

NERLITE® AREA ARRAY



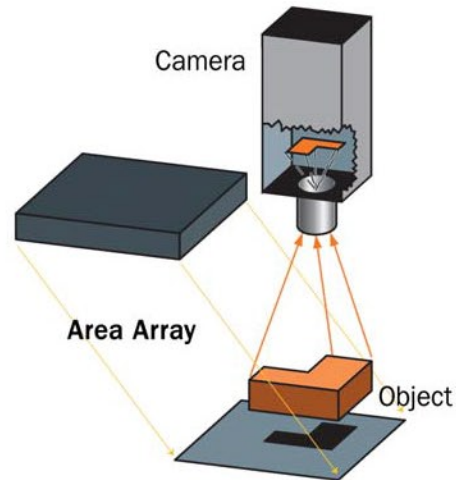
Economical Lighting Solution

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

An Area Array's general purpose, unidirectional design (adjustable via mounting position) may be used for dark field (creating shadows and specular reflection) or bright field lighting for diffused surfaces. As with other incident lighting choices, subtle adjustments to working distance and angle of light delivery can deliver good image contrast for minimal investment.

Area Array: At a Glance

- Features an economical, general purpose design
- Address a broad range of applications via light positioning in bright field or dark field
- Sturdy housings combined with LEDs rated at up to 50,000 hours
- Multiple arrays may be combined to address large field of view applications



Illumination Example:

Object



Resulting Image



Labeled bottle: Inspect for label presence or absence, correct label and proper orientation.

Application Examples

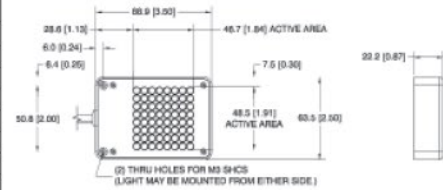
- Locate or measure outside dimensions
- Illuminate flat, diffused surfaces
- Control costs
- Non-diffuse incident (front) lighting
- Dark field or bright field lighting
- Label placement inspection

NERLITE® AREA ARRAY SPECIFICATIONS AND OPTIONS

AR 50x50

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm ²	mw/cm ²
AR-50x50, Red Continuous	636 nm	160 mA		2560	
AR-50x50, Red Strobe	636 nm		3.2 A	25600	
AR-50x50, White Continuous	6500 K	204 mA		3430	
AR-50x50, White Strobe	6500 K		2.88 A	48300	
AR-50x50, Blue Continuous	470 nm	204 mA		3420	
AR-50x50, Blue Strobe	470 nm		2.88 A	48200	
AR-50x50, Infrared Continuous	880 nm	100 mA			50
AR-50x50, Infrared Strobe	880 nm		1.59 A		500
AR-50x50, Ultraviolet Continuous	375 nm	176 mA			2.2
AR-50x50, Ultraviolet Strobe	375 nm		510 mA		6.2

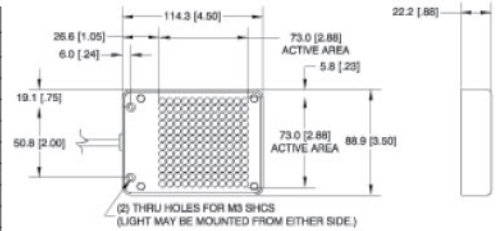
Active Area: 1.9" x 1.8" (49 mm x 47 mm) **Weight:** 14 oz. (397 g)
Dimensions: H 3.5" (88.9 mm) x W 2.5" (63.5 mm) x D 0.87" (22.2 mm)



AR 75x75

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT	mcd/cm ²	mw/cm ²
AR-75x75, Red Continuous	636 nm	420 mA		3100	
AR-75x75, Red Strobe	636 nm		4.8 A	14600	
AR-75x75, White Continuous	6500 K	369 mA		4220	
AR-75x75, White Strobe	6500 K		9.41 A	53600	
AR-75x75, Blue Continuous	470 nm	369 mA		3650	
AR-75x75, Blue Strobe	470 nm		9.41 A	46300	
AR-75x75, Infrared Continuous	880 nm	240 mA			50
AR-75x75, Infrared Strobe	880 nm		5.04 A		540
AR-75x75, Ultraviolet Continuous	375 nm	250 mA			2.2
AR-75x75, Ultraviolet Strobe	375 nm		1.49 A		6.5

