



## product introduction

The SA30 Series is the first series of spot lights featuring an adjustable length lens allowing its user to select the correct spot size needed for the specific application without having to adjust the position of the whole light. The SA30 Series of Spot Lights also offers a completely homogenous light pattern at any working distance for a very define and even projected spot. The versatility of the SA30 Series and its convenient mounting options make this light the ideal spotlight.



## product features



- Telescoping Lens
- Compact 30mm Diameter Design
- Driver Built In – No External Wiring To A Driver
- Homogenous Light Pattern
- Continuous Operation or Strobe Mode
- Dimmable Via Built In Potentiometer
- Analog Intensity 0-10VDC Signal
- One, 1mm<sup>2</sup> Die High Current LEDs



## product specifications

<b>Electrical Input</b>	24VDC +/- 5%
<b>Current</b>	Max. 250mA
<b>Wattage</b>	Max. 6W
<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 @ 24VDC
<b>NPN Line</b>	22mA @ Common (0VDC)
<b>Yellow Indicator LED</b>	LED Strobe Indicator ON = Light Active
<b>Green Indicator LED</b>	ON = Power
<b>Continuous Mode</b>	Light will be in continuous mode by leaving signal on strobe input active
<b>Potentiometer</b>	10 turn pot – Intensity control of 10%-100% Clockwise increases intensity
<b>Analog Intensity</b>	The output is adjustable from 10%-100% of brightness by a 0-10VDC 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>Weight</b>	~145g
<b>Compliances</b>	CE and RoHS
<b>IEC 62471 Rating</b>	See page 4



## product number key

# SA30 – XXX —» Part Number Key

**Product Family:**  
Adjustable Spot  
SA30

**Color:**  
365/395 – UV  
470 – Blue  
505 – Cyan  
530 – Green  
625 – Red  
850/940 – IR  
WHI - White



## warnings



### Attention

Please note that the power requirements are 250mA at 24VDC. Failure to supply light with 250mA will result in non-repeatable lighting. Contact Smart Vision Lights for more information.



## wiring configuration

If Analog 0-10VDC 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



## mounting & accessories



**PB30-M1**  
Swivel Mount



**PB30-M2**  
Slotted Block Mount



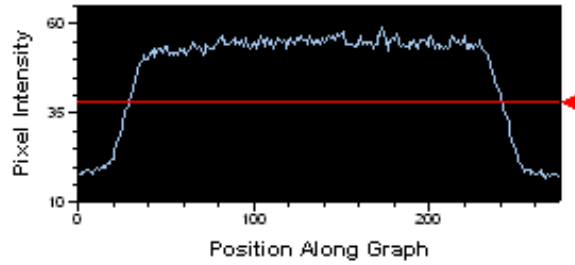
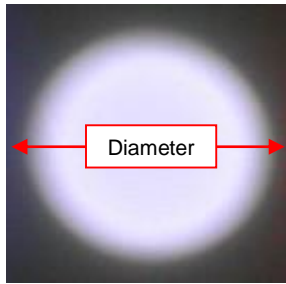
**PB30-M3**  
Slotted Right Angle



**PB30-M6**  
Bolt-on Block Mount



## optical performance



The SA30 offers a homogenous light pattern at any defined working distance. The Pixel Graph representation shows a steep drop off in intensity outside of the projected spot size with a very diffuse light pattern inside.

<b>Average Intensity Rating</b>	200mm diameter	2200 lux
	700mm diameter	560 lux

\*Lux measurement taken at .5m distance.

Working Distance mm (inches)	Fully Retractable Spot Size Diameter mm (inches)	Fully Extended Spot Size Diameter mm (inches)
150mm (5.9")	210mm (8")	40mm (1.5")
300mm (11.8")	385mm (15")	60mm (2.5")
600mm (23.6")	760mm (30")	100mm (4")
1m (39.4")	1220mm (48")	155mm (6")



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, 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 eye. Safe for most applications except prolonged exposures.  
Applicable for wavelengths: 395, 470, 505, 530, and WHI.

**Notice**

**Risk Group 1:** UV emitted from this product. Minimize exposure to eyes and skin. Use appropriate shielding. Safe for most applications except prolonged exposures.  
Applicable for wavelengths: 395

**Caution**

**Risk Group 2:** UV emitted from this product. Eye or skin irritation may result from exposure. Use appropriate shielding. Does not pose optical hazard if aversion responses limit exposure.  
Applicable for wavelengths: 365