

## NERLITE® LA-50-1, LA-100-1 & LA-150-1 Linear Illuminators

LA Series Linear Illuminators provide a high intensity "light line" generated from a single row of LEDs. Available in 50, 100 and 150 mm lengths, LA Series modules can be combined to create a linear projection of light of virtually any length.



### Model#Description

RVA:0106541	□ □	LA-50-1, R LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		0 = 12V-C, 1 = 24V-C, 2 = 24V-S
RVA:0106541	□ □	LA-50-1, W LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		3 = 12V-C, 4 = 24V-C, 5 = 24V-S
RVA:0106543	□ □	LA-100-1, R LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		0 = 12V-C, 1 = 24V-C, 2 = 24V-S
RVA:0106543	□ □	LA-100-1, W LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		3 = 12V-C, 4 = 24V-C, 5 = 24V-S
RVA:0106545	□ □	LA-150-1, R LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		0 = 12V-C, 1 = 24V-C, 2 = 24V-S
RVA:0106545	□ □	LA-150-1, W LED
		0 = ND, 1 = D, 2 = LW.2"@.5", 4 = LW.25"@.5"
		3 = 12V-C, 4 = 24V-C, 5 = 24V-S

### Mechanical:

	LA-50-1	LA-100-1	LA-150-1
<b>L x W x H (mm/in.):</b>	56.1 x 15.2 x 19.1 / 2.21 x 0.60 x 0.75	106.9 x 15.2 x 19.1 / 4.21 x 0.60 x 0.75	157.7 x 15.2 x 19.1 / 6.21 x 0.60 x 0.75
<b>Weight:</b>	78 grams (2.6 oz.)	105 grams (3.7 oz.)	136 grams (4.8 oz.)
<b>Mounting:</b>	← (2) M3 x .19" deep →		
<b>Housing Material:</b>	← Black Anodized Aluminum →		

### Environmental:

<b>Max. Operating Humidity</b>	95% non-condensing
<b>Operating Temp.</b>	40 °C (104 °F)
<b>Storage Temp.</b>	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</sup>
RVA:010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S <sup>1</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
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
RVA:030003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C
RVA:030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C
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

### Description Key Example



### Illumination & Electrical:

#### Lighting Technique:

Linear; Dark-field or Bright-field

#### Illuminated Area (mm/in.):

LA-50-1	LA-100-1	LA-150-1
51.0 x 8.9 / 2.01 x 0.35	101.8 x 8.9 / 4.01 x 0.35	152.6 x 8.9 / 6.01 x 0.35

#### Stand-Off<sup>1</sup>:

12.7 mm (0.5 in.)

#### Light Characteristics :

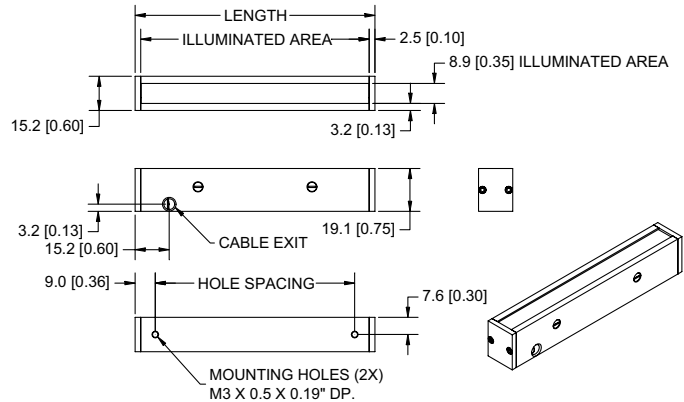
Voltage/Current (mA) ; max. cont., peak stroke)

Source	Color (nm)	Exp. Life	Model: LA-								
			12V-C			24V-C			24V-S		
			50	100	150	50	100	150	50	100	150
LED	Red (660)	50k hrs.	42	84	126	23	46	69	400	800	1200
LED	White - 6500 Kelvin	10k hrs.	80	160	240	40	80	120	800	1600	2400

### CE Conformity:

Yes

<sup>1</sup>Suggested; diffused & non-diffused models; see model # descriptions above for focused unit line widths (LW) @ 0.5 " standoff.



