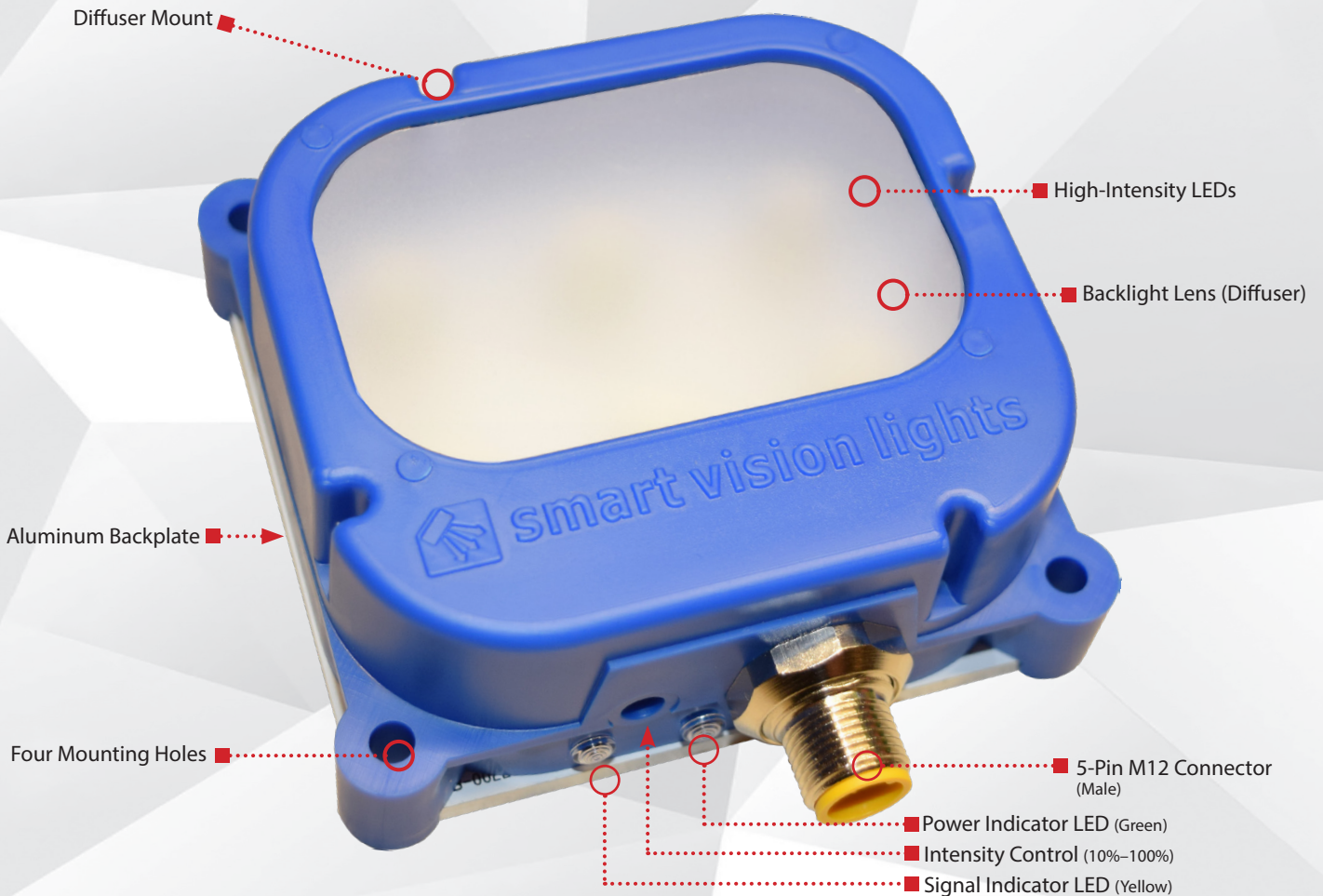




smart vision lights

SB75 Brick Light SPOT LIGHT BACKLIGHT

PRODUCT DATA SHEET



Warranty 10 YEAR	Compliant IEC 62471	Compliant CE RoHS	Rated IP 50	Connector 5-PIN M12
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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 a 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 with the 1–10VDC analog signal line. Heat is dissipated through the aluminum backplate, allowing the SB75 to be run at a higher current and a greater intensity.

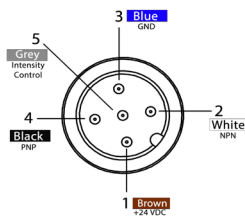


PRODUCT SPECIFICATIONS

Electrical Input	24VDC +/-5%
Input Current	Max. 375 mA
Wattage	Max. 9.0 W
On/Off Input	PNP: +4 VDC 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 24VDC (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	~155 g
Compliances	CE, RoHS, IEC 62471
Warranty	10 years. For complete warranty information, visit smartvisionlights.com/warranty .



WIRING CONFIGURATION



Pin layout for light (male connector)

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	1–10VDC	GREY*

* Some cables use green/yellow for pin 5

For maximum intensity, tie pin 5 to pin 1 at +24VDC.

For continuous mode: Tie PNP (pin 4) can be tied to +24VDC (pin 1) **or** tie NPN (pin 2) can be tied to Ground (pin 3).

