

# Top Light Illumination

## DTL Series

Innovative LED lighting  
for machine vision

Diffuse top lighting with  
camera aperture in various dimensions

- High light efficiency
- Save operation
- High Quality
- Cost saving

Top lights are ideal for all applications where you need a diffuse light and you have not enough space to use a dome or coaxial lighting. The optional camera and light mounts make it easy to design compact light sensors. The lighting is delivered with the new flexible integrated LED controller.

# Top Lighting Panel - DTL-Series

## Compact incident lighting with camera aperture

Compact incident lighting with camera aperture is ideal for inspecting objects nearly shadow free in a bright field setup. The lateral coupling of the LED light ensures a very homogeneous radiation over the objects surface. The top light occupies far less room than a dome light or coaxial light, making it perfect to be used for applications with limited space while providing similar object illumination. Mostly used for barcode reading, the inspection of tin cans, packages with semi shiny uneven surfaces or transparent materials are also possible applications for a top light.

All illuminations of the DTL series are designed for use in the automation industry: the LEDs are integrated in a stable, black anodized aluminum housing, the radiation is emitted through a protective acrylic glass screen and the electrical connection is made via an M8 connector, which is widely used in the automation industry.

The top light series offers an optional easy-to-mount filter holder. This rear-mounted holder allows the use of a clear cover plate, a circular diffuser foil with high transmittance and a beam angle of 90° (fully diffuse) or a polarizer foil with high transmittance and polarization in the wavelength range of 400

transmittance and polarization in the wavelength range of 400 to 700nm.

MBJ offers the top lights in LED color white 5000K (CRI80), red, infrared, green, blue, and yellow in the standard program, with the white, red, and infrared LED being available from stock. You will also find suitable cables and holders in our accessories.



The DTL series is equipped with 4 mounting positions of threaded M5 holes on the rear plate. In addition, four fixing points are provided to attach the optional foil holder.

For all our lighting 2D and 3D files are available for download on our website.

### Specification

<b>Material</b>	Anodized aluminum housing	<b>Certifications</b>	CE, RoHS
<b>Connector</b>	M8 socket, male, 4 pin	<b>Degree of Protection</b>	IP54
<b>Supply voltage</b>	24 V DC +/- 5%	<b>Humidity</b>	30% to 70%
<b>Op. Temperature</b>	10° Celsius to 30° Celsius	<b>Accessories</b>	Mountings, Filterholder, Filters

Standard Model	Light field <sup>1</sup>	Dimension	Lens hole	Steady power	Price from <sup>2</sup>
DTL-0510	50 x 100 mm	90 x 130 x 12 mm	Ø 36 mm	6.0 W	210 €
DTL-1010	100 x 100 mm	140 x 130 x 12 mm	Ø 36 mm	11.0 W	290 €
DTL-1020	100 x 200 mm	140 x 230 x 12 mm	Ø 36 mm	16.0 W	380 €
DTL-2020	200 x 200 mm	240 x 230 x 12 mm	Ø 45 mm	22.0 W	490 €
DTL-2030	200 x 300 mm	240 x 330 x 12 mm	Ø 45 mm	28.0 W	690 €

1) Available LED colors: WT=white, RD= red, IR= infrared, GN=green, BE=blue, YE=yellow. Other LED colors on request

2) Price for a white LED, plus VAT and transportation costs

Operation Modes	Mode description
<b>(-s) internal controller</b> with 4 operation modes	24V steady light, dimmable steady light, triggered light and triggered flash light with up to 100% more intensity
<b>(-x) no controller</b>	External LED control is required