TABULATION	LENGTH	ILLUMINATED AREA	HOLES SPACING
RVA:0106541XX	2.21	2.01	1.50
RVA:0106543XX	4.21	4.01	3.50
RVA:0106545XX	6.21	6.01	5.50

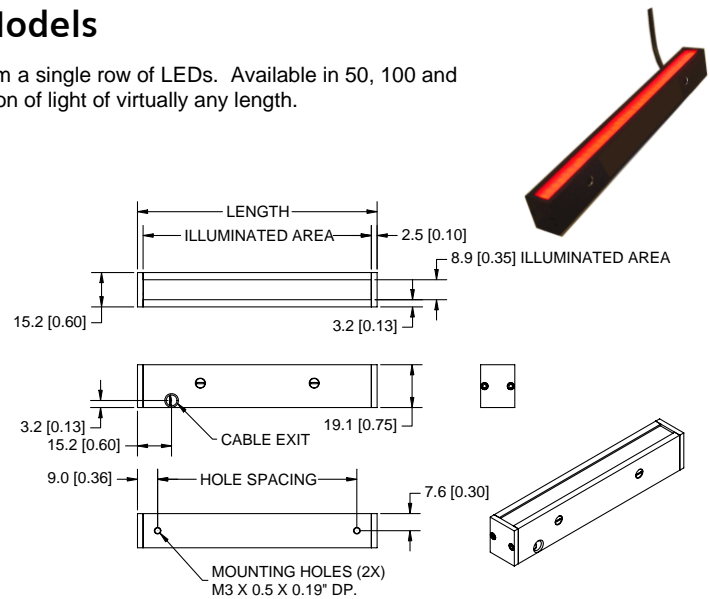
### Cables/Connectors:

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

## NERLITE® LA-Series Linear Array Custom Models

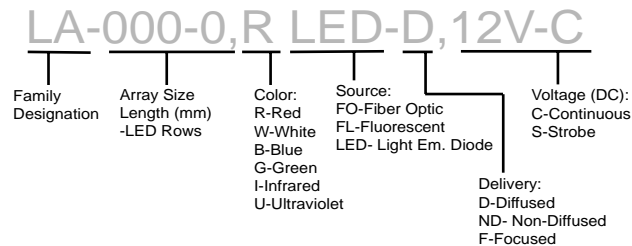
LA Series Linear Illuminators provide a high intensity "light line" generated from a single row of LEDs. Available in 50, 100 and 150 mm lengths, LA Series modules can be combined to create a linear projection of light of virtually any length.

Model #	Description
RVA:010654160	LA-50-1, B LED-ND, 12V-C
RVA:010654191	LA-50-1, G LED-F, 12V-C, LW=.2@.5
RVA:010654190	LA-50-1, I LED-ND, 12V-C, 880nm
RVA:010654194	LA-50-1, I LED-ND, 24V-C, 940nm
RVA:010654192	LA-50-1, I LED-F, 12V-C, LW=.2@.5, 880 nm
RVA:010654193	LA-50-1, I LED-F, 12V-C, LW=.25@.5, 940 nm
RVA:010654195	LA-50-1, R LED-ND, 24V-C w/ "Flying Leads"
RVA:010654113	LA-50-1, R LED-D, 24V-C w/ "Flying Leads"
RVA:010654197	LA-50-1, W LED-D, 24V-C w/ "Flying Leads"
RVA:010654198	LA-50-1, W LED-ND, 24V-C w/ "Flying Leads"
RVA:010654360	LA-100-1, B LED-ND, 12V-C
RVA:010654361	LA-100-1, B LED-D, 12V-C
RVA:010654386	LA-100-1, B LED-D, 24V-S w/"Flying Leads"
RVA:010654381	LA-100-1, B LED-D, 24V-S
RVA:010654380	LA-100-1, B LED-ND, 24V-S
RVA:010654392	LA-100-1, B LED-ND, 24V-C w/ "Flying Leads"
RVA:010654390	LA-100-1, I LED-D, 24V-C, 940nm
RVA:010654397	LA-100-1, I LED-D, 24V-S, 880nm
RVA:010654394	LA-100-1, I LED-D, 24V-C w/ "Flying Leads", 940nm
RVA:010654391	LA-100-1, R LED-D, 24V-C w/ "Flying Leads"
RVA:010654395	LA-100-1, R LED-ND, 24V-C w/ "Flying Leads"
RVA:010654393	LA-100-1, W LED-D, 24V-C w/ "Flying Leads"
RVA:010654590	LA-150-1, I LED-D, 24V-C, 940nm
RVA:010654592	LA-150-1, I LED-D, 24V-C, 880nm
RVA:010654593	LA-150-1, R LED-ND, 24V-C w/ "Flying Leads"
RVA:010654594	LA-150-1, G LED-ND, 24V-C



