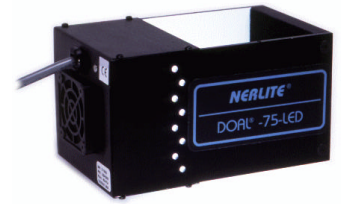


**DOAL-75-LED Series** provides diffuse illumination in the same optical path as the camera. The DOAL is designed for applications that have flat specular surfaces requiring uniform lighting. With the DOAL, light rays reflect off the beam splitter directly on to the object at nearly 90°. This lighting technique helps bring out surface textures, elevation changes and translucent features. DOAL-75-*plus* models feature an increased number of LEDs, densely packed for greater intensity as compared to standard DOAL-75s.



MODEL #	DESCRIPTION
010-200500	DOAL®-75, R LED-D, 12V-C
010-200502	DOAL®-75, R LED-D, 24V-C w/"Flying Leads"
010-200501	DOAL®-75, R LED-D, 24V-S
010-200503	DOAL®-75, I LED-D, 12V-C, 940nm
010-204900	DOAL®-75, W LED-D, 12V-C
010-204902	DOAL®-75, W LED-D, 24V-C w/"Flying Leads"
010-204904	DOAL®-75, W LED-D, 24V-C w/DB9
010-204901	DOAL®-75, W LED-D, 24V-S
010-204903	DOAL®-75, G LED-D, 24V-S
010-205700	DOAL®-75, B LED-D, 12V-C
010-205400	DOAL®-75- <i>plus</i> , R LED-D, 12V-C
010-205401	DOAL®-75- <i>plus</i> , R LED-D, 24V-S

**Description Key**

Example: **DOAL-xx, R LED-D, 12V-C**

- Family Designation: DOAL-xx
- Color: R = Red, W = White, B = Blue, G = Green, I = Infrared, U = Ultraviolet
- Source: FO = Fiber Optic, FL = Fluorescent, LED = Light Emitting Diode
- Voltage (DC): C = Continuous, S = Strobe
- Delivery: D = Diffused, ND = Non-Diffused, F = Focussed
- Aperture (mm - approx.): (not explicitly defined in key)

**ILLUMINATION & ELECTRICAL:**

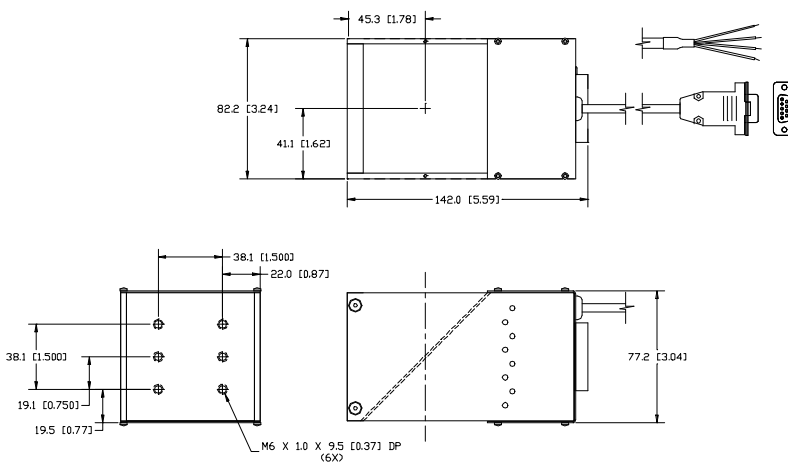
**Lighting Technique:** Diffuse On-Axis  
**Light Aperture:** 75 mm x 75 mm (3 in. x 3 in.)  
**Field Of View x Stand-Off:** 38 mm (1.5 in.) x 25 mm (1.0 in.)  
**Light Characteristics:**

Source	Color (nm)	Exp. Life	Voltage/Current (max.)		
			12V-C	24V-C	24V-S
LED	Red (636)	60k hrs.	1.1 A	280 mA	6.0 A pk.
LED	Red <i>plus</i> (660)	50k hrs.	1.0 A	n/a <sup>1</sup>	7.9 A pk.
LED	White - 6500 Kelvin	10k hrs.	1.1 A	520 mA	9.6 A pk.
LED	Blue (470)	10k hrs.	1.1 A	n/a <sup>1</sup>	n/a <sup>1</sup>
LED	Green (533)	50k hrs.	n/a <sup>1</sup>	n/a <sup>1</sup>	9.6 A pk.
LED	IR (940)	50k hrs.	540 mA	n/a <sup>1</sup>	n/a <sup>1</sup>

<sup>1</sup>No model available in stated voltage

**CE Conformity:**

Yes



**MECHANICAL:**

**L x W x H (mm/in.):** 142.0 mm x 82.2 mm x 77.2 mm (5.59 in. x 3.24 in. x 3.04 in.)  
**Mounting:** (6) M6  
**Housing Material:** Black Anodized Aluminum  
**Weight:** 454 grams (16 oz.)

**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, 2 Channel Strobe Cntrl.	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, 1 Channel M/D Strobe Cntrl.	24V-S
010-501200	VPS, Variable, US Cord	12V-C
010-501201	VPS-EU, Variable, EU Cord	12V-C
030-003702	Ext. Cable, Cont., 1.8 M (6 ft.)	12V-C & 24V-C
030-003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-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;

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

**CABLES/CONNECTORS:**

	Connector	Length	Pin#	1	2	3	4	5	6	7	8	9
<b>12V-C Models</b>	9 pin D-sub Male	0.5 M (18 in.)		+12VDC (Fan)	GND (Fan)	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	2.0 M (6.6 ft.) <sup>1</sup>		+24VDC (Fan)	GND (Fan)	n/a	n/a	n/a	+24VDC	n/a	GND	n/a

<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)



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**