

Oblique Angled Lights for Line Sensor

LNIS2 Series

Renewed version of the LNIS Series.
Expand into wider applications
with increased brightness.

Brightness up to **1.5^{*}x**
That of Conventional Products

* Current as of CCS's in-house measurement conditions in May 2017. The data included is for reference only. Actual values may vary. The illuminance distribution, recommended illumination range and spectral distribution are the same as those of the conventional LNIS Series.



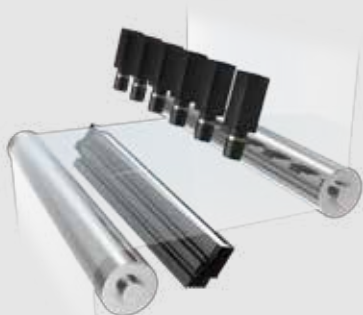
- ❑ Achieves bi-directional angled illumination using an original optical design
- ❑ Designed for detecting "moving-direction scratches," which were difficult to detect
- ❑ Fan-less (natural air-cooling) and compact case design
- ❑ Emitting surface up to 1,000 mm in 100 mm units

Applications

Streak inspection on sheet surface; scratch inspection on clear film, glass panels, and sheet metal; etc.

❑ Example Configuration

- Scratch inspection on clear film



❑ Best for Finding Moving-Direction Scratches Such as Streaks

- Imaging of vertical scratches (moving-direction scratches) on film



Emphasizes only the vertical scratch. Even if you increase the output, the background noise and brightness do not increase.

Product Lineup

Model name	Emitting surface	Power consumption (max.)	Extension cable	Recommended Control Unit	Weight (max.)
LNIS2-100SW	100 mm	18 W	FCB-EL2 (EL connector)	Analog Control Unit PSB3-30024 or Digital Control Unit PD3-10024-8	400 g
LNIS2-200SW	200 mm	35 W			700 g
LNIS2-300SW	300 mm	52 W			1,000 g
LNIS2-400SW	400 mm	69 W			1,300 g
LNIS2-500SW	500 mm	86 W			1,600 g
LNIS2-600SW	600 mm	103 W	FCB-ME7 (Metal connector)	Analog Control Unit PSB3-30024	1,900 g
LNIS2-700SW	700 mm	120 W			2,200 g
LNIS2-800SW	800 mm	138 W			2,500 g
LNIS2-900SW	900 mm	155 W			2,800 g
LNIS2-1000SW	1,000 mm	172 W			3,100 g

CCS accepts custom orders for such as LED colors other than white, sizes, and the position where the light cable comes out of the case. Please contact your CCS sales representative for details.

For detailed information on the Control Units, refer to CCS website or *General Catalog of LED Lighting for Machine Vision Applications*.

Analog Control Unit
PSB3-30024



Digital Control Unit
PD3-10024-8



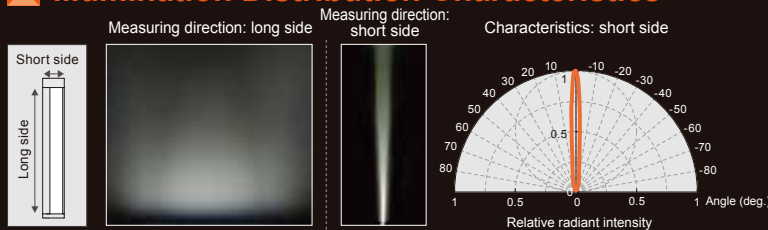
Custom products with a PWM frequency of 500 kHz are available for the Digital Control Unit PD3 series.