TABULATION	LENGTH	ILLUMINATED AREA	HOLES SPACING
RVA:0106541XX	2.21	2.01	1.50
RVA:0106543XX	4.21	4.01	3.50
RVA:0106545XX	6.21	6.01	5.50

### Description Key Example



### Mechanical:

	LA-50-1	LA-100-1	LA-150-1
L x W x H (mm/in.):	56.1 x 15.2 x 19.1 / 2.21 x 0.60 x 0.75	106.9 x 15.2 x 19.1 / 4.21 x 0.60 x 0.75	157.7 x 15.2 x 19.1 / 6.21 x 0.60 x 0.75
Weight:	78 grams (2.6 oz.)	105 grams (3.7 oz.)	136 grams (4.8 oz.)
Mounting:	(2) M3 x .19" deep		
Housing Material:	Black Anodized Aluminum		

### Environmental:

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

### Illumination & Electrical:

Lighting Technique:

Linear; Dark-field or Bright-field

Illuminated Area (mm/in.):

LA-50-1	LA-100-1	LA-150-1
51.0 x 8.9 / 2.01 x 0.35	101.8 x 8.9 / 4.01 x 0.35	152.6 x 8.9 / 6.01 x 0.35

Stand-Off <sup>1</sup>:

12.7 mm (0.5 in.)

Light Characteristics:

Voltage/Current (mA ; max. cont., peak strobe)

Source	Color (nm)	Exp. Life	12V-C			24V-C			24V-S		
			50	100	150	50	100	150	50	100	150
LED	Red (660)	50k hrs.	*	*	*	23	46	69	*	*	*
LED	White – 6500 Kelvin	10k hrs.	*	*	*	40	80	*	*	*	*
LED	IR (880)	50k hrs.	100	*	*	*	*	57	*	800	*
LED	IR (940)	50k hrs.	42	*	*	20	40	60	*	*	*
LED	Blue (470)	10k hrs.	80	160	*	*	80	*	*	1600	*
LED	Green (533)	10k hrs.	80	*	*	*	*	120	*	*	*

CE Conformity:

Yes

<sup>1</sup> Suggested; diffused & non-diffused models; see model # descriptions above for focused unit line widths (LW) @ 0.5" standoff.

### Accessories:

Part #	Description	Models Used On
RVA:010901900	SCM-2 Channel Strobe Control	24V-S <sup>2</sup>
RVA:010502702	SCM-1 Channel M/D Strobe Control	24V-S <sup>2</sup>
RVA:010501402	CPS-24, 24VDC, US Cord	24V-S <sup>1,2</sup>
RVA:010501401	CPS-24, 24VDC, EU Cord	24V-S <sup>1,2</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: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 <sup>2</sup>
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:030007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S <sup>2</sup>
RVA:030007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S <sup>2</sup>
RVA:030006900	Y cable, 2 Lights, 9 pin D-sub Strb.	24V-S <sup>2</sup>
RVA:030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C <sup>2</sup>

