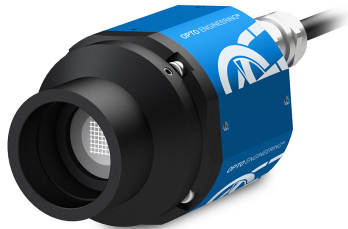




LT2PRXP-IR850-C | DATASHEET

High power LED pattern projector, IR, 850 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 | | IR, 850 nm |
| Spectral FWHM | (nm) | 35 |
| Illuminance, continuous ¹ | (klux) | - |
| Irradiance, continuous ¹ | (W/m ²) | - |
| Illuminance, strobe ¹ | (klux) | 2.7 |
| Irradiance, strobe ¹ | (W/m ²) | 13300 |

Electrical specifications

| | | |
|--------------------------------------|------|--------------------------|
| Operating mode | | Strobe |
| Power supply mode | | Constant current driving |
| Supply voltage ² | | - |
| Current ² | | - |
| Power consumption ² | | - |
| Peak power consumption ³ | (W) | 45 |
| Max led forward current ³ | (A) | 3 |
| Min pulse duration | (ms) | - |
| Max pulse duration | (ms) | 10 |
| Max duty cycle | (%) | 10 |
| Typical pulse delay | (%) | - |
| Typical jitter | (%) | - |

I/O interface

| | |
|----------------|----------------------------------|
| Connector | M12 straight plug male connector |
| Included cable | 20 cm pigtail |

Mechanical specifications

| | | |
|------------------------|------|------|
| Mount | | C |
| Phase adj availability | | Yes |
| Length | (mm) | 67.5 |
| Width | (mm) | 46.0 |
| Height | (mm) | 93.0 |
| Mass | (g) | 199 |

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.

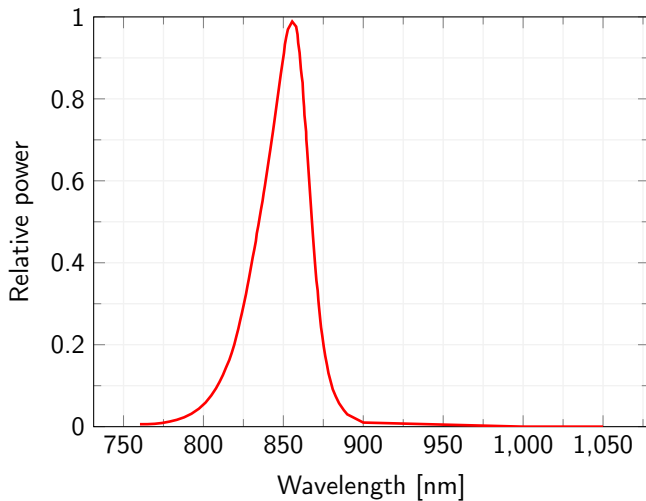
All product specifications and data are subject to change without notice to improve reliability, functionality, design or other. Photos and pictures are for illustration purposes only. Data are reported by design, actual lens performance may vary due to manufacturing tolerances.

CONNECTOR PINOUT

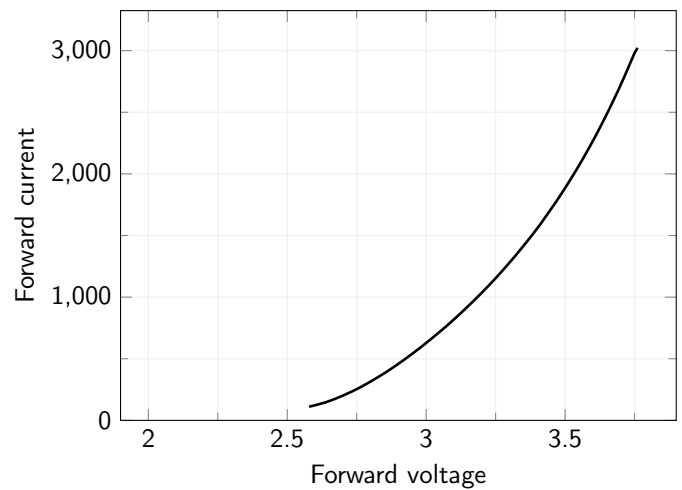


| Pin | Function |
|-----|----------------|
| 1 | LED anode |
| 2 | LED cathode |
| 3 | NTC first end |
| 4 | NTC second end |
| 5 | Not connected |

LED color spectrum



Voltage current characteristics



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](#).



A wide selection of innovative machine vision components.