Specifications

LED color	White (SW)
Correlated color temp.	6,500 K (typ.)
Input voltage	24 VDC max.
Case material	Aluminum alloy, Resin
Cable length	300 mm
Operating environment	0 to 40°C, Humidity: 20 to 85%RH (with no condensation)
Storage environment	-20 to 60°C, Humidity: 20 to 85%RH (with no condensation)
CE marking	Safety standard: Conforms to EN62471
Environmental regulations	RoHS compliant
Cooling method	Natural air-cooling
Accessories	Instruction guide
Spectral distribution	

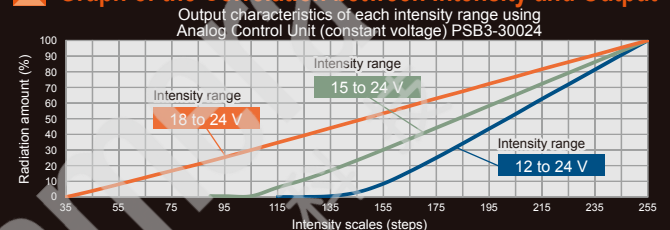
The data included is for reference only. Actual values may vary.

Illumination Distribution Characteristics



Actual measurement values when the LNIS2-400SW Light Unit is used. Results for individual products may vary.

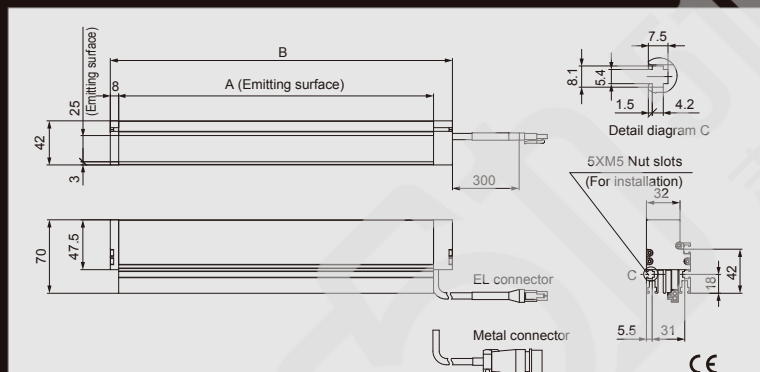
Graph of the Correlation between Intensity and Output



Actual measurement values when the Analog Control Unit PSB3-30024 is used. Results for individual products may vary.

Dimensions (mm)

LNIS2-□□□ SW



Model name	A: Emitting surface	B: Total length	Connector type
LNIS2-100SW	100 mm	126 mm	EL connector
LNIS2-200SW	200 mm	226 mm	
LNIS2-300SW	300 mm	326 mm	
LNIS2-400SW	400 mm	426 mm	
LNIS2-500SW	500 mm	526 mm	
LNIS2-600SW	600 mm	626 mm	Metal connector
LNIS2-700SW	700 mm	726 mm	
LNIS2-800SW	800 mm	826 mm	
LNIS2-900SW	900 mm	926 mm	
LNIS2-1000SW	1,000 mm	1,026 mm	

Extension Cables (Sold Separately)

FCB-EL2

Model name	Cable length	Weight	Recommended Control Unit
FCB-1-EL2	1 m	85 g	Analog Control Unit PSB3-30024 or Digital Control Unit PD3-10024-8
FCB-2-EL2	2 m	165 g	
FCB-3-EL2	3 m	245 g	
FCB-5-EL2	5 m	405 g	
FCB-10-EL2	10 m	805 g	
FCB-15-EL2	15 m	1,205 g	

Dimensions (mm)	FCB-n-EL2 (n=1, 2, 3, 5, 10, 15)
	n x 1,000
	Cable permitted bending radius: 29.6 mm

FCB-ME7

Model name	Cable length	Weight	Recommended Control Unit
FCB-2-1.25SQ-ME7	2 m	430 g	Analog Control Unit PSB3-30024
FCB-3-1.25SQ-ME7	3 m	580 g	
FCB-5-1.25SQ-ME7	5 m	1,000 g	
FCB-10-1.25SQ-ME7	10 m	2,000 g	
FCB-20-2.0SQ-ME7	20 m	5,000 g	

Dimensions (mm)	FCB-n-1.25SQ-ME7 (n=2, 3, 5, 10)	FCB-20-2.0SQ-ME7
	n x 1,000	20,000
	Cable permitted bending radius: 63.6 mm	Cable permitted bending radius: 63.6 mm

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CAUTION

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of this product are subject to change without notification for product improvement.

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