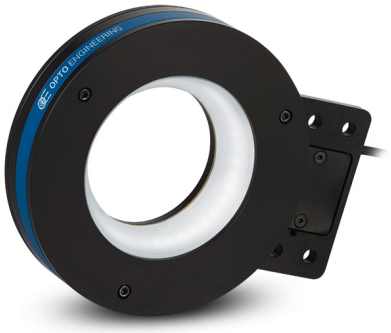
LTLAB2-G | DATASHEET

OPTO ENGINEERING

Diffusive strobed low angle ring light illuminator - medium size high power green



KEY ADVANTAGES

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

Rugged industrial design with built-in industrial connector
For easy integration into any machine vision system.

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

Low angle beam shaping diffuser
Highly diffusive material avoids hot spots formation and ensures uniform light intensity.

LTLA series are high-power diffusive LED strobed low-angle ring light illuminators designed to provide darkfield lightning and to effectively enhance minute surface features or textures.

SPECIFICATIONS

Lighting specifications

Illumination area diameter	(mm)	60
Optimal working distance	(mm)	5-50
Number of LEDs		40
Light color, Peak wavelength		green, 525 nm
Spectral FWHM	(nm)	35
Illuminance[1]	(klux)	180
Diffuser		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		CBLT001

[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

Mechanical specifications

Aperture Diameter	(mm)	64
Length	(mm)	166.5
Width	(mm)	133.0
Height	(mm)	38.0
Mass	(g)	800
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

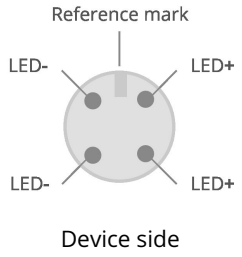
Risk group (CEI EN 62471:2010)	Exempt

COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

A wide selection of innovative machine vision components.

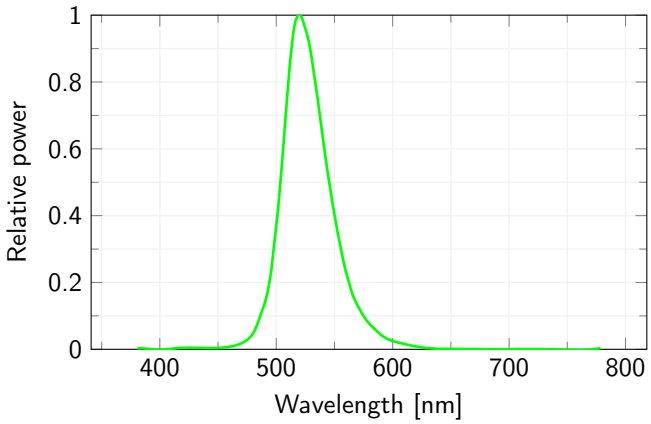
CONNECTOR PINOUT



Device side

Function	Cable color
LED +	Brown
LED +	White
LED -	Blue
LED -	Black

LED color spectrum



Forward Current Characteristics