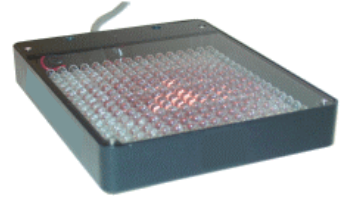
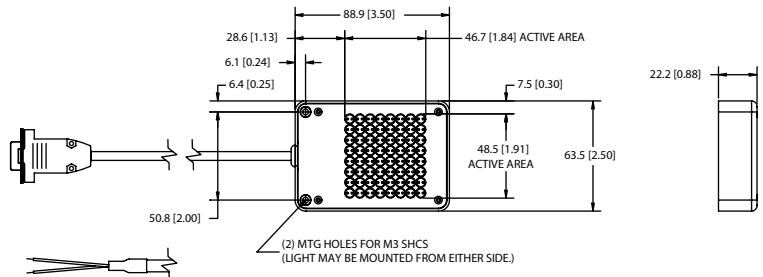


## NERLITE® AR-50 Series Area Array Illuminators

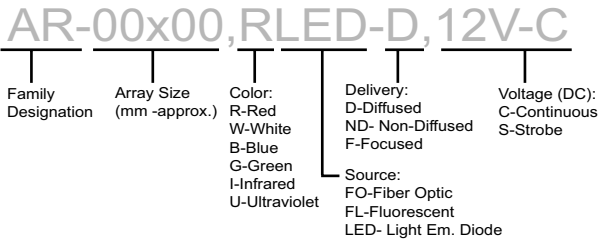
AR-50 Series Area Array Illuminators are designed for non-specular surface lighting in applications that demand economical solutions. All AR-50 Series modules employ non-diffused, square arrays of LEDs measuring approximately 50 mm per side, providing high output (HO) light from a specific direction onto the field of view. Using a new approach in thermal management technology for LED illumination, the AR-50 Series is able to support large LED arrays operating at temperature levels that guarantee long life. AR-50 Series modules may be used as dark-field (creating shadows and specular reflection) or as bright-field for diffused surfaces.



Model #	Description
RVA:010652101	AR-50x50, R LED-ND, 12V-C, 636nm
RVA:010652107	AR-50x50, R LED-ND, 12V-C, 630nm
RVA:010652111	AR-50x50, R LED-ND, 24V-C w/9 pin D-sub
RVA:010652115	AR-50x50, R LED-ND, 24V-C w/"Flying Leads"
RVA:010652131	AR-50x50, R LED-ND, 24V-S
RVA:010652103	AR-50x50, W LED-ND, 12V-C
RVA:010652113	AR-50x50, W LED-ND, 24V-C w/9 pin D-sub
RVA:010652114	AR-50x50, W LED-ND, 24V-C w/"Flying Leads"
RVA:010652133	AR-50x50, W LED-ND, 24V-S
RVA:010652105	AR-50x50, B LED-ND, 12V-C
RVA:010652125	AR-50x50, B LED-ND, 24V-C w/9 pin D-sub
RVA:010652135	AR-50x50, B LED-ND, 24V-S
RVA:010904501	AR-50x50, I LED-ND, 12V-C
RVA:010904503	AR-50x50, I LED-ND, 24V-C w/9 pin D-sub
RVA:010904509	AR-50x50, I LED-ND, 24V-C w/"Flying Leads"
RVA:010904505	AR-50x50, I LED-ND, 24V-S



Description Key Example



### Mechanical:

L x W x H (mm/in.):

88.9 x 63.5 x 22.2 /

3.50 x 2.50 x 0.88

### Mounting:

Housing Material:

(2) M3 SHCS holes

Weight:

Black Anodized Aluminum

397 grams (14 oz.)

### Illumination & Electrical:

#### Lighting Technique:

Dark-field or Bright-field

#### Light Output Area:

46.7 mm x 48.5 mm  
(1.84 in. x 1.91 in.)

