

# LTBRZ3-C-IR-10 | DATASHEET

OPTO ENGINEERING

**LED bar light with integrated driving electronics, 300 mm length, continuous, infrared 850 nm, 10° lens**



## SPECIFICATIONS

### Lighting specifications

|                              |                     |            |
|------------------------------|---------------------|------------|
| Illumination area width      | (mm)                | 295        |
| Illumination area height     | (mm)                | 25         |
| Emission angle               | (°)                 | 10         |
| Number of LEDs               |                     | 12         |
| Light color, peak wavelength |                     | IR, 860 nm |
| Spectral FWHM                | (nm)                | 40.0       |
| Illuminance <sup>1</sup>     | (klux)              | -          |
| Irradiance <sup>1</sup>      | (W/m <sup>2</sup> ) | 70.0       |
| Diffuser                     |                     | yes        |
| Polarization film            |                     | no         |

### Electrical specifications

|                             |      |                   |
|-----------------------------|------|-------------------|
| Supply voltage <sup>2</sup> | (V)  | 24                |
| Peak power consumption      | (W)  | 18                |
| Operating mode              |      | Continuous        |
| Daisy chain                 |      | no                |
| Max continuous current      | (A)  | 0.750             |
| Max pulse current           | (A)  | -                 |
| Minimum Ton                 | (µs) | 1000              |
| Maximum Ton                 | (ms) | -                 |
| Max duty cycle              | (%)  | 100               |
| Maximum Frequency           | (Hz) | -                 |
| Input connector             |      | M12, 5 pins, male |
| Output connector            |      | -                 |
| Cables <sup>3</sup>         |      | CBLT014, CBLT015  |

## KEY ADVANTAGES

**Integrated constant current driving electronics**

**Daisy-chain option**

Easily connect up to 4 lights together.

**Wide selection**

295x25 mm active area. Available in red, white, green blue and Infrared

**5-pin M12 connector**

**Compact lightweight design with reduced thickness (33 mm)**

The **LTBRZ3 series** consists of high intensity LED bar lights with integrated constant current driving electronics that can be used in a wide variety of general purpose machine vision applications both as front lights or as backlights.

### Mechanical specifications

|                 |      |             |
|-----------------|------|-------------|
| Width           | (mm) | 307         |
| Height          | (mm) | 66          |
| Thickness       | (mm) | 33          |
| Mass            | (g)  | 400         |
| Clamping system |      | 4x ø5 holes |

### Environment

|                             |      |                       |
|-----------------------------|------|-----------------------|
| Operating temperature       | (°C) | 0-40                  |
| Storage temperature         | (°C) | 0-50                  |
| Operating relative humidity | (%)  | 20-85, non condensing |
| IP rating                   |      | IP40                  |
| Installation                |      | Indoor use only       |

### Eye safety

|                                |              |
|--------------------------------|--------------|
| Risk group (CEI EN 62471:2010) | Risk group 1 |
|--------------------------------|--------------|

<sup>1</sup> Measured at 200 mm for models with lenses. Measured at emitting surface for backlight models.

<sup>2</sup> Tolerance ± 5 %

<sup>3</sup> Not included. Must be ordered separately

## COMPATIBLE PRODUCTS

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



A wide selection of innovative machine vision components.

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.

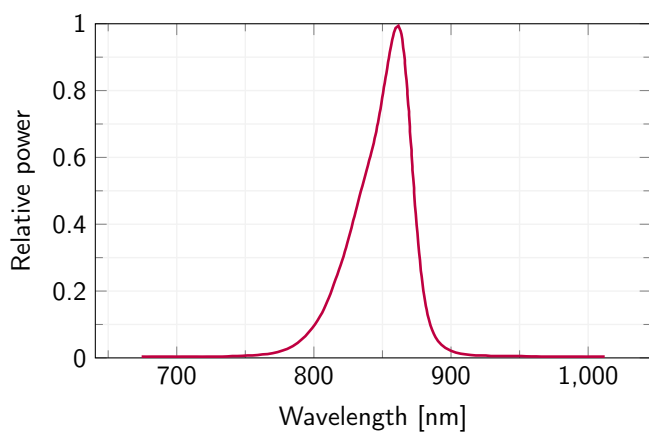
## INPUT CONNECTOR PINOUT



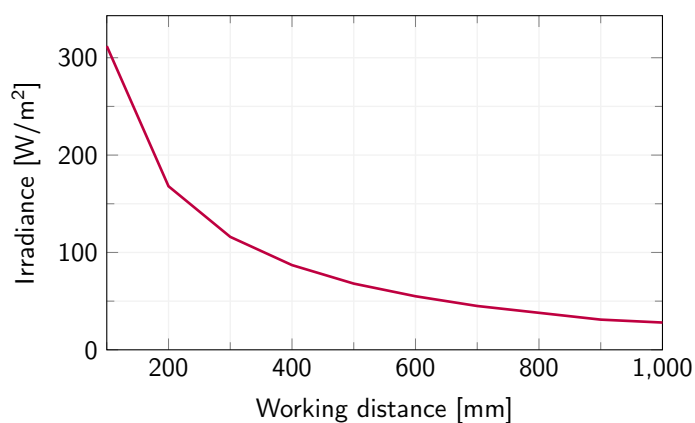
| Pin | Function                | Cable color   |
|-----|-------------------------|---------------|
| 1   | +24Vdc                  | Brown         |
| 2   | NPN                     | White         |
| 3   | GND                     | Blue          |
| 4   | PNP                     | Black         |
| 5   | Analogue dimming(0-10V) | Grey or green |

Device side

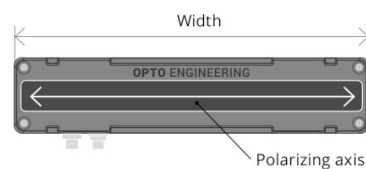
## LED color spectrum



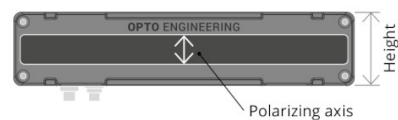
## Irradiance



## OPTIONAL POLARIZING SHEETS

Part Number: LTBRZ3-x-y-w-**PH**-e

PV with vertical linear polarizer. Polarizing axis parallel to the active area height.

Part Number: LTBRZ3-x-y-w-**PV**-e

PH with horizontal linear polarizer. Polarizing axis parallel to the active area width.