

# MICROSCAN®

## NERLITE® SCDI®-50 "V2"

SCDI®-50 "V2" Square Continuous Difuse Illuminators provide continuous diffuse illumination in the same optical path as the camera. "V2" (Version 2) SCDI's are available in both continuous and strobe configurations, provide enhanced light intensity, are passively-cooled (no fans) and suitable for clean room environments. Their patented design addresses applications involving undulating and highly specular surfaces by minimizing surface textures and elevation changes while providing uniform illumination over the field of view.

Model #	Description
NER-010304000	SCDI®-50 V2, R LED-D, 12V-C, 6' (2M) Cbl w/DB9
NER-010304002	SCDI®-50 V2, R LED-D, 24V-S, 6' (2M) Cbl w/DB9
NER-010304001	SCDI®-50 V2, R LED-D, 24V-C, 6' (2M) Cbl w/DB9
NER-010304004	SCDI®-50 V2, R LED-D, 24V-C, 15' (4.5M) Cbl w/Flying Leads
NER-010304010	SCDI®-50 V2, W LED-D, 12V-C, 6' (2M) Cbl w/DB9
NER-010304012	SCDI®-50 V2, W LED-D, 24V-S, 6' (2M) Cbl w/DB9
NER-010304011	SCDI®-50 V2, W LED-D, 24V-C, 6' (2M) Cbl w/DB9
NER-010304014	SCDI®-50 V2, W LED-D, 24V-C, 15' (4.5M) Cbl w/Flying Leads
NER-010304020	SCDI®-50 V2, B LED-D, 12V-C, 6' (2M) Cbl w/DB9
NER-010304031	SCDI®-50 V2, G LED-D, 24V-C, 6' (2M) Cbl w/DB9
NER-010304033	SCDI®-50 V2, G LED-D, 24V-C, 15' (4.5M) Cbl w/Flying Leads
NER-010304032	SCDI®-50 V2, G LED-D, 24V-S, 6' (2M) Cbl w/DB9
NER-010304090	SCDI®-50 V2, I LED-D, 12V-C, 6' (2M) Cbl w/DB9
NER-010304091	SCDI®-50 V2, I LED-D, 24V-S, 6' (2M) Cbl w/DB9

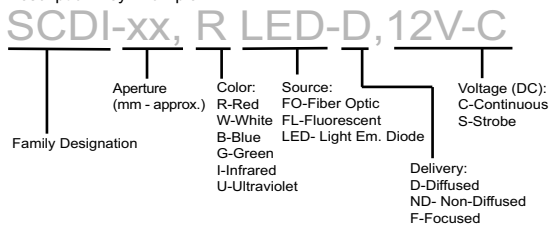


**Environmental:**  
**Max. Operating Humidity** 95% non-condensing  
**Operating Temp.** 40°C (104°F)  
**Storage Temp.** 50°C (122°F)

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

<sup>1</sup> NER-01050140x used only with NER-010901900;  
 NER-01050260x used with either NER-010502702 or 24V-C lights with DB-9 connectors  
<sup>2</sup> 24V-C accessories are not available for "Flying Leads" configurations

### Description Key Example



### Illumination & Electrical:

**Lighting Technique:** Square Continuous Diffuse  
**Light Aperture:** 51.6 mm x 39.6 mm (2.02 in. x 1.56 in.)  
**Field Of View x Stand-Off<sup>1</sup>:** 25.4 mm (1.0 in.) x 12.7 mm (0.5 in.)

### Light Characteristics:

Source	Color (nm)	Exp. Life	Voltage/Current (max.) <sup>3</sup>		
			12V-C	24V-C	24V-S <sup>2,3</sup>
LED	Red (630)	60k hrs.	400mA	200mA	4 A pk.
LED	White – 6500 Kelvin	10k hrs.	400mA	200mA	4 A pk.
LED	Blue (470)	10k hrs.	400mA	n/a	n/a
LED	Green (533)	10k hrs.	n/a	200mA	3.9 A pk.
LED	IR (880)	50k hrs.	240mA	n/a	2.1 A pk.

<sup>1</sup> Suggested

<sup>2</sup> Maximum pulse width = 1ms, maximum frequency = 60Hz

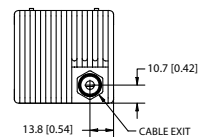
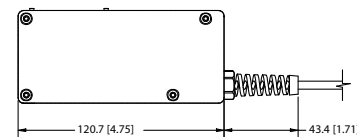
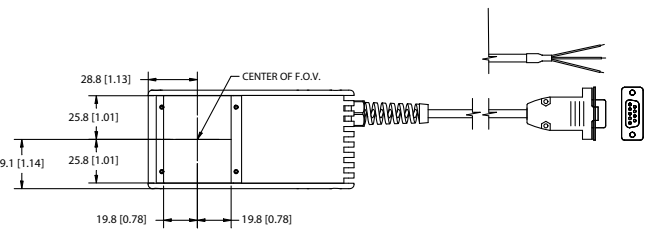
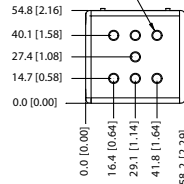
<sup>3</sup> Exceeding max. current, pulse width or frequency voids product warranty.

**CE Conformity:** Yes

### Mechanical:

**L x W x H (mm/in.):** 120.7 mm x 58.2 mm x 54.8 mm (4.75 in. x 2.29 in. x 2.16 in.)  
**Mounting:** (7) M6 x 1.0 x 9.5 (0.25 in.) DP  
**Housing Material:** Black Anodized Aluminum  
**Weight:** 408 grams (14.4 oz.)

MOUNTING HOLES  
 M6 X 1.0 X 0.25" DP, (7X)



### 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')	n/a	n/a	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-S Models	9 pin D-sub Male	2.0 M (6.6')	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') <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, a shield, and no connector; leads are labeled GND and V+ (+24VDC)

NERLITE SCDI-50-V2-Series 120908