



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, 1mm² Die High Current LEDs



product specifications

Electrical Input	24 VDC +/- 5%
Current	Max. 250mA
Wattage	Max. 6W
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)
Yellow Indicator LED	LED Strobe Indicator ON = Light Active
Green Indicator LED	ON = Power
Continuous Mode	Light will be in continuous mode by leaving signal on strobe input active
Potentiometer	10 turn pot – Intensity control of 10% to 100% Clockwise increases intensity
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
Weight	~145g
Compliances	CE and RoHS
IEC 62471 Rating	See page 3



product number key

SA30 – XXX —» Part Number Key

Product Family:
Adjustable Spot
SA30

Color:
365, 395, 470, 505,
530, 625, 850, 940
& WHI (White)

* Lights come standard with Narrow lenses



warnings

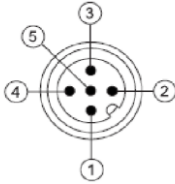


Attention

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



1 – 24V
2 – NPN
3 – GND
4 – PNP
5 – 0-10V

Standard M12 mating cable color code:

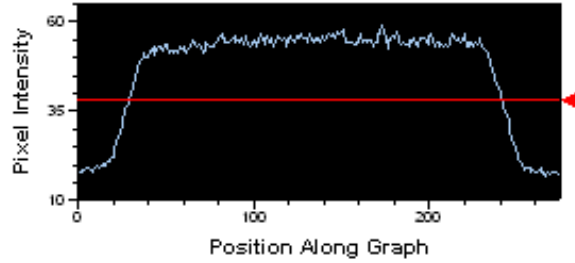
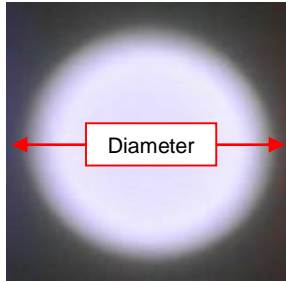
BROWN
WHITE
BLUE
BLACK
*GRAY (GREEN/YELLOW)

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	Wire Color	Function	Signal
1	BROWN	Power	+24 VDC
2	WHITE	NPN Strobe	GND for Active ON
3	BLUE	Ground	GND
4	BLACK	PNP Strobe	4VDC to 30VDC for Active ON
5	GREEN	Analog Intensity Control	0-10 VDC



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.

Average Intensity Rating	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")



mounting & accessories



PB30-M1
Swivel Mount



PB30-M2
Slotted Block Mount



PB30-M3
Slotted Right Angle



PB30-M6
Bolt-on Block Mount



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