

# LTSP50-B-30L | DATASHEET

# High power LED spotlights with integrated electronics, ø50mm, Blue 451nm











### **SPECIFICATIONS**

### **Lighting specifications**

| Illumination area diameter          | (mm)                | 50         |
|-------------------------------------|---------------------|------------|
| Number of LEDs                      |                     | 5          |
| Light color, peak wavelength        |                     | Blue 451nm |
| Spectral FWHM                       | (nm)                | 18         |
| Illuminance, continuos <sup>1</sup> | (klux)              | 8          |
| Irradiance, continuos <sup>1</sup>  | (W/m <sup>2</sup> ) | 588        |
| Illuminance, boosted <sup>1</sup>   | (klux)              | 13         |
| Irradiance, boosted <sup>1</sup>    | (W/m <sup>2</sup> ) | 995        |
| Illuminance, strobe <sup>1</sup>    | (klux)              | 19         |
| Irradiance, strobe <sup>1</sup>     | (W/m <sup>2</sup> ) | 801        |

# **Mechanical specifications**

| •                           |      |                         |
|-----------------------------|------|-------------------------|
| Diameter                    | (mm) | 52.0                    |
| Thickness                   | (mm) | 75.0                    |
| Mass                        | (g)  | 250                     |
| Clamping system             |      | 4x M4 threaded<br>holes |
| Environment                 |      |                         |
| Operating temperature       | (°C) | 0-40                    |
| Storage temperature         | (°C) | 0-50                    |
| Operating relative humidity | (%)  | 20-85, non condensing   |
| Installation                |      | Indoor use only         |
| IP rating                   |      | IP67                    |

### **KEY ADVANTAGES**

### **High-power light output**

**Built-in smart driver** for continuous, boosted and strobe operating modes

**Industry standard 5 PIN M12 Connector** with PNP/NPN/analog dimming input

10°, 30°, 60°, 120° beam angles

**Optional polarizing and protective filters** 

**Compact IP67 design with swivel mounting bracket** 

**The LTSP series** features high intensity spot lights designed to provide homogeneous light output from various working distances.

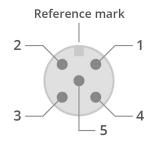
### **Electrical specifications**

| Operating mode                 |      | Continuous and strobe   |
|--------------------------------|------|---|
| Supply voltage                 | (V)  | 24  |
| Current, continuos             | (mA) | 450   |
| Power consumption, continuos   | (W)  | 10.8  |
| Current, boosted               | (mA) | 900   |
| Power consumption, boosted     | (W)  | 21.6  |
| Pear current, strobe           | (mA) | 2500  |
| Peak power consumption, strobe | (W)  | 60  |
| Min pulse duration             | (μs) | 3   |
| Max pulse duration             | (ms) | 10  |
| Max duty cycle                 | (%)  | 10  |
| Typical pulse delay            | (ns) | 300   |
| Typical jitter                 | (ns) | 10  |
| I/O interface                  |      | PNP logic input,<br>NPN dimming input ,<br>analog dimming input |
| Connector                      |      | M12 straight plug male connector                                |
| Included cable                 |      | not included  |
| Eye safety                     |      |   |
| Risk group (CEI EN 62471:2010) |      | Risk group 2  |

<sup>&</sup>lt;sup>1</sup> At emitting surface.



# **CONNECTOR PINOUT**



Device side

| Pin | Function                       |
|-----|--------------------------------|
| 1   | +24Vdc                         |
| 2   | NPN                            |
| 3   | GND                            |
| 4   | PNP                            |
| 5   | Analogue<br>dimming<br>(0-10V) |

# **COMPATIBLE PRODUCTS**

Full list of compatible products available here.



A wide selection of innovative machine vision components.

# 1 0.8 0.6 0.6 0.4 0.2 0.4 440 460 480 500 Wavelength [nm]