Active Area: 2.9" x 2.9" (73 mm x 73 mm) **Weight:** 16 oz. (454 g)
Dimensions: H 4.5" (114.3 mm) x W 3.5" (88.9 mm) x D 0.87" (22.2 mm)

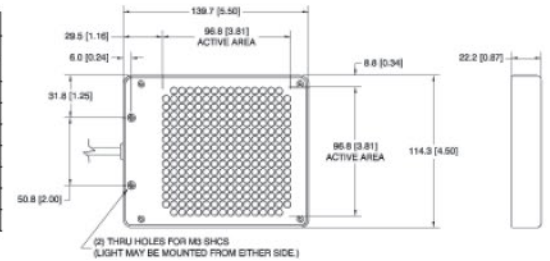


AR 100x100

DESCRIPTION	nm/K	CONT. CURRENT	STROBE CURRENT		mcd/cm ²	mw/cm ²
			CHANNEL 1	CHANNEL 2		
AR-100x100, Red Continuous	636 nm	233 mA			1260	
AR-100x100, Red Strobe	636 nm		8.4 A		22700	
AR-100x100, White Continuous	6500 K	420 mA			3115	
AR-100x100, White Strobe*	6500 K		8.62 A	7.84 A	62300	
AR-100x100, Blue Continuous	470 nm	420 mA			3140	
AR-100x100, Blue Strobe*	470 nm		8.62 A	7.84 A	62800	
AR-100x100, Infrared Continuous	880 nm	218 mA				30
AR-100x100, Infrared Strobe	880 nm		5.04 A			600

* These products have two separate circuits.

Active Area: 3.8" x 3.8" (97 mm x 97 mm) **Weight:** 20 oz. (567 g)
Dimensions: H 5.5" (139.7 mm) x W 4.5" (114.3 mm) x D 0.87" (22.2 mm)



AR 50x200

DESCRIPTION	nm/K	CONT. CURRENT		STROBE CURRENT		mcd/cm ²	mw/cm ²
		LIGHTING	FAN	CHANNEL 1	CHANNEL 2		
AR-50x200, Red Continuous	636 nm	447 mA	62 mA			2640	
AR-50x200, Red Strobe	636 nm			8.8 A		26400	
AR-50x200, White Continuous	6500 K	862 mA	62 mA			5440	
AR-50x200, White Strobe*	6500 K			8.62 A	8.62 A	54400	

* These products have two separate circuits.

Active Area: 2" x 8" (51 mm x 203 mm) **Weight:** 20 oz. (567 g)
Dimensions: H 2.36" (59.9 mm) x W 9" (228.6 mm) x D 2" (50.8 mm)



ENVIRONMENTAL

Operating Temperature: 0° to 40° C (32° to 104° F)
Storage Temperature: 0° to 50° C (32° to 122° F)
Humidity: up to 95% (non-condensing)

LIGHTING PARAMETERS

Active Area Defined: Area of light output from the illuminator.

LIGHT SOURCE

Type: High output LEDs
Light Output: Millicandelas per square centimeter (mcd/cm²)
Radiant Output: Milliwatts per square centimeter (mw/cm²)
Expected Life: 50,000 hours (Red, Infrared LEDs)
Expected Life: 10,000 hours (Blue, White, Ultraviolet LEDs)
Eye Safety: EN 60825-1: Class 1 (Red, White, Infrared LEDs); Class 1M (Ultraviolet LEDs); Class 2 (Blue LEDs)

CONNECTOR

Type: 15 ft. (4.5 m) integrated cable with flying leads

ELECTRICAL

Power (Continuous Models): 24 VDC +/- 1%
Power (Strobe Models): 1 ms max. pulse width, 6% max duty cycle, use of NERLITE NL-200 Series Lighting Controller is required.



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