OPTIONAL

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



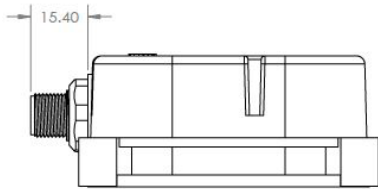
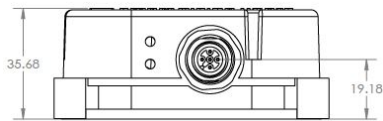
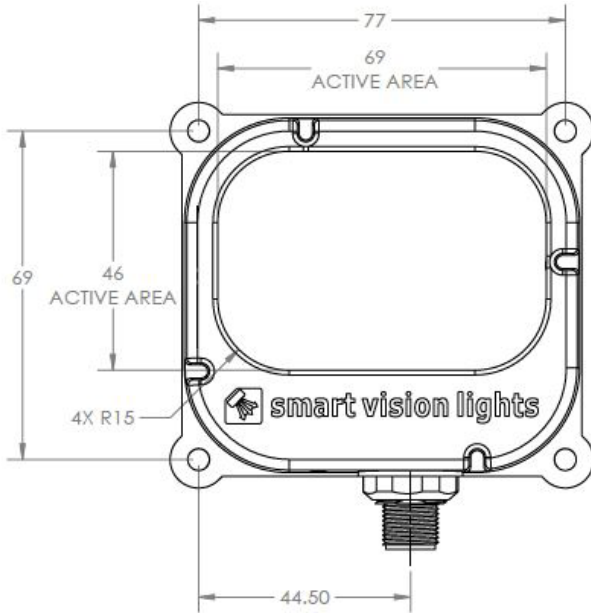
RESOURCE CORNER

Additional resources, including CAD files, videos, and application examples, are available on our website.



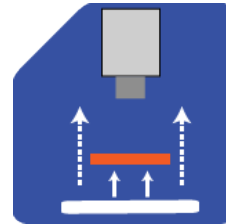
PRODUCT DRAWING

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



ILLUMINATION

SB75 Series of Brick Lights works best for:



Backlight



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, 940, 1050, 1200, 1300, 1450, and 1550.

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 for prolonged exposure. Applicable for wavelengths 470, 505, 530, and WHI.



PART NUMBER

SB75 –

COLOR:



Part Number Example:

SB75-625 (SB75, 625 nm Red Wavelength)



Additional wavelength options available upon request.

This light is available in our SWIR LEDs.

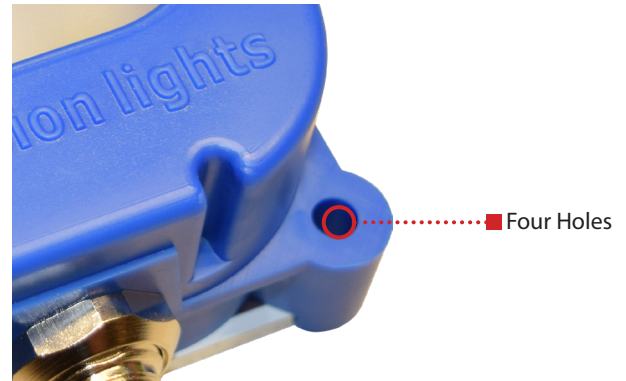
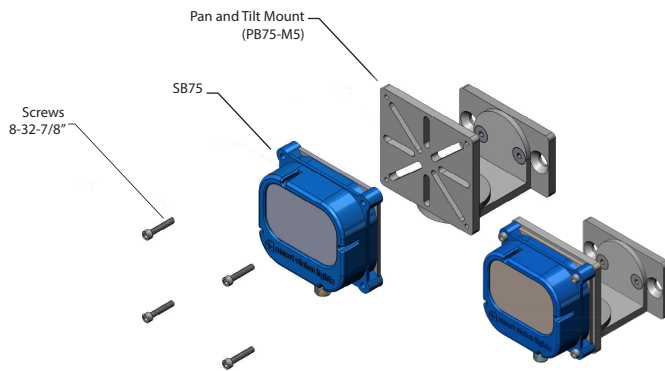


MOUNTING

The SB75 Brick Light has four holes for mounting.

Diagram shows pan and tilt mounting (**part number PB75-M5**).

See Accessories for additional mounting options.





ACCESSORIES

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

Variable Control Pot	
Description	Part Number
Controls the intensity of the light	IVP-C1

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.

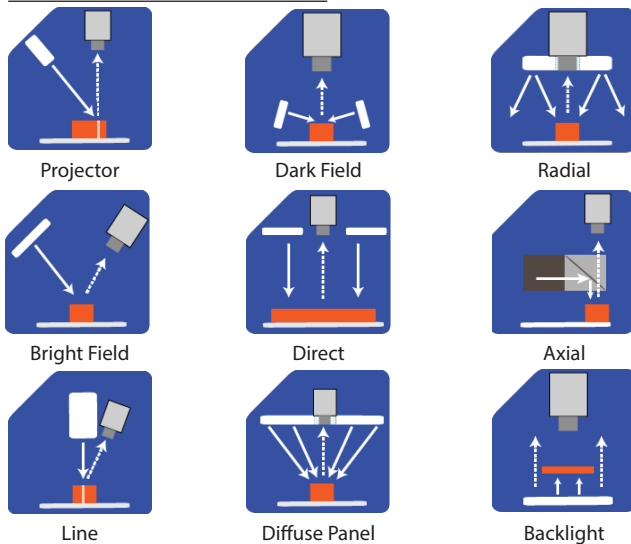
Built-In Driver The built-in driver allows full function without the need for an external driver.

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

Polarizers Filters that reduce reflections on specular surfaces.

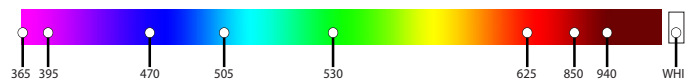
Diffuser Used to widen the angle of light emission, reduce reflections, and increase uniformity.

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.