Omron Microscan’s Smart Series NERLITE products feature built-in controllers for a complete and easily integrated solution.

MAX illuminators provide a high intensity output over a large area. Featuring IP67 industrial sealing and the brightest LEDs in their class, the compact lights are an ideal solution for any rugged automation environment. Versatile 10° spot and 50° flood lens options allow them to be used at both near and far distances to accommodate a variety of applications.

**MAX: At a Glance**

- **Smart Series: Built-in controller with adjustable intensity continuous mode and high output strobe mode**
- **High intensity output with state of the art LED technology**
- **Integrated Pulse Width Modulation (PWM) feature for dimming and on-off control**
- **Select models can be easily daisy chained together (MAX 300)**
- **IP67 enclosure with M12 connectors**

**Illumination Example:**

Object

![Image of an object]

Resulting Image

![Image of an illuminated object]

**Application Examples**

- Large surface inspection
- Package sorting inspection
- Traffic monitoring
- Food processing and packaging
- Automotive/aerospace assembly

**Large engine block:** Provides good contrast over large areas to perform product inspection.

For more information on this product, visit [www.microscan.com](http://www.microscan.com).
**MAX 45**

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>LENS</th>
<th>nm/K</th>
<th>CONT. OUTPUT (lumens)</th>
<th>STROBE OUTPUT (lumens)</th>
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<td>MAX 45, Red</td>
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<td>625 nm</td>
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<td>165</td>
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<tr>
<td>MAX 45, Red</td>
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<td>625 nm</td>
<td>195</td>
<td>661</td>
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<tr>
<td>MAX 45, White</td>
<td>10°</td>
<td>5000 K – 8300 K</td>
<td>151</td>
<td>412</td>
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<tr>
<td>MAX 45, White</td>
<td>50°</td>
<td>5000 K – 8300 K</td>
<td>151</td>
<td>412</td>
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</table>

Active Area: 0.8" (20 mm) x 0.8" (20 mm) Current Draw at 24 VDC (typ.): 75 mA
Weight: 5 oz. (144 g)
Dimensions: H 2.24" (57 mm) x W 1.77" (45 mm) x D 1.20" (30.5 mm)

**MAX 100**

<table>
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<td>5000 K – 8300 K</td>
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</table>

Active Area: 0.8" (20 mm) x 3.6" (92 mm) Current Draw at 24 VDC (typ.): 275 mA
Weight: 12 oz. (353 g)
Dimensions: H 2.24" (57 mm) x W 4.17" (106 mm) x D 1.20" (30.5 mm)

**MAX 300**

<table>
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<th>DESCRIPTION</th>
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<th>STROBE OUTPUT (lumens)</th>
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<tr>
<td>MAX 300, Red</td>
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</table>

Active Area: 0.8" (20 mm) x 11.2" (284 mm) Current Draw at 24 VDC (typ.): 750 mA
Weight: 36 oz. (1007 g)
Dimensions: H 2.24" (57 mm) x W 11.81" (300 mm) x D 1.20" (30.5 mm)

**ENVIRONMENTAL**

Enclosure: Black anodized aluminum, IP67 rated; Humidity: up to 95% (non-condensing)
Operating Temperature: 0° to 50° C (32° to 122° F); Storage Temperature: 0° to 50° C (32° to 122° F)

**LIGHTING PARAMETERS**

Active Area Defined: Area of light output from the illuminator

**LIGHT SOURCE**
Type: High output LEDs
Light Output: Lumens
Expected Life: 50,000 hours
Eye Safety: EN 60825-1: Class 2

**CONNECTOR**
Input (all models): M12 5-pin plug, A-code
Output (MAX 300 models only): M12 5-pin socket, A-code

**ELECTRICAL**

Power: 20.2–28.8 VDC
Continuous Operation: No additional signals required
Continuous Operation with Dimming: 0 VDC (LEDs off) to 3.1–3.5 VDC (LEDs on) PWM signal. < 1 mA, modulation frequency 2 KHz +/- 100 Hz. Note: LED duty cycle will equal duty cycle of dimming signal when using this mode.
Continuous Operation with On/Off Control: 0 VDC (LEDs off) to 3.1–3.5 VDC (LEDs on), < 1 mA
High Output Strobe Operation: Optoisolated. 0 VDC (LEDs off) to 3.1–28.8 VDC (LEDs on), 10 mA max, 5 μs min to 10 mS max pulse width. Note: High Output Strobe internally limits LED frequency and pulse width to maximum of 90 Hz and 1 mS respectively.