



LTSP50-IR850 | DATASHEET

High power LED spotlights with integrated electronics, ø50mm, IR 850nm



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.

SPECIFICATIONS

Lighting specifications

Illumination area diameter	(mm)	50
Emission Angle	(°)	56
Number of LEDs		5
Light color, peak wavelength		IR 850nm
Spectral FWHM	(nm)	25
Illuminance, continuous ¹	(klux)	0.01
Irradiance, continuous ¹	(W/m ²)	42
Illuminance, boosted ¹	(klux)	0.01
Irradiance, boosted ¹	(W/m ²)	74
Illuminance, strobe ¹	(klux)	0.03
Irradiance, strobe ¹	(W/m ²)	144

Mechanical specifications

Diameter	(mm)	52.0
Thickness	(mm)	75.0
Mass	(g)	244
Clamping system		4x M4 threaded 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

Electrical specifications

Operating mode		Continuous and strobe
Supply voltage	(V)	24
Current, continuous	(mA)	450
Power consumption, continuous	(W)	10.8
Current, boosted	(mA)	900
Power consumption, boosted	(W)	21.6
Peak 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, NPN dimming input, analog dimming input
Connector		M12 straight plug male connector
Included cable		not included

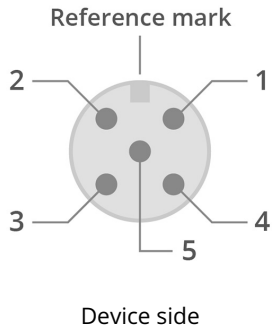
Eye safety

Risk group (CEI EN 62471:2010) Risk group 2

¹ At emitting surface.

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CONNECTOR PINOUT



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

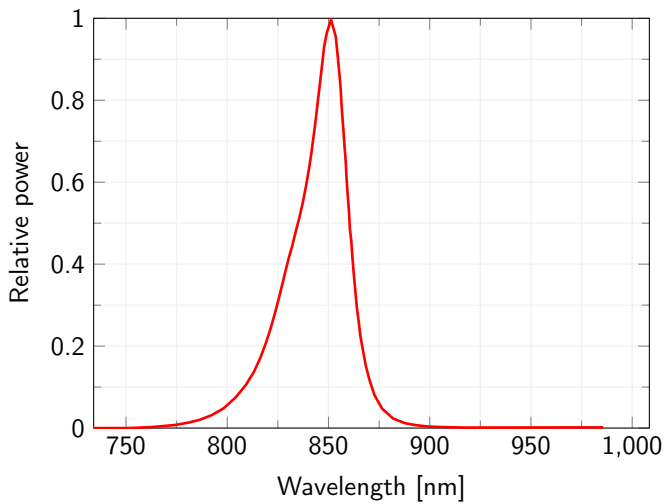
COMPATIBLE PRODUCTS

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

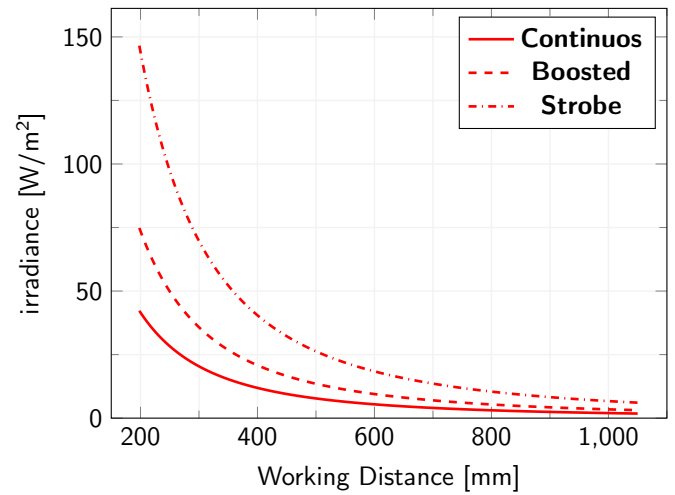


A wide selection of innovative machine vision components.

LED color spectrum



Irradiance Characteristics



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