NERLITE® HI-BRITE



HI-BRITE: At a Glance

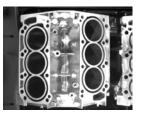
- Smart Series: Built-in controller with adjustable intensity continuous mode and high output strobe mode
- High intensity output with state of the art LED technology
- Integrated Pulse Width Modulation (PWM) feature for dimming and on-off control
- Select models can be easily daisy chained together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

Illumination Example:

Object



Resulting Image

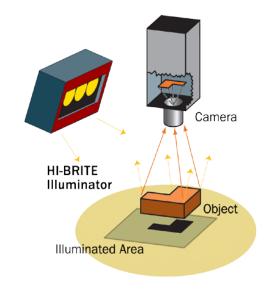


Large engine block: Provides good contrast over large areas to perform product inspection.

Integrated Large Area LED Lighting

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

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 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



NERLITE® HI-BRITE Specifications and Options

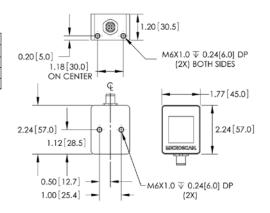
HB 45

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)



1.20[30.5]

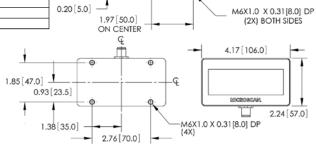
HB 100

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
HR-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)



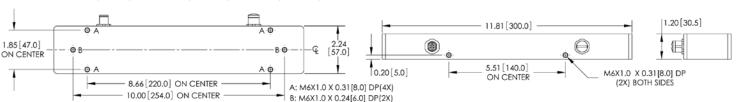
HB 300

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)



M12 5-pin socket:

Note: HB 300

models only. Same

pin assignment.

2

M12 5-pin plug:

Pin Assignment

+24 VDC

Trigger (-) DC Ground

Trigger (+)

Dimmer

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

Continous Operation: No additional signals required

Continous Operation with Dimming: O 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. O 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 3 year warranty upon online product registration.

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