LTLNE-300-CX-N-FC-W | DATASHEET

OPTO ENGINEERING

LED line light, coaxial, 300 mm length, near focusing, fan cooling, white, 6200 K

KEY ADVANTAGES

High density LEDs.

3 types of projection lenses
Near field focusing (N), far field focusing (F), collimated (C).

3 opto-mechanical configurations
Lens only, coaxial illumination (CX) or with 45° mirror (MR).

2 cooling methods and power intensities
Passive or active with fans.

Optional diffusive sheet (D) for illumination uniformity
Hot spots reduction when inspecting highly reflective surfaces.

LTLNE series are high power LED line illuminators designed for line scan applications. LTLNE series are available in three opto-mechanical versions: basic configuration with condensing lens, as coaxial line lights (CX) or integrating a 45° mirror (MR).

SPECIFICATIONS

Lighting specifications

Illumination area length	(mm)	300
Illumination area height	(mm)	20
Type		coaxial
Focusing		near
Optimal working distance	(mm)	10-100
Number of LEDs		42
Light color, peak wavelength		white, 6200 K
Spectral FWHM	(nm)	-
Illuminance[1]	(klux)	n.a.
Diffuser		no

Electrical specifications

Supply voltage[2]	(V)	24
Current[3]	(mA)	4000
Power consumption	(W)	100
Estimated MTBF[4]	(hours)	> 20000
Connector		WEIPU SP1710/P9
Included cable		CBLT007 included

[1] Measured at minimum working distance
[2] ±2%
[3] With constant driving voltage
[4] Drop tp 50% intensity @ 25°C

Mechanical specifications

Length	(mm)	340.0
Width	(mm)	177.0
Height	(mm)	40.0
Mass	(g)	2700
Clamping system		8x M4 threaded holes
Cooling method		fan

Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	-20-+60
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only

Eye safety

Risk group (CEI EN 62471:2010)	Risk group 2

COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

OPTICS	LIGHTING	CAMERAS	SOFTWARE	ACCESSORIES

A wide selection of innovative machine vision components.

CONNECTOR PINOUT

Reference mark
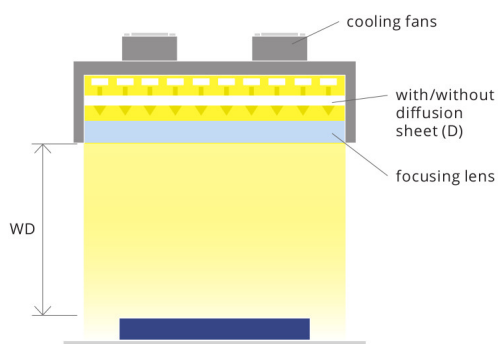
PIN 1
PIN 2
PIN 3
PIN 4
PIN 9
PIN 8
PIN 7
PIN 6
PIN 5

Device side
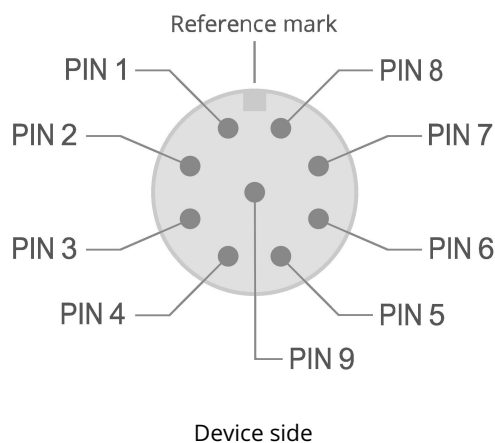
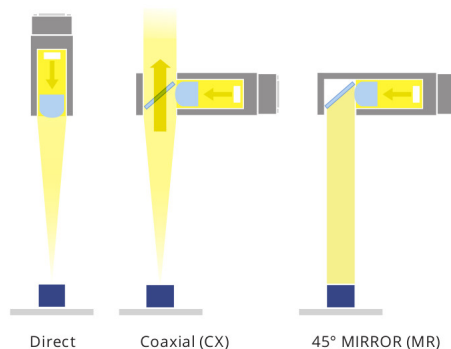| Pin	Function	Description	Cable color
1	LED+	Light supply: positive terminal	White
2	LED+	Light supply: positive terminal	Brown
3	LED-	Light supply: negative terminal	Green
4	LED-	Light supply: negative terminal	Yellow
5	NTC+	Thermal sensor input: positive terminal	Grey
6	NTC-	Thermal sensor input: negative terminal	Pink
7	FAN-	Fan supply: negative terminal	Blue
8	FAN+	Fan supply: positive terminal	Red
9		Not used	

LED color spectrum

Relative power vs Wavelength [nm]
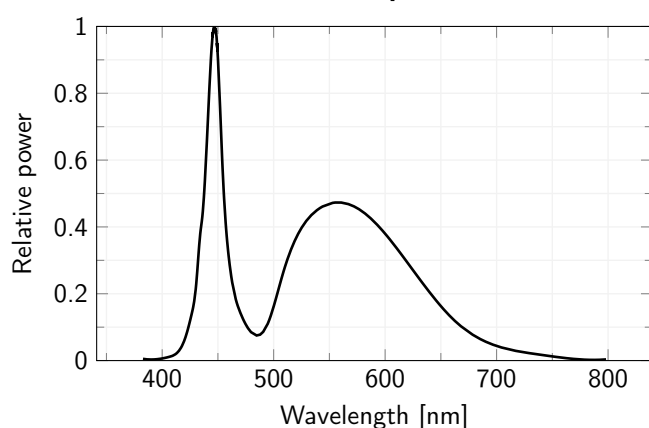
ADDITIONAL INFO

Lighting structure

cooling fans

with/without diffusion sheet (D)

focusing lens

WD

Type

Direct

Coaxial (CX)

45° MIRROR (MR)

Projection lenses and focusing distances

Converging near field (N)

Converging far field (F)

Collimated (C)