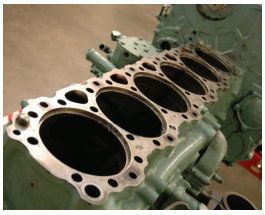
NERLITE® MAX

MAX: At a Glance

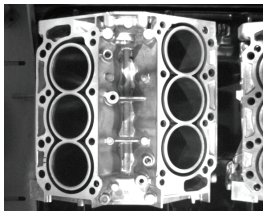
- *Smart Series: Built-in controller with adjustable intensity continuous mode and high output strobe mode*
- *High intensity output with state of the art LED technology*
- *Integrated Pulse Width Modulation (PWM) feature for dimming and on-off control*
- *Select models can be easily daisy chained together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

Illumination Example:

Object



Resulting Image



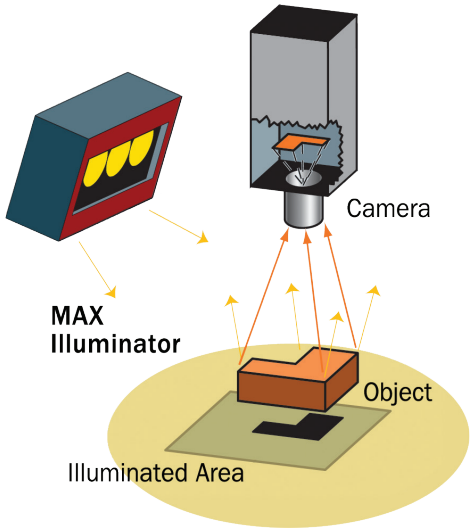
Large engine block: Provides good contrast over large areas to perform product inspection.

For more information on this product, visit www.microscan.com.

Integrated Large Area LED Lighting

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.



Application Examples

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

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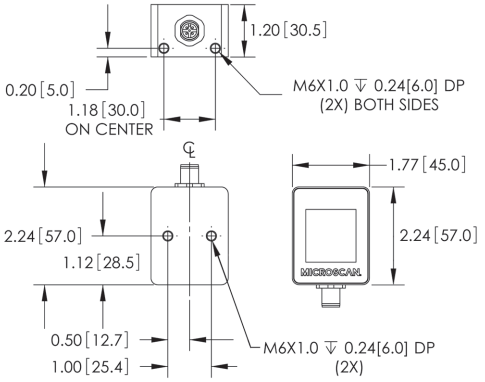
NERLITE® MAX SPECIFICATIONS AND OPTIONS

MAX 45

DESCRIPTION	LENS	nm/K	CONT. OUTPUT (lumens)	STROBE OUTPUT (lumens)
MAX 45, Red	10°	625 nm	49	165
MAX 45, Red	50°	625 nm	49	165
MAX 45, White	10°	5000 K – 8300 K	151	412
MAX 45, White	50°	5000 K – 8300 K	151	412

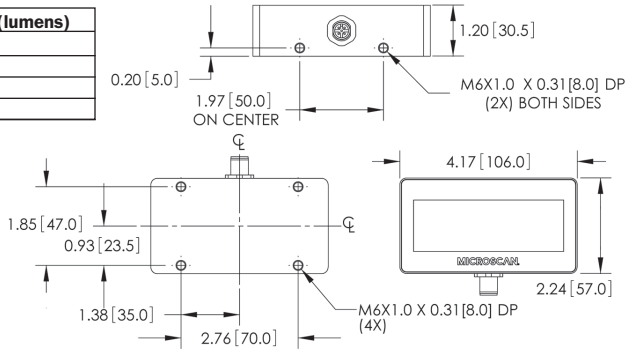
Active Area: 0.8" (20 mm) x 0.8" (20 mm) **Current Draw at 24 VDC (typ.):** 75 mA
Weight: 5 oz. (144 g)
Dimensions: H 2.24" (57 mm) x W 1.77" (45 mm) x D 1.20" (30.5 mm)



MAX 100

DESCRIPTION	LENS	nm/K	CONT. OUTPUT (lumens)	STROBE OUTPUT (lumens)
MAX 100, Red	10°	625 nm	195	661
MAX 100, Red	50°	625 nm	195	661
MAX 100, White	10°	5000 K – 8300 K	604	1648
MAX 100, White	50°	5000 K – 8300 K	604	1648

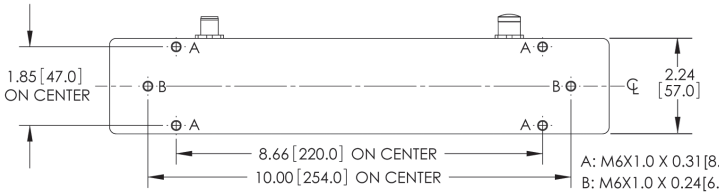
Active Area: 0.8" (20 mm) x 3.6" (92 mm) **Current Draw at 24 VDC (typ.):** 275 mA
Weight: 12 oz. (353 g)
Dimensions: H 2.24" (57 mm) x W 4.17" (106 mm) x D 1.20" (30.5 mm)

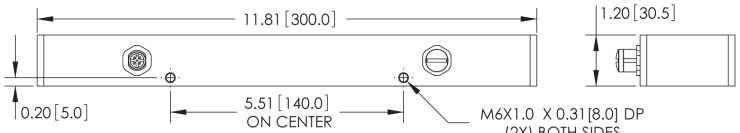


MAX 300

DESCRIPTION	LENS	nm/K	CONT. OUTPUT (lumens)	STROBE OUTPUT (lumens)
MAX 300, Red	10°	625 nm	584	1982
MAX 300, Red	50°	625 nm	584	1982
MAX 300, White	10°	5000 K – 8300 K	1813	4944
MAX 300, White	50°	5000 K – 8300 K	1813	4944

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)





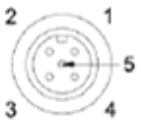
ENVIRONMENTAL
Enclosure: Black anodized aluminum, IP67 rated; **Humidity:** up to 95% (non-condensing)
Operating Temperature: 0° to 50° C (32° to 122° F); **Storage Temperature:** 0° to 50° C (32° to 122° F)

LIGHTING PARAMETERS
Active Area Defined: Area of light output from the illuminator

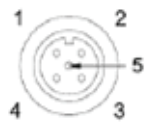
LIGHT SOURCE
Type: High output LEDs
Light Output: Lumens
Expected Life: 50,000 hours
Eye Safety: EN 60825-1: Class 2

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

M12 5-pin plug:



M12 5-pin socket:



Pin Assignment

1 +24 VDC
2 Trigger (-)
3 DC Ground
4 Trigger (+)
5 Dimmer

Note: MAX 300 models only. Same pin assignment.

ELECTRICAL
Power: 20.2–28.8 VDC
Continous Operation: No additional signals required
Continous 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.
Continous 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.

QMS CERTIFICATION
www.microscan.com/quality

Read Range and other performance data is determined using high quality Grade A symbols per ISO/IEC 15415 and ISO/IEC 15416 in a 25° C environment. For application-specific Read Range results, testing should be performed with symbols used in the actual application. Omron Microscan Applications Engineering is available to assist with evaluations. Results may vary depending on symbol quality. **Warranty**–For current warranty information on this product, please visit www.microscan.com/warranty.

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