LTDMLAB2-WW | DATASHEET

OPTO ENGINEERING

Diffusive strobed dome + low angle illumination system - medium size high power white

KEY ADVANTAGES

Two independent illumination units in one single solution
Dome unit for homogeneous illuminations and low angle unit for dark field lightning can be independently operated.

Ultra-high power light output and strobe mode only operation
For the inspection of fast moving object and extended LED lifetime.

Multiple configurations
Available in two sizes and two power intensities.

Compatible LTDV strobe controllers available
For easy and appropriate power, control and synchronization of the illuminator.

LTDMLA series are ultra-high power diffuse LED strobe illuminators combining a dome light and a low angle ring light.

SPECIFICATIONS

Lighting specifications

Illumination area diameter	(mm)	60
Optimal working distance	(mm)	5-50
Number of LEDs (Dome)		40
Light color, peak wavelength (Dome)		white, > 6000 K
Spectral FWHM (Dome)	(nm)	-
Illuminance[1] (Dome)	(klux)	160
Number of LEDs (Ringlight)		40
Light color, peak wavelength (Ringlight)		white, > 6000 K
Spectral FWHM (Ringlight)	(nm)	-
Illuminance[1] (Ringlight)	(klux)	210
Diffuser (Ringlight)		yes

Electrical specifications

Power supply mode		Strobe only, constant current driving
Peak power consumption	(W)	n.a
Min pulse current	(A)	3.5
Max pulse current	(A)	17
Max pulse duration[2]	(ms)	1
Max duty cycle	(%)	1.5
Estimated MTBF[3]	(hours)	> 50000
Connector		M12
Included cable		CBLT005

Mechanical specifications

Aperture Diameter	(mm)	10-50
Length	(mm)	166.5
Width	(mm)	133.0
Height	(mm)	104.0
Mass	(g)	1800
Clamping system		4x M6 threaded holes

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)	Exempt

[1] Measured at maximum current and maximum working distance
[2] At 25°C. At max pulse width (1ms), max pulse frequency = 15 Hz
[3] At 25°C

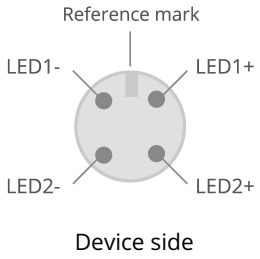
COMPATIBLE PRODUCTS

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.

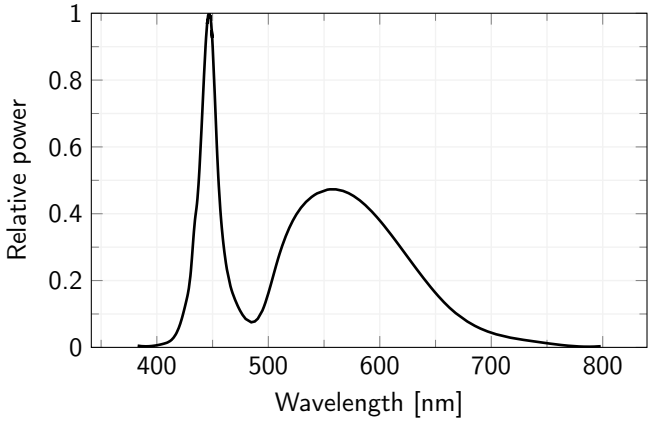
CONNECTOR PINOUT



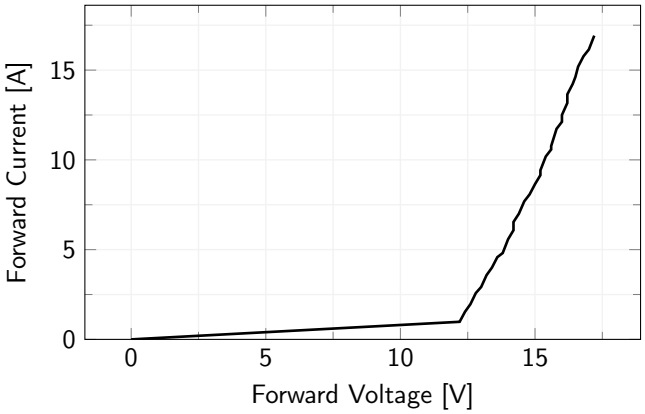
Device side

Function	Cable color
LED 1+	Brown/White
LED 1-	Green/Yellow
LED 2+	Blue/Red
LED 2-	Grey/Pink

LED color spectrum



Forward Current Characteristics



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