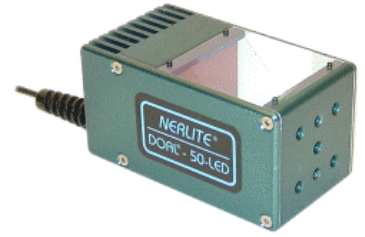


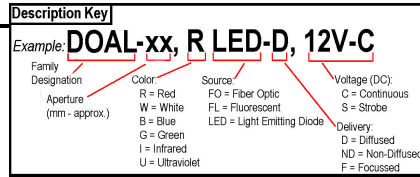
# NERLITE®

## DOAL®-50 "V2" Series LED Illuminators

**DOAL-50 "V2" Series LED Illuminators** provide diffuse illumination in the same optical axis as the camera. "V2" (Version 2) DOAL's provide up to twice the light intensity of their predecessors, are passively-cooled (no fans) and suitable for clean room environments. The DOAL is designed for applications that have flat specular surfaces requiring uniform lighting. With the DOAL, light rays reflect off the beam splitter directly on to the object at nearly 90°. This lighting technique helps bring out surface textures, elevation changes and translucent features.



MODEL #	DESCRIPTION
010-200810	DOAL-50 V2, R LED-D, 12V-C
010-200811	DOAL-50 V2, R LED-D, 24V-C w/DB9
010-200814	DOAL-50 V2, R LED-D, 24V-C w/"Flying Leads"
010-200812	DOAL-50 V2, R LED-D, 24V-S
010-200820	DOAL-50 V2, W LED-D, 12V-C
010-200821	DOAL-50 V2, W LED-D, 24V-C w/DB9
010-200824	DOAL-50 V2, W LED-D, 24V-C w/"Flying Leads"
010-200822	DOAL-50 V2, W LED-D, 24V-S
010-200830	DOAL-50 V2, B LED-D, 12V-C
010-200831	DOAL-50 V2, B LED-D, 24V-C w/DB9
010-200834	DOAL-50 V2, B LED-D, 24V-C w/"Flying Leads"
010-200832	DOAL-50 V2, B LED-D, 24V-S



### ILLUMINATION & ELECTRICAL:

**Lighting Technique:** Diffuse On-Axis  
**Light Aperture:** 50 mm x 49 mm (2 in. x 1.93 in.)  
**Field Of View x Stand-Off:** 25 mm x 25 mm (1 in. x 1 in.)

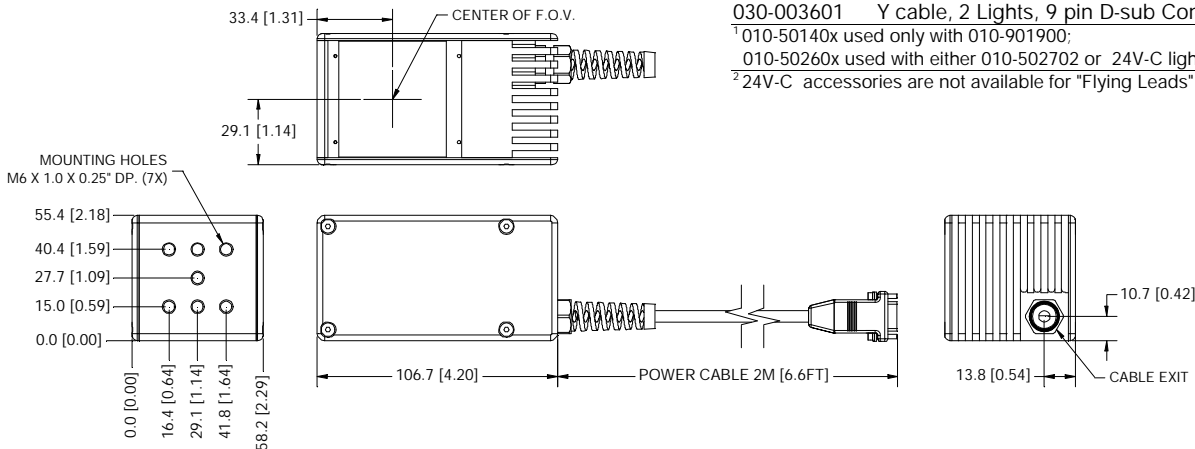
#### Light Characteristics:

Source	Color (nm)	Exp. Life	Voltage/Current (max.)		
			12V-C	24V-C	24V-S
LED	Red (630)	60k hrs.	400 mA	200 mA	4.0 A pk.
LED	White - 6500 Kelvin	10k hrs.	400 mA	200 mA	4.0 A pk.
LED	Blue (470)	10k hrs.	400 mA	200 mA	4.0 A pk.

**CE Conformity:** Yes

### MECHANICAL:

**L x W x H (mm/in.):** 106.7 mm x 58.2 mm x 55.4 mm (4.20 in. x 2.29 in. x 2.18 in.)  
**Mounting:** (7) M6 x 1.0 (0.25" deep)  
**Housing Material:** Blue Anodized Aluminum  
**Weight:** 388.4 grams (13.7 oz.)



### 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> <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 Models w/"Flying Leads" have a 4.5 M (15 ft.) cable with tinned leads and no connector; leads are labeled GND and V+ (+24VDC).

### 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
010-901900	SCM-2 Channel Strobe Control	24V-S
010-501402	CPS-24, 24VDC, US cord	24V-S <sup>1</sup>
010-501401	CPS-24, 24VDC, EU cord	24V-S <sup>1</sup>
010-502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
010-502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S <sup>1,2</sup>
010-500301	CPS-12 3.5A, 12VDC, US Cord	12V-C
010-500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C
010-502700	ICM-1, M/D Intensity Cntrl, 12V-C	12V-C
010-502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C <sup>2</sup>
010-502702	SCM-1 Channel M/D Strobe Control	24V-S
010-501200	VPS, Variable, US Cord	12V-C
010-501201	VPS-EU, Variable, EU Cord	12V-C
030-003700	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C
030-003701	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C
030-007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
030-007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S
030-006900	Y cable, 2 Lights, 9 pin D-sub Strb.	24V-S
030-003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C

<sup>1</sup>010-50140x used only with 010-901900;

<sup>2</sup>010-50260x used with either 010-502702 or 24V-C lights with DB-9 connectors

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



Products are protected under US Patent #s:  
 5,461,417; 5,187,611; 5,539,485; 5,301,402;  
 5,604,550; 5,684,530; 5,713,661

**All RVSI/NER Products come with an Industry-Leading 2-Year Warranty**