The ODSXP30 Series Projector Light offers the most intense projected pattern from an LED. This light features an Overdrive driver with NPN or PNP signal options. The 9mm² die size emits 5-6x the intensity as a constant current SX30. The housing is constructed of finned 6061-T6 aluminum designed to dissipate as much heat as possible therefore allowing the LED to be strobed at 15A during the active ON period in comparison to 2A in the standard SX30. Multiple interchangeable pattern styles are available along with optional custom patterns. The ODSXP30 Series is able to project a thinner and define pattern of light compared to laser projectors making the ODSXP30 a more accurate light.

### Electrical Input

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power</td>
<td>24VDC +/- 5%</td>
</tr>
</tbody>
</table>

### Current

Max. 15A draw during strobe – Max. Average 1.5A

### Wattage

Max. 360W draw during strobe – Max Average 36W

### Strobe Input

- PNP: +4VDC or greater to activate
- NPN: GND (<1VDC) to activate

### Strobe/Pulse Time

Max. 5000 SPS (Strobes Per Second) | Max. Single Pulse = 50ms

### Red Indicator LED

- ON = LED ON (LED active)
- OFF = LED/Light Not Ready

### Green Indicator LED

- ON = Power

### Analog Intensity

The output is adjustable from 10%-100% of brightness by a 0-10VDC signal

### Connection

5 pin M12 connector

### Ambient Temp.

-20°C - 50°C (-4°F - 122°F)

### IP Rating

IP50

### Weight

~413g

### Compliances

CE and RoHS

### IEC 62471 Rating

See page 6
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

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Signal</th>
<th>Wire Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power In</td>
<td>+24VDC</td>
<td>BROWN</td>
</tr>
<tr>
<td>2</td>
<td>NPN</td>
<td>Sinking Signal</td>
<td>WHITE</td>
</tr>
<tr>
<td>3</td>
<td>GND</td>
<td>Ground</td>
<td>BLUE</td>
</tr>
<tr>
<td>4</td>
<td>PNP</td>
<td>Sourcing Signal</td>
<td>BLACK</td>
</tr>
<tr>
<td>5</td>
<td>Intensity Control</td>
<td>0-10VDC</td>
<td>GREY¹</td>
</tr>
</tbody>
</table>

¹ Some cables use green with yellow stripe for 0-10V adjustment

Attention
Please note that the power requirements are 15A at 24VDC. Failure to supply light with 15A will result in non-repeatable lighting. Contact Smart Vision Lights for more information.

Standard patterns are available and custom patterns can be etched. Patterns can be changed.
In constant operation the housing on ODSXP30 series lights will run at 50°C in an ambient temperature of 25°C.

<table>
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<tr>
<th></th>
<th>100mm</th>
<th>150mm</th>
<th>200mm</th>
<th>300mm</th>
<th>400mm</th>
<th>500mm</th>
<th>600mm</th>
<th>750mm</th>
<th>1000mm</th>
<th>1500mm</th>
<th>2000mm</th>
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<tr>
<td>60mm</td>
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<td>8</td>
<td>12</td>
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Number in box represents the focal length of lens (example - 6 is a 6mm focal length lens)

ODSXP30 series aluminum enclosures designed to transfer heat away from the high power LED.

Additional heat sinking recommended in ambient air temperatures above 25°C.

Thermal image taken after 2 hours of continuous ON operation at 25°C.
Duty Cycle on Performance of Light

All lights are pulse following

Duty Cycle ($D$) is defined as the ratio between Strobe Time and Rest Time

Maximum Duty Cycle for OD Light is 10% = .1

Calculating Rest Time - $R_T$

$$ R_T = \frac{S_T}{D} $$

$S_T$ is the Strobe Time

$R_T$ is the Rest Time

$D$ is Duty Cycle

Example: Camera exposure of 5mS where Strobe Time is 5mS.

$$ R_T = \frac{5\text{mS}}{.1} = 50\text{mS} $$

Rest Time is 50ms for 5ms Strobe Time
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, 530, and WHI.