The all metal construction of the Ring Light Series of lights provides a small particle resistant and all around durable light. The RCC130 was designed to produce a narrow uniform/homogenous light pattern. To achieve this, the RCC130 contains special lenses for creating this near collimated light pattern. Its simple plug and play 5 Pin M12 connector allows for ease of use while allowing for full control. The RCC130 operates with either an NPN or a PNP signal and runs on an industry standard 24 VDC. The 0-10 VDC intensity control assists in gaining full control of the light output. A standard 42 mm inner hole diameter allows for use with nearly all camera systems with available step-up and step-down conversion kits adapters. Optics include a tightly focused uniform lens for narrow version.

- Narrow - Tight Focus Uniform Lensing
- PNP and NPN Strobe Input
- Continuous Operation or Strobe Mode
- Dimmable via Built-In Potentiometer
- Analog Intensity 0-10VDC Signal
- Eight, 1mm² Die High Current LEDs

### Electrical Input
- 24 VDC +/- 5%

### Current
- Max. 800mA

### Wattage
- Max. 20W

### 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
- 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
- ~325g

### Certification
- CE and RoHS certified

### IEC 62471 Rating
- See page 4
**Part Number Key**

- **Product Family:** Ring Light
- **RCC130 Series**

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

*Lights come standard with narrow lenses*

CE and RoHS Compliant

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**Attention**

Please note that the power requirements are up to 800mA at 24VDC. Failure to supply light with up to 800mA can result in non-repeatable lighting. Contact Smart Vision Lights for more information.

---

**Optical Performance**

**RCC130-XXX**

<table>
<thead>
<tr>
<th>Working Distance mm (inches)</th>
<th>Pattern (80%-100% measured intensity) mm (Inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1m (39&quot;)</td>
<td>98mm (3.86&quot;) D</td>
</tr>
<tr>
<td>2m (79&quot;)</td>
<td>180mm (7.09&quot;) D</td>
</tr>
<tr>
<td>3m (118&quot;)</td>
<td>310mm (12.2&quot;) D</td>
</tr>
</tbody>
</table>

Typical output performance: Illumination (Lux) = 12480

_Illumination measurement taken on White Lights – 6500K_

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**Projected Pattern**

- **RCC130-625**
  - 1m working distance

**Measurement Method**

RCC130 Series

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**Product Number Key**
**mounting & accessories**

- Standard industrial T-slots on each side accept T-nuts
- Front mounting of Lens to Ring Light
- Rear mounting of Lens to Ring Light

**identification**

- 0-10 VDC Intensity Adjust
- Active Signal Indicator LED (Yellow)
- Power Input Plug
- Power Indicator LED (Green)

**wiring configuration**

<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>GREY 🠡</td>
</tr>
</tbody>
</table>

*Some cables use green with yellow stripe for 0-10V adjustment*
Standard Adapter Kit – Part # SU46-25.5-27

Adapter Kit includes 2 step up rings (25.5 and 27), 6 set screws and hex tool. 6 set screws – 3 for mounting step up ring to light and 3 additional for lens. Some locking thumbscrews may prevent the lens from fitting through the center of the R80, extra low-profile replacement set screws are included, allowing the protruding thumbscrews to be removed.

Step Up Adapter Kits

Step Up Adapter Kits includes step up rings, 6 set screws and hex tool. Lenses can be mounted to front or back of ring light. Filters can also be installed.

<table>
<thead>
<tr>
<th>M46 step-up</th>
<th>Lens thread size</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-</td>
<td>25.5</td>
<td>SU46-25.5/27</td>
</tr>
<tr>
<td>46-</td>
<td>27</td>
<td>SU46-25.5/27</td>
</tr>
<tr>
<td>46-</td>
<td>30.5</td>
<td>SU46-30.5</td>
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<tr>
<td>46-</td>
<td>34</td>
<td>SU46-34</td>
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<tr>
<td>46-</td>
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<td>SU46-39</td>
</tr>
<tr>
<td>46-</td>
<td>40.5</td>
<td>SU46-40.5</td>
</tr>
<tr>
<td>46-</td>
<td>43</td>
<td>SU46-43</td>
</tr>
</tbody>
</table>

Step Down Adapter Rings

Step Down rings mount large lenses to light. Step Down rings mount lenses to back of ring light. Filters can also be installed.

<table>
<thead>
<tr>
<th>M46 step-down</th>
<th>Lens thread size</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>46-</td>
<td>49</td>
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<tr>
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<td>SD46-55</td>
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</tr>
<tr>
<td>46-</td>
<td>72</td>
<td>SD46-72</td>
</tr>
</tbody>
</table>

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 eye. Safe for most applications except prolonged exposures. Applicable for wavelengths: 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