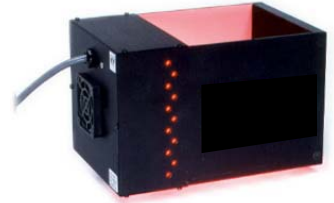


MICROSCAN®

NERLITE® DOAL®-100-LED

DOAL® -100-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



Model #	Description
NER-010200600	DOAL® -100, R LED-D, 12V-C
NER-010200601	DOAL® -100, R LED-D, 24V-S
NER-010200602	DOAL® -100, R LED-D, 24V-C w/"Flying Leads"
NER-0102006400	DOAL® -100, G LED-D, 12V-C, 0.9 M (3 ft.) cable
NER-010204601	DOAL® -100, W LED-D, 12V-C
NER-010204600	DOAL® -100, W LED-D, 24V-S, Y cable
010-207600	DOAL® -100, B LED-D, 12V-C
NER-010200603	DOAL® -100, I LED-D, 24V-C w/"Flying Leads"
NER-010200604	DOAL® -100, I LED-D, 24V-C w/DB9

Mechanical:

L x W x H (mm/in.): 168.5 mm x 108.0 mm x 103.7 mm
(6.64 in. x 4.25 in. x 4.08 in.)

Mounting:

Housing Material: Black Anodized Aluminum
Weight: 700 grams (1.9 lbs.)

Environmental:

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

Illumination & Electrical:

Lighting Technique: Diffuse On-Axis Light (DOAL®)

Light Aperture: 100 mm x 100 mm (4 in. x 4 in.)

Field Of View x Stand-Off¹: 50 mm (2.0 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.	2.2 A	680 mA	13.0 A pk.
LED	White - 6500 Kelvin	10k hrs.	1.8 A	n/a ²	17.2 A pk.
LED	Blue (470)	10k hrs.	1.8 A	n/a ²	n/a ²
LED	Green (533)	10k hrs.	1.9 A	n/a ²	n/a ²
LED	Infrared (880)	50k hrs.	n/a ²	520 mA	n/a ²

¹ Suggested

² No model available in stated voltage

CE Conformity:

Yes

Accessories:

Part #	Description	Models Used On
NER-010901900	SCM-2 Channel Strobe Control	24V-S
NER-010501402	CPS-24, 24VDC, US cord	24V-S ¹
NER-010501401	CPS-24, 24VDC, EU cord	24V-S ¹
NER-010502601	CPS-24T, 24VDC US w/9-pin D-sub	24V-C ^{1,2}
NER-010502602	CPS-24T, 24VDC EU w/9-pin D-sub	24V-C ^{1,2}
NER-010500301	CPS-12 3.5A, 12VDC, US Cord	12V-C
NER-010500303	CPS-12 3.5A, 12VDC, EU Cord	12V-C
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-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 ³	Ext. Cable, Strobe, 1.8 M (6 ft.)	24V-S
NER-030007010 ³	Ext. Cable, Strobe, 3.0 M (10 ft.)	24V-S

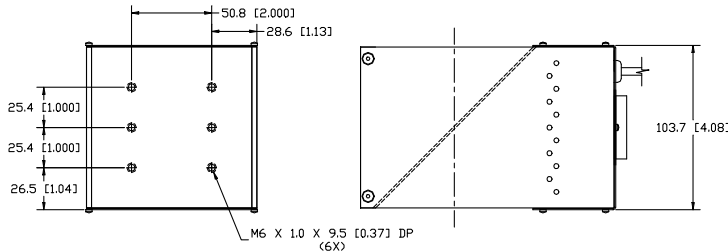
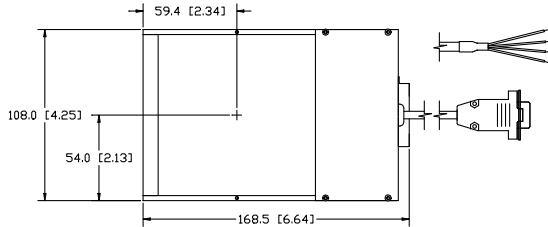
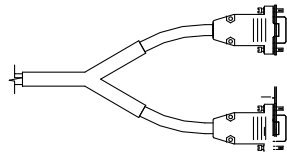
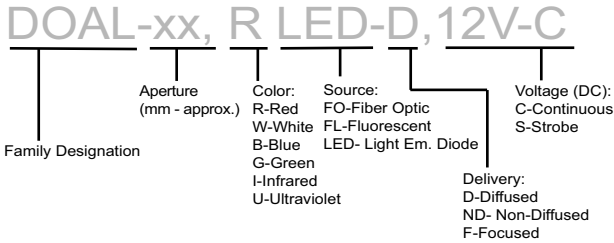
¹ NER-01050140x used only with NER-010901900;

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

² 24V-C accessories are not available for "Flying Leads" configurations

³ When used w/model # NER-010204600, two extension cables are required

Description Key Example



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.) ¹	+12VDC (Fan)	GND (Fan)	GND	+12VDC	n/a	n/a	n/a	n/a	n/a
24V-S Models	9 pin D-sub Male ²	1.8 M (6 ft.) ²	V-	n/a	n/a	+24VDC	n/a	n/a	n/a	n/a	n/a
24V-C Models³	9 pin D-sub Male ³	2.0 M (6.6 ft.) ³	+24VDC (Fan)	GND (Fan)	n/a	n/a	n/a	+24VDC	n/a	GND	n/a

¹ Note: 0.9 M (3 ft.) cable on model number NER-010206400.

² Note: Y cable w/2 9 pin D-sub Male connectors on model number NER-010204600. Cable length from light housing to Y junction = 1.5 M (5 ft.); from Y junction to 9 pin D-sub = 0.3 M (1 ft.).

³ Note: 24V-C Models w/"Flying Leads" have a 4.5 M (15 ft.) cable with four (4) tinned leads and no connector; leads are labeled GND, V+ (+24VDC), FAN GND and FAN V+ (+24VDC).