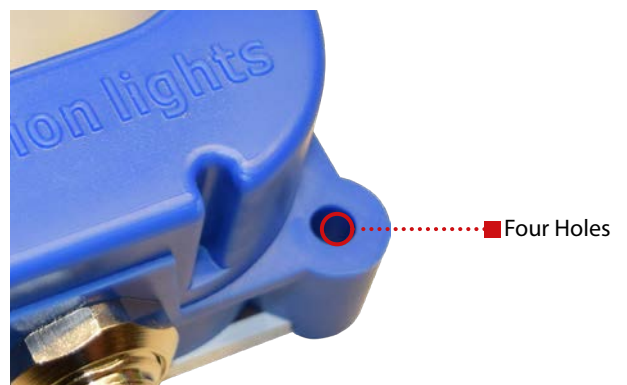
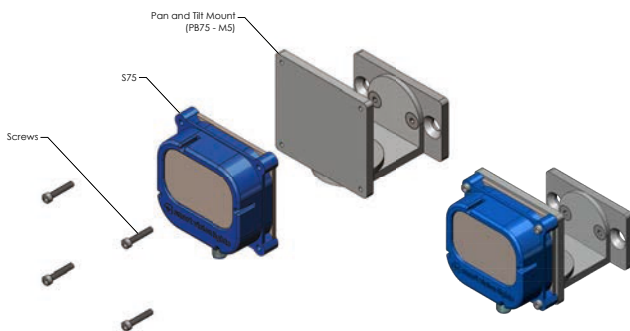


MOUNTING


Mounting options include four holes on the SB75 Series brick light.

Example of the S75 shown using the Pan and Tilt mount (**Part Number: PB75-M5**).


See accessories for additional mounting options.



ACCESSORIES

Power Cables	
	
Lengths	Part Number
5 m	5PM12-5
10 m	5PM12-10
15 m	5PM12-15

Mount	
	
Description	Part Number
Pan and Tilt Mount	PB75-M5

Mounting Rails	
	
Length	Part Number
300 mm	LEXT300
600 mm	LEXT600
900 mm	LEXT900
1200 mm	LEXT1200
Custom sizes available	

GLOSSARY

This glossary covers all Smart Vision Lights product families; some content in this section may not apply to this specific light.

TERMINOLOGY

OverDrive™ Light includes an integrated high-current strobe driver for complete LED light control.

Continuous Operation Light stays on continuously.

Multi-Drive™ Combines continuous operation and OverDrive™ strobe (high-current strobe operation) modes into one easy-to-use light.

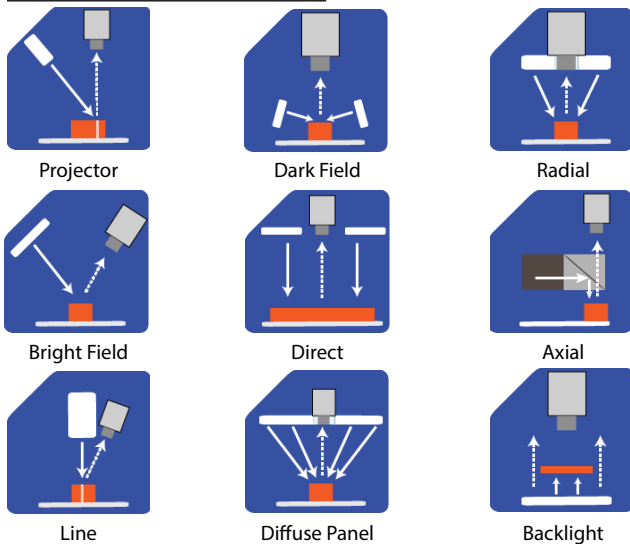
Built-In Driver The built-in driver allows full function without the need of an external driver.

Camera to Light Connecting the light directly to the camera, without the need for additional controllers or equipment.

Polarizers Filters that reduce reflections on specular surfaces.

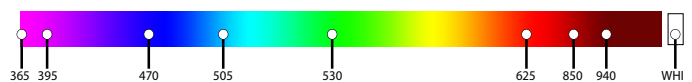
Diffuser Used to widen the angle of light emission, reduce reflections, and increase uniformity.

TYPES OF ILLUMINATIONS



COLOR/WAVELENGTHS LEGEND

Wavelength options range from 365 nm to 1550 nm. Additional wavelengths available for many light families.



See Part Number section for **this light's** available standard wavelengths.



Shortwave infrared LEDs are available in 1050 nm, 1200 nm, 1300 nm, 1450 nm, and 1550 nm.

Check Part Number section to see if **this light** is available in SWIR wavelengths.