<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 and 24V-S 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	2.0 M (6.6 ft.)	n/a	n/a	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-S Models <sup>1</sup>	9 pin D-sub Male <sup>1</sup>	2.0 M (6.6 ft.) <sup>1</sup>	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>	2.0 M (6.6 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 and 24V-S Models w/"Flying Leads" have a cable with two (2) tinned leads and no connector; leads are labeled GND and V+ (+24VDC); model #RVA:010654392 cable length is 9.0 M (30 ft.), all others are 4.5 M (15 ft.).

## NERLITE® LA-50-1, LA-100-1 & LA-150-1 Evaluation Accessories Kits

LA-50-1, LA-100-1 & LA-150-1 Evaluation Accessories Kits provide a diffused lens, two fresnel (focusing) lenses (0.25 in. and 0.5" focal lengths) and a hex key tool to support quick and easy lens changes for product demonstration/evaluation purposes.



Model #	Description
RVA:010907003	KIT, LA-50-1 EVAL ACCESSORIES
RVA:010907004	KIT, LA-100-1 EVAL ACCESSORIES
RVA:010907005	KIT, LA-150-1 EVAL ACCESSORIES

### Mechanical:

#### Lenses:

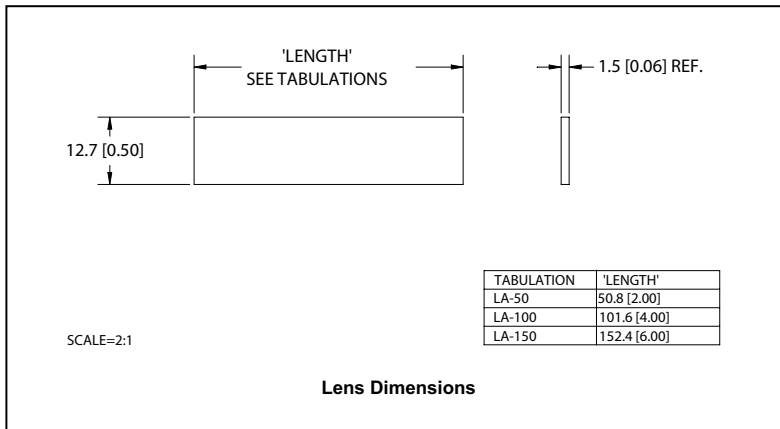
<b>Length:</b>	<b>LA-50-1:</b>	50.8 mm (2.00 in.)
	<b>LA-100-1:</b>	101.6 mm (4.00 in.)
	<b>LA-150-1:</b>	152.4 mm (6.00 in.)
<b>Width x Height:</b>	<b>All Models:</b>	12.7 mm x 1.5 mm (0.50 in. x 0.06 in.)
<b>Mounting:</b>		Channel
<b>Material:</b>		Plastic

#### Tool:

**Size:** M1.6

**Weight (max)<sup>1</sup>:** 35.4 grams (1.25 oz.)

<sup>1</sup> Weight of heaviest kit (LA-150-1); includes tool & three lenses



### NERLITE LA-50-1, LA-100-1 & LA-150-1 Lens Interchange Procedure

1. Position the light (LA-50-1, LA-100-1 or LA-150-1) with lens up on a clean work surface.
2. Using the supplied hex key, remove two (2) socket head cap screws (M1.6 x 3) from either of the housing's end caps and remove end cap.
3. Slide lens out of housing. Note: Lens secured with silicone from factory and may not slide out easily. If necessary, remove second end cap from housing to allow simultaneous push & pull for lens removal.
4. Slide any lens from the evaluation accessories kit into the housing, handling lens by edges only to avoid contamination. Note: Fresnel lenses are directional. Install Fresnel lenses with grooved surface facing LEDs.
5. Replace housing end cap(s) with two (2) socket head cap screws (M1.6 x 3) and tighten screws with hex key.