#### Light Characteristics:

Source	Color (nm)	Exp. Life	Voltage/Current (max.)		
			12V-C	24V-C	24V-S
LED	Red (636)	60k hrs.	355 mA	160 mA	3.2 A pk.
LED	Red (630)	50k hrs.	400 mA	tdb	tdb
LED	White - 6500 Kelvin	10k hrs.	440 mA	320 mA	4.4 A pk.
LED	Blue (470)	10k hrs.	440 mA	tdb	4.4 A pk.
LED	IR (940)	50k hrs.	176 mA	80 mA	1.6 A pk.

#### CE Conformity:

Yes

### Environmental

#### Max. Operating Humidity

95% non-condensing

#### Operating Temp.

40°C (104°F)

#### Storage Temp.

50°C (122°F)

### Accessories:

Part #	Description	Models Used On
RVA:010500301	CPS-12 3.5A, 12VDC, US Cord	12V-C
RVA:010500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C
RVA:010501402	CPS-24, 24VDC, US cord	24V-S <sup>1</sup>
RVA:010501401	CPS-24, 24VDC, EU cord	24V-S <sup>1</sup>
RVA:010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
RVA:010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
RVA:010502700	ICM-1, M/D, 12V-C	12V-C
RVA:010502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C <sup>2</sup>
RVA:010502702	SCM-1, 1 Channel M/D Strobe Cntrl.	24V-S
RVA:010901900	SCM-2, 2 Channel Strobe Cntrl.	24V-S
RVA:010503500	VPS-II, 2 Ch. Variable PS, US Cord	12V-C
RVA:010503501	VPS-II, 2 Ch. Variable PS, EU Cord	12V-C
RVA:030003702	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C & 24V-C <sup>2</sup>
RVA:030003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C <sup>2</sup>
RVA:030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C <sup>2</sup>
RVA:030007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
RVA:030007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S
RVA:030006900	Y cable, 9 pin D-sub Strobe	24V-S

<sup>1</sup> RVA:01050140x used only with RVA:010901900;

RVA:01050260x used with either RVA:010502702 or 24V-C lights with DB-9 connectors

<sup>2</sup> 24V-C accessories are not available for "Flying Leads" configurations

### Cables/Connectors:

	Connector	Length	Pin#	1	2	3	4	5	6	7	8	9
12V-C Models	9 pin D-sub Male	1.8 M (6 ft.)		n/a	n/a	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-S Models	9 pin D-sub Male	1.8 M (6 ft.)		V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a
24V-C Models <sup>1</sup>	9 pin D-sub Male <sup>1</sup>	1.8 M (6 ft.) <sup>1</sup>		n/a	n/a	n/a	n/a	n/a	n/a	+24VDC	n/a	GND

<sup>1</sup> Note: 24V-C Models w/"Flying Leads" have a 4.5 M (15 ft.) cable with two (2) tinned leads and no connector; leads are labeled GND and V+ (+24VDC)

## NERLITE® AR-50x200-HO

The **AR-50x200-HO Series** of high output area arrays provide bright, non-diffuse illumination in a rectangular array. Model RVA:010652501 utilizes an array of infrared (IR) LEDs configured with one red LED, providing a visible indication of light status.

