LT2PRXP-R │ DATASHEET

OPTO ENGINEERING

High power LED pattern projector, red, 625 nm

KEY ADVANTAGES

High efficiency LEDs for sharp edges, superior homogeneity and contrast

Built-in driver for continuous and strobe operations

5 PIN M12 Connector with PNP/NPN/analogue dimming input

Compatible with **standard C-mount lenses up to 1.1"**

Automatic shutdown in case of overheating

Interchangeable projection patterns

Compact version available

LTPRUP series features high-power LED pattern projectors designed for inline or offline applications including quality control, 3D reconstruction, dimensional measurement, planarity control, robot guidance and alignment applications.

SPECIFICATIONS

Lighting specifications

Active area diameter	(mm)	17.6
Light color, peak wavelength		red, 625 nm
Spectral FWHM	(nm)	20
Illuminance, continuos[1]	(klux)	498
Irradiance, continuos[1]	(W/m^2)	3100
Illuminance, strobe[1]	(klux)	1300
Irradiance, strobe[1]	(W/m^2)	6370

Electrical specifications

Operating mode		Continuous and strobe
Power supply mode		-
Supply voltage[2]	(V)	24
Current[2]	(A)	1.05
Power consumption[2]	(W)	25.2
Peak power consumption[3]	(W)	45.6
Max led forward current[3]	(A)	3
Min pulse duration	(μs)	2
Max pulse duration	(ms)	10
Max duty cycle	(%)	10
Typical pulse delay	(%)	400
Typical jitter	(%)	100
I/O interface		PNP logic input, NPN logic input, analog dimming input
Connector		1x M12 straight plug male connector
Included cable		not included

Mechanical specifications

Mount		C
Phase adj availability		Yes
Length	(mm)	100.7
Width	(mm)	59.1
Height	(mm)	59.1
Mass	(g)	332

Environment

Operating temperature	(°C)	0-40
Storage temperature	(°C)	0-50
Operating relative humidity	(%)	20-85, non condensing
Installation		Indoor use only
IP rating		IP30

Eye safety

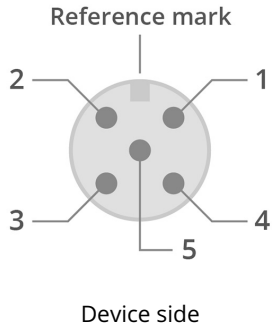|	
Risk group (CEI EN 62471:2010)	Risk group 1

[1] At pattern emitting surface.
[2] Continuous mode, using the integrated electronic driver.
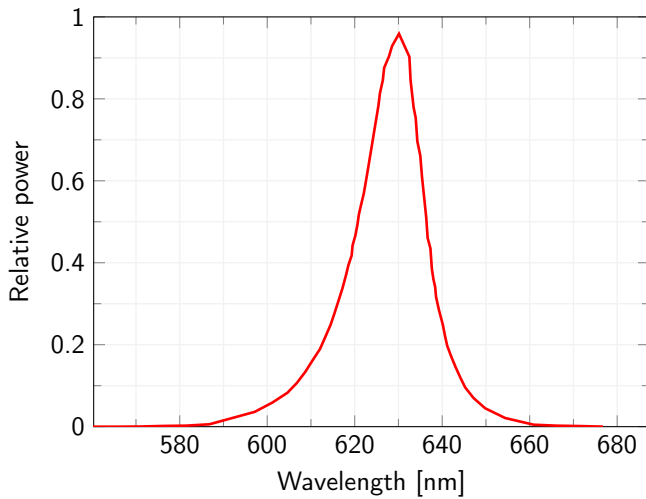[3] Strobe mode.

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.
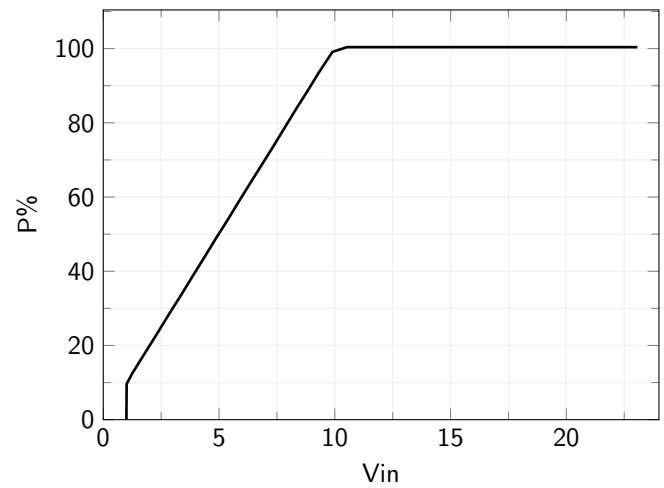
CONNECTOR PINOUT

Reference mark

2 — 1
3 — 4
— 5

Device side

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

LED color spectrum

Analog input specification

RECOMMENDED ACCESSORIES

Opto-Engineering® suggests the following accessories to power the camera:

- **CBLTM12-5P-2M**, Illumination cable PVC black, Side 1 M12 female connector 5 poles, Side 2 cable end - 2 m
- **CBLTM12-5P-5M**, Illumination cable PVC black, Side 1 M12 female connector 5 poles, Side 2 cable end - 5 m
- **CBLTM12-5P-10M**, Illumination cable PVC black, Side 1 M12 female connector 5 poles, Side 2 cable end - 10 m

COMPATIBLE PRODUCTS

Full list of compatible products available *here*.

OPTICS	LIGHTING	CAMERAS	SOFTWARE	ACCESSORIES

A wide selection of innovative machine vision components.