

MICROSCAN®

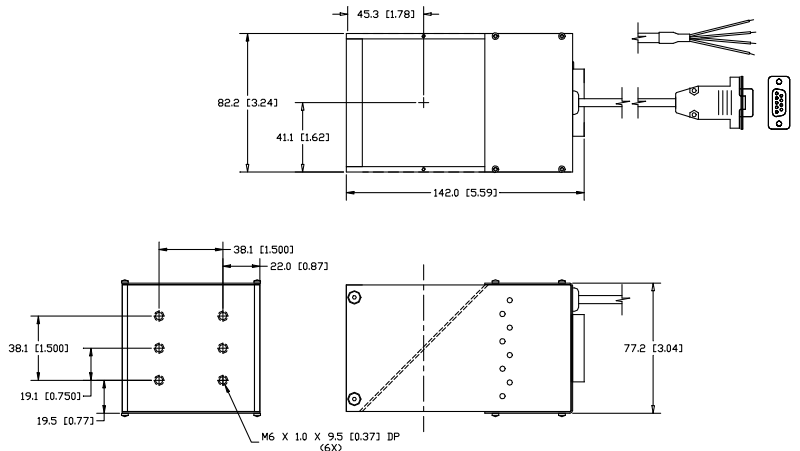
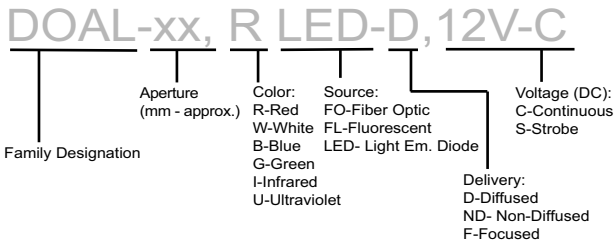
NERLITE® DOAL®-75 LED

The **DOAL-75-LED** 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 technique brings out surface textures, elevation changes and translucent features. DOAL-75-*plus* models feature an increased LED count for greater intensity.



Model #	Description
NER-010200500	DOAL®-75, R LED-D, 12V-C
NER-010200502	DOAL®-75, R LED-D, 24V-C w/"Flying Leads"
NER-010200501	DOAL®-75, R LED-D, 24V-S
NER-010200504	DOAL®-75, R LED-D, 24V-S w/"Flying Leads"
010-200503	DOAL®-75, I LED-D, 12V-C, 940nm
NER-010204900	DOAL®-75, W LED-D, 12V-C
NER-010204902	DOAL®-75, W LED-D, 24V-C w/"Flying Leads"
NER-010204904	DOAL®-75, W LED-D, 24V-C w/DB9
NER-010204901	DOAL®-75, W LED-D, 24V-S
NER-010204903	DOAL®-75, G LED-D, 24V-S
NER-010205700	DOAL®-75, B LED-D, 12V-C
NER-010205720	DOAL®-75, B LED-D, 24V-C, 6' (1.8M) Cbl. w/DB9
NER-010205400	DOAL®-75- <i>plus</i> , R LED-D, 12V-C
NER-010205401	DOAL®-75- <i>plus</i> , R LED-D, 24V-S
NER-010205402	DOAL®-75- <i>plus</i> , R LED-D, 24V-S w/"Flying Leads"

Description Key Example



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. 3.04 in.)

Mounting:

Housing Material:

Black Anodized Aluminum

Weight:

454 grams (16 oz.)

Illumination & Electrical:

Lighting Technique:	Diffuse On-Axis Light (DOAL®)
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 (1.0in.)
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	4.8 A pk.
LED	Red <i>plus</i> (660)	50k hrs.	1.0 A	n/a ¹	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	532 mA	n/a ¹
LED	Green (533)	50k hrs.	n/a ¹	n/a ¹	9.6 A pk.
LED	IR (940)	50k hrs.	540 mA	n/a ¹	n/a

¹No model available in stated voltage

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
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 ^{1,2}
NER-010501401	CPS-24, 24VDC, EU cord	24V-S ^{1,2}
NER-010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C & 24V-S ^{1,2}
NER-010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C & 24V-S ^{1,2}
NER-010502700	ICM-1, M/D Intensity Cntrl, 12V-C	12V-C
NER-010502701	ICM-1, M/D Intensity Cntrl, 24V-C	24V-C ²
NER-010502702	SCM-1, 1 Channel M/D Strobe Cntrl.	24V-S ²
NER-010901900	SCM-2, 2 Channel Strobe Cntrl.	24V-S ²
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 & 24V-C ²
NER-030003703	Ext. Cable, Cont., 3.0 M (10 ft.)	12V-C & 24V-C ²
NER-030003601	Y cable, 2 Lights, 9 pin D-sub Cont.	12V-C & 24V-C ²
NER-030007006	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S ²
NER-030007010	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S ²
NER-030006900	Y cable, 2 Lights, 9 pin D-sub Strb.	24V-S ²

¹NER-01050140x used only with NER-010901900;

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

²24V-C and 24V-S accessories are not compatible with "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	0.5 M (18 in.)		+12VDC (Fan)	GND (Fan)	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-S Models ¹	9 pin D-sub Male ¹	1.8 M (6 ft.) ¹		V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a
24V-C Models ¹	9 pin D-sub Male ¹	2.0 M (6.6 ft.) ¹		+24VDC (Fan)	GND (Fan)	n/a	n/a	n/a	+24VDC	n/a	GND	n/a

¹Note: 24V-S and 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) on 24V-S models and FAN GND, FAN V+ (+24VDC), GND, and V+ (+24VDC) on 24V-C models.