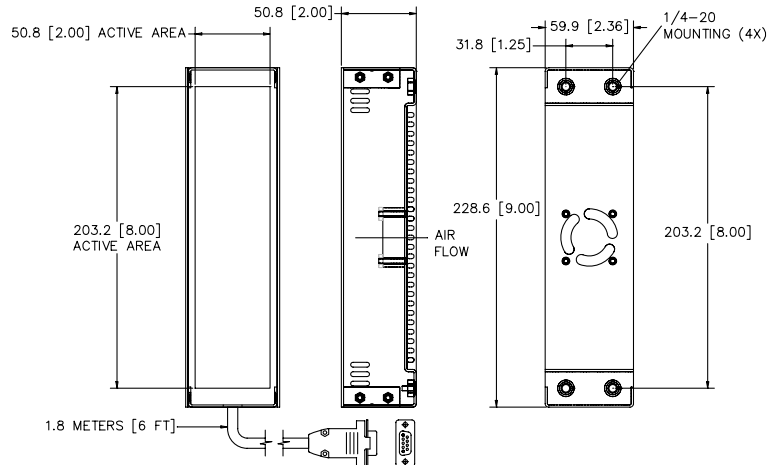


Model #	Description
RVA:010650003	AR-50x200-HO, R LED-ND, 12V-C
RVA:010650004	AR-50x200-HO, R LED-ND, 24V-S
RVA:010650005	AR-50x200-HO, R LED-ND, 24V-C
RVA:010650006	AR-50x200-HO, B LED-ND, 12V-C
RVA:010650011	AR-50x200-HO, B LED-ND, 24V-S
RVA:010650012	AR-50x200-HO, W LED-ND, 24V-C
RVA:010650013	AR-50x200-HO, W LED-ND, 24V-S
RVA:010652500	AR-50x200-HO, I LED-ND, 24V-S
RVA:010652501	AR-50x200-HO, I LED-ND, 24V-S, 1 Red LED
RVA:010652503	AR-50x200-HO, I LED-ND, 12V-C

Description Key Example

AR-00x00,RLED-D,12V-C

Family Designation	Array Size (mm - approx.)	Color: R-Red W-White B-Blue G-Green I-Infrared U-Ultraviolet	Delivery: D-Diffused ND- Non-Diffused F-Focused	Source: FO-Fiber Optic FL-Fluorescent LED- Light Emitting Diode	Voltage (DC): C-Continuous S-Strobe CC-Current Control
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### ILLUMINATION & ELECTRICAL:

**Lighting Technique:** Area Array  
**Active Area:** 51mm x 203 mm (2 in. x 8 in.)  
**Light Characteristics:**

Source	Color (nm)	Exp. Life	Voltage/Current (max.)		
			12V-C	24V-C	24V-S
LED	Red (636)	60k hrs.	1.6 A	0.8 A	8.8 A pk.
LED	Blue (470)	10k hrs.	1.86 A	n/a	17.6 A pk.
LED	Infrared (940)	50k hrs.	1.5 A	n/a	17.0 A pk.
LED	White – 6500 Kelvin	10k hrs.	n/a	0.9 A	17.6 A pk.

**CE Conformity:** Yes

### MECHANICAL:

**L x W x H (mm/in.):** 228.6 mm x 59.9 mm x 50.8 mm (9.00 in. x 2.36 in. x 2.00 in.)  
**Mounting:** (4) 1/4-20 on bottom of unit  
**Housing Material:** Black Anodized Aluminum  
**Weight:** 567 grams (1.25 lbs.)

### ENVIRONMENTAL:

**Max. Operating Humidity:** 95% non-condensing  
**Operating Temp.** 40°C (104°F)  
**Storage Temp.** 50°C (122°F)

### Accessories:

Part #	Description	Models Used On
RVA:010901900	SCM-2, 2 Channel Strobe Cntrl.	24V-S
RVA:010501402	CPS-24, 24VDC, US cord	24V-S <sup>1</sup>
RVA:010501401	CPS-24, 24VDC, EU cord	24V-S <sup>1</sup>
RVA:010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S <sup>1</sup>
RVA:010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S <sup>1</sup>
RVA:010500301	CPS-12 3.5A, 12VDC, US Cord	12V-C
RVA:010500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C
RVA:010502700	ICM-1, M/D Intensity Cntrl, 12V-C	12V-C
RVA:010502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C
RVA:010502702	SCM-1, 1 Channel M/D Strobe Cntrl.	24V-S
RVA:010503500	VPS-II, 2 Ch. Variable PS, US Cord	12V-C
RVA:010503501	VPS-II, 2 Ch. Variable PS, EU Cord	12V-C
RVA:010003702	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C & 24V-C
RVA:010003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C
RVA:010007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
RVA:010007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S

