

## Modular LED line light, 1000mm length, collimated, diffuser, fan cooling, white



### KEY ADVANTAGES

Emitting surface up 2 meters in 200 mm increments.

Flicker free for line scan applications.

3 types of projection lenses

Near field focusing (N), far field focusing (F), collimated (C).

Homogeneous beam for uniform illumination.

Built-in controller

**LTLNM series** are high power LED line illuminators designed for line scan applications. These lights are flicker-free and meet the needs of demanding applications with reduced exposure times (tens of  $\mu$ s) ensuring very constant illumination and repeatable acquisition. Their modular design provides size flexibility without any compromise in terms of light uniformity.

### SPECIFICATIONS

#### Lighting specifications

|                              |        |               |
|------------------------------|--------|---------------|
| Modules                      |        | 5             |
| Illumination area length     | (mm)   | 1000          |
| Illumination area height     | (mm)   | 20            |
| Focusing                     |        | collimated    |
| Optimal working distance     | (mm)   | 10-200        |
| Number of LEDs               |        | 240           |
| Light color, peak wavelength |        | white, 6200 K |
| Spectral FWHM                | (nm)   | -             |
| Illuminance <sup>1</sup>     | (klux) | n.a.          |
| Diffuser                     |        | yes           |

#### Electrical specifications

|                             |         |                  |
|-----------------------------|---------|------------------|
| Supply voltage <sup>2</sup> | (V)     | 24               |
| Current                     | (A)     | 15               |
| Power consumption           | (W)     | 360              |
| Estimated MTBF <sup>3</sup> | (hours) | > 20000          |
| Power connector             |         | WEIPU SP2110/P2  |
| Power Cables                |         | CBLT008 included |
| I/O connector               |         | M12, 5 pins      |
| I/O cables                  |         | CBLT009 included |

<sup>1</sup> Measured at minimum working distance

<sup>2</sup>  $\pm$ 2%

<sup>3</sup> Drop to 50% intensity @ 25°C

#### Mechanical specifications

|                 |      |                       |
|-----------------|------|-----------------------|
| Length          | (mm) | 1050.0                |
| Width           | (mm) | 75.0                  |
| Height          | (mm) | 128.0                 |
| Mass            | (g)  | 9500                  |
| Clamping system |      | 4x M10 threaded holes |
| Cooling method  |      | fan                   |

#### Environment

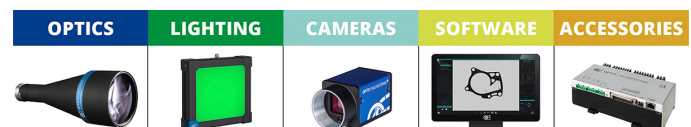
|                             |      |                       |
|-----------------------------|------|-----------------------|
| Operating temperature       | (°C) | 0-40                  |
| Storage temperature         | (°C) | 0-50                  |
| Operating relative humidity | (%)  | 20-85, non condensing |
| Installation                |      | Indoor use only       |

#### Eye safety

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

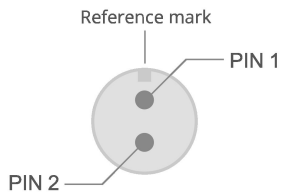
### COMPATIBLE PRODUCTS

Full list of compatible products available [here](#).



A wide selection of innovative machine vision components.

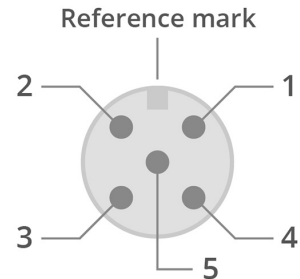
**POWER CONNECTOR PINOUT**



Illuminator side. Front view

| Pin | Description                 | Cable Color |
|-----|-----------------------------|-------------|
| 1   | Positive power supply (24V) | Brown       |
| 2   | Negative power supply (GND) | Blue        |

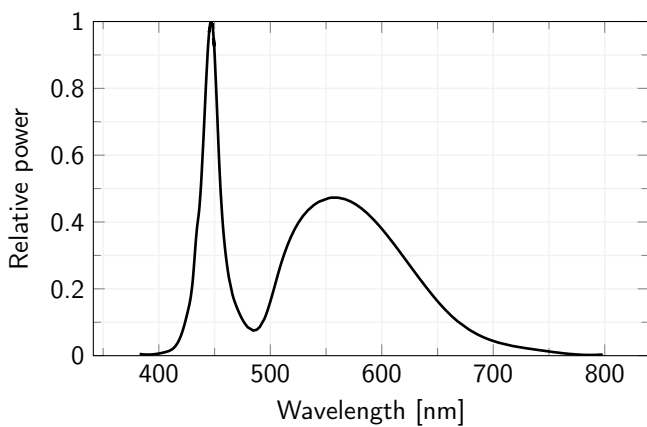
**I/O CONNECTOR PINOUT**



Illuminator side. Front view

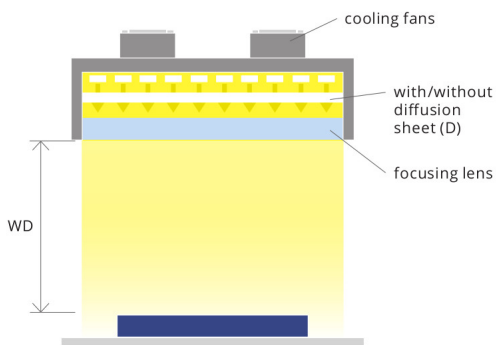
| Pin | Function        | Description                              | Cable Color |
|-----|-----------------|--|-------------|
| 1   | Enable          | Connect to a +24Vdc to turn the light ON | Brown       |
| 2   | Fault           | Internally pulled-up to +24Vdc           | White       |
| 3   | Signal GND      | Internally connected to power GND        | Blue        |
| 4   | 10V output      | 10V reference signal for dimming         | Black       |
| 5   | Dimming control | Voltage signal for dimming control       | Green       |

**LED color spectrum**

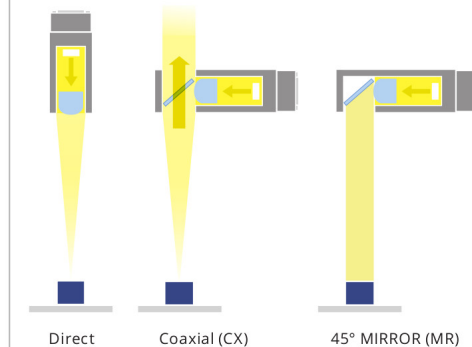


**ADDITIONAL INFO**

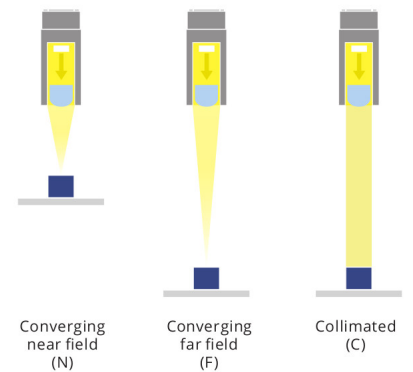
**Lighting structure**



**Type**



**Projection lenses and focusing distances**



All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.