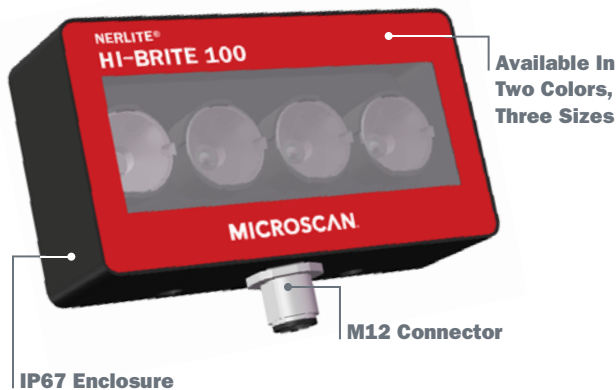


NERLITE® HI-BRITE SERIES

Integrated Large Area LED Lighting

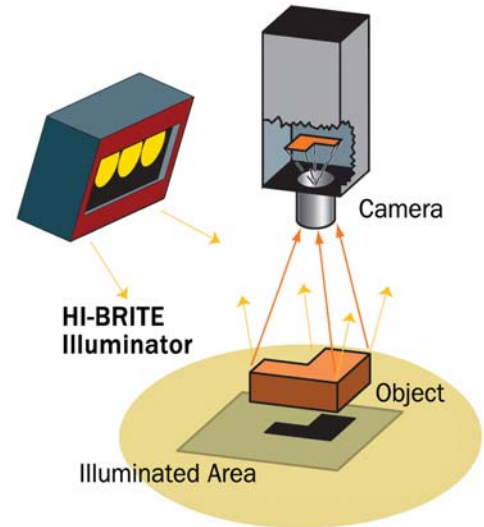


Microscan's wide range of NERLITE products can illuminate any part or mark for successful machine vision and auto ID applications.

HI-BRITE illuminators provide a high intensity output over a large area. Featuring IP67 industrial sealing and the brightest LEDs in their class, the compact lights include a built-in controller for a complete and easily integrated solution for rugged automation environments. 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.

HI-BRITE: At a Glance

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

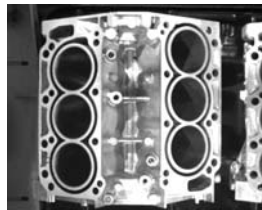


Illumination Example:

Object



Resulting Image



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

Application Examples

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

NERLITE® HI-BRITE SERIES SPECIFICATIONS AND OPTIONS

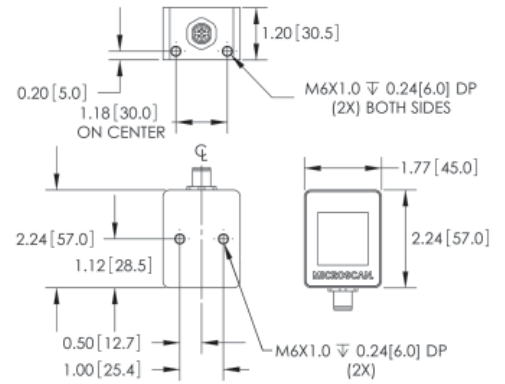
HB 45

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



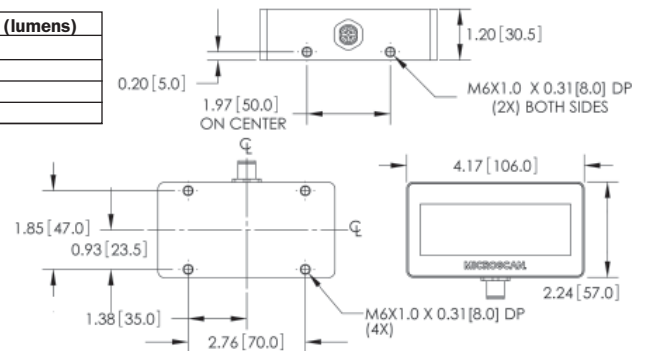
HB 100

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



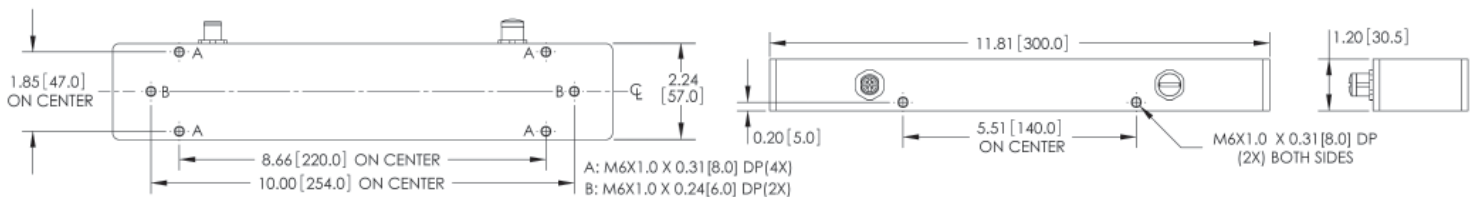
HB 300

DESCRIPTION	LENS	nm/K	CONT. OUTPUT (lumens)	STROBE OUTPUT (lumens)
HB-300, Red	10°	625 nm	584	1982
HB-300, Red	50°	625 nm	584	1982
HB-300, White	10°	5000 K – 8300 K	1813	4944
HB-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 (HB-300 models only): M12 5-pin socket, A-code

ELECTRICAL

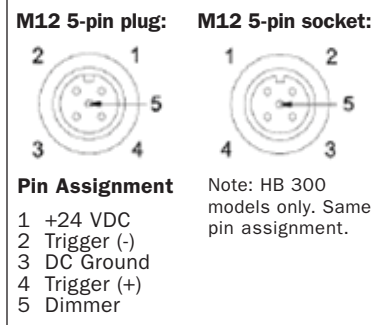
Power: 20.2–28.8 VDC

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.



CE COMPLIANT

ISO CERTIFICATION

Certified ISO 9001:2008 Quality Management System

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Microscan Applications Engineering is available to assist with evaluations. Results may vary depending on symbol quality. **Warranty**—One year limited warranty on parts and labor. Free extended three year warranty available with online product registration.

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