<sup>1</sup> RVA:01050140x used only with RVA:010901900;

RVA:01050260x used with either RVA:010502702 or 24V-C lights with DB-9 connectors

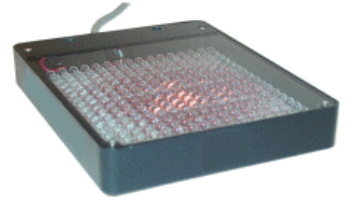
### CABLES/CONNECTORS:

	Connector	Length	Pin#	1	2	3	4	5	6	7	8	9
<b>12V-C Models</b>	9 pin D-sub Male	1.8 M (6 ft.)		+12VDC (Fan)	GND (Fan)	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
<b>24V-C Models</b>	9 pin D-sub Male	2.0 M (6.6 ft.)		+24VDC (Fan)	GND (Fan)	n/a	n/a	n/a	+24VDC	n/a	GND	n/a
<b>24V-S Models</b>	9 pin D-sub Male	1.8 M (6 ft.)		V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a

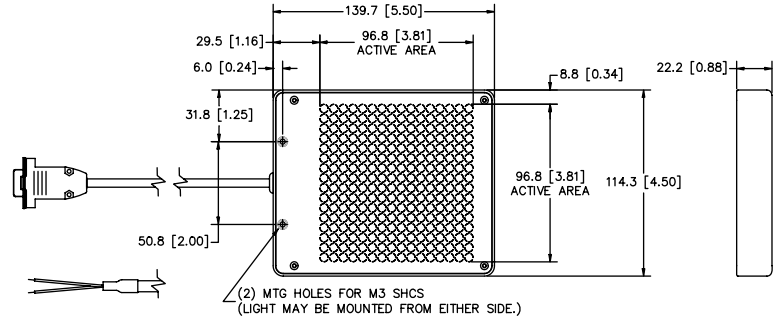


## NERLITE® AR-100 Series Area Array Illuminators

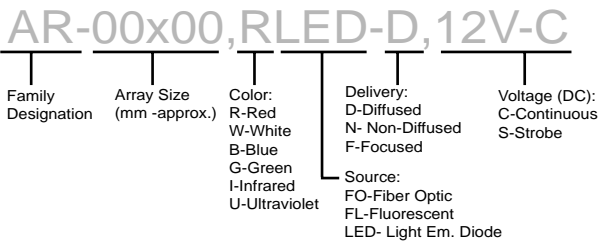
AR-100 Series Area Array Illuminators are designed for non-specular surface lighting in applications that demand economical solutions. All AR-100 Series modules employ non-diffused, square arrays of LEDs measuring approximately 100 mm per side, providing high output (HO) light from a specific direction onto the field of view. Using a new approach in thermal management technology for LED illumination, the AR-100 Series is able to support large LED arrays operating at temperature levels that guarantee long life. AR-100 Series modules may be used as dark-field (creating shadows and specular reflection) or as bright-field for diffused surfaces.



Model #	Description
RVA:010652201	AR-100X100-HO, R LED-ND, 12V-C
RVA:010904101	AR-100X100-HO, R LED-ND, 24V-C w/9 pin D-sub
RVA:010652226	AR-100X100-HO, R LED-ND, 24V-S
RVA:010652203	AR-100X100-HO, W LED-ND, 12V-C
RVA:010904201	AR-100X100-HO, W LED-ND, 24V-C w/9 pin D-sub
RVA:010652228	AR-100X100-HO, W LED-ND, 24V-S
RVA:010652205	AR-100X100-HO, B LED-ND, 12V-C
RVA:010904301	AR-100X100-HO, B LED-ND, 24V-C w/9 pin D-sub
RVA:010652230	AR-100X100-HO, B LED-ND, 24V-S
RVA:010904401	AR-100X100-HO, I LED-ND, 12V-C, 940nm
RVA:010904403	AR-100X100-HO, I LED-ND, 24V-C w/9 pin D-sub, 940nm
RVA:010652231	AR-100X100-HO, I LED-ND, 24V-C w/"Flying Leads", 940nm
RVA:010904405	AR-100X100-HO, I LED-ND, 24V-S, 940nm
RVA:010904406	AR-100X100-HO, I LED-ND, 24V-S, 880nm
RVA:010904408	AR-100X100-HO, I LED-ND, 24V-C w/9 pin D-sub, 800nm



### Description Key Example



### Mechanical:

**L x W x H (mm/in.):**

139.7 mm x 114.3 mm x 22.2 mm  
(5.5 in. x 4.5 in. x 0.88 in.)

### Mounting:

**Housing Material:**

(2) M3 SHCS holes  
Black Anodized Aluminum

**Weight:**

567 grams (20 oz.)

### Environmental:

**Max. Operating Humidity**

95% non-condensing

**Operating Temp.**

40°C (104°F)

**Storage Temp.**

50°C (122°F)

### Illumination & Electrical:

**Lighting Technique:**

Dark-field or Bright-field

**Light Output Area:**

96.8 mm x 96.8 mm  
(3.81 in. x 3.81 in.)

### Light Characteristics:

Source	Color (nm)	Exp. Life	Voltage/Current (max.)		
			12V-C	24V-C	24V-S
LED	Red (636)	60k hrs.	640 mA	320 mA	13.0 A pk.
LED	White - 6500 Kelvin	10k hrs.	0.9 A	420 mA	17.2 A pk.
LED	Blue (470)	10k hrs.	0.9 A	420 mA	17.2 A pk.
LED	IR (800)	50k hrs.	n/a	440 mA	n/a
LED	IR (880)	50k hrs.	n/a	n/a	6.8 A pk.
LED	IR (940)	50k hrs.	640 mA	304 mA	7.7 A pk.

**CE Conformity:**

Yes

### Accessories:

Part #	Description	Models Used On
RVA:010500301	CPS-12 3.5A, 12VDC, US Cord	12V-C
RVA:010500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C
RVA:010501402	CPS-24, 24VDC, US cord	24V-S <sup>1</sup>
RVA:010501401	CPS-24, 24VDC, EU cord	24V-S <sup>1</sup>
RVA:010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
RVA:010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
RVA:010502700	ICM-1, M/D Intensity Cntrl, 12V-C	12V-C
RVA:010502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C <sup>2</sup>
RVA:010502702	SCM-1, 1 Channel M/D Strobe Cntrl.	24V-S
RVA:010901900	SCM-2, 2 Channel Strobe Cntrl.	24V-S
RVA:010503500	VPS-II, 2 Ch. Variable PS, US Cord	12V-C
RVA:010503501	VPS-II, 2 Ch. Variable PS, EU Cord	12V-C
RVA:030003702	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C & 24V-C <sup>2</sup>
RVA:030003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C <sup>2</sup>
RVA:030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C <sup>2</sup>
RVA:030007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
RVA:030007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S
RVA:030006900	Y cable, 2 Lights, 9 pin D-sub Strb.	24V-S

<sup>1</sup> RVA:01050140x used only with RVA:010901900;

RVA:01050260x used with either RVA:010502702 or 24V-C lights with DB-9 connectors

<sup>2</sup> 24V-C accessories are not available for "Flying Leads" configurations

### Cables/Connectors:

Connector	Length	Pin#	1	2	3	4	5	6	7	8	9
<b>12V-C Models</b>	9 pin D-sub Male	1.8 M (6 ft.)	n/a	n/a	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
<b>24V-S Models</b>	9 pin D-sub Male	1.8 M (6 ft.)	V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a
<b>24V-C Models<sup>1</sup></b>	9 pin D-sub Male <sup>1</sup>	1.8 M (6 ft.) <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	+24VDC	n/a	GND

<sup>1</sup> Note: 24V-C Models w/"Flying Leads" have a 4.5 M (15 ft.) cable with two (2) tinned leads and no connector; leads are labeled GND and V+ (+24VDC)