

Datasheet

LuxaLight LED Engine 24V 265nm 3535 60° (24 Volt, 57 LEDs, 3535, IP20)

LE-24-265-57X3535PLX60

Version: 2025-03-28.1

Product description

Our advanced UV-C LED engine, with a wavelength of 265 nm, provides a powerful solution for a wide range of industrial and research-related applications. This LED engine is designed for use in environments where precision, flexibility, and reliability are essential, but without the housing, making it an ideal choice for applications requiring customized integration. The LED engine offers a range of unique benefits:

Optimal Wavelength for Industrial Use: The 265 nm wavelength is ideal for applications requiring UV light for sterilization, disinfection, or specific chemical processes. This wavelength provides high energy intensity, which is essential for activating photochemical reactions in various industrial environments.

Stroboscopic Pulse Function: Thanks to the innovative strobing pulse technology, we can generate radiation with higher peak intensity. This technique enhances efficiency in processes that are sensitive to short light pulses. The ability to emit rapid, repetitive pulses increases effectiveness in applications such as surface treatment, cleaning, or material processing. This functionality is fully supported when integrated with the Manima Pollux Industry system, allowing for precise control and optimization of pulse intensity to maximize performance.

Increased Radiation Capacity: When integrated with the Manima Pollux Industry system, our LED engine achieves a radiation capacity that significantly exceeds conventional systems. This offers advantages such as accelerated reactions, improved industrial machine performance, and more precise control over treatment parameters.

Reliable Performance and Long Lifespan: The robust construction of the LED engine ensures reliable performance, even without the protective housing. The long lifespan of the LEDs reduces the need for frequent replacements and minimizes downtime, contributing to higher operational efficiency and lower maintenance costs.

Energy Efficiency and Sustainability: Our technology is designed with a focus on energy efficiency, reducing operational costs while maintaining optimized energy output. This makes it a sustainable choice for industrial applications that aim to minimize energy consumption and environmental impact.

Built-in NTC Sensor: The product comes equipped with a standard NTC (Negative Temperature Coefficient) sensor for precise temperature control, ensuring the system operates within optimal temperature ranges for maximum performance.

Real-Time Monitoring and Maximum Radiation: When used in combination with the Manima Pollux Industry system, real-time monitoring allows for the maximum radiation output from the UV LED fixture to be achieved. This integration ensures precise control, enabling the system to operate at peak efficiency under varying conditions.

The combination of the 265 nm UV-C LED engine, stroboscopic pulse function, and real-time monitoring provides an unparalleled solution for applications requiring precision, power, and efficiency.

Applications:

- Sterilization and disinfection of industrial surfaces
- Chemical processes and photochemical reactions
- Material processing and surface treatment
- Research and R&D work with the 265 nm wavelength
- Enhancement of industrial production systems through increased radiation

Technical specifications

General															
Brand	LuxaLight														
Application	Disinfection														
LED type	3535														
PCB color	White														
Material	Aluminum														
Dimensions	200 × 20 × 2 mm														
Mounting	3M tape VHB4905														
LEDs per piece	57.00														
Lighting															
Wave length	265 nm														
Beam angle	60 °														
Measurement results															
Irradiance	<table border="1"> <thead> <tr> <th>Value</th> <th>Measuring distance</th> </tr> </thead> <tbody> <tr> <td>226 W/m²</td> <td>25 mm</td> </tr> <tr> <td>113 W/m²</td> <td>50 mm</td> </tr> <tr> <td>66,3 W/m²</td> <td>75 mm</td> </tr> <tr> <td>46,9 W/m²</td> <td>100 mm</td> </tr> <tr> <td>22,1 W/m²</td> <td>200 mm</td> </tr> <tr> <td>13,6 W/m²</td> <td>300 mm</td> </tr> </tbody> </table>	Value	Measuring distance	226 W/m ²	25 mm	113 W/m ²	50 mm	66,3 W/m ²	75 mm	46,9 W/m ²	100 mm	22,1 W/m ²	200 mm	13,6 W/m ²	300 mm
	Value	Measuring distance													
	226 W/m ²	25 mm													
	113 W/m ²	50 mm													
	66,3 W/m ²	75 mm													
	46,9 W/m ²	100 mm													
	22,1 W/m ²	200 mm													
13,6 W/m ²	300 mm														
<ul style="list-style-type: none"> • By combining Pulse Mode with Real-Time Monitoring, the efficiency of LED systems can be increased, resulting in higher output. • We have the expertise and equipment to perform measurements tailored to the specific requirements of the application. 															
Electronics															
Working voltage	24V														
Current per piece	1.70 A / piece														
Power consumption per piece	40.80 W / piece														
PCB material	Aluminium														
Pinout	<table border="1"> <thead> <tr> <th>Symbol</th> <th>Function</th> </tr> </thead> <tbody> <tr> <td>V+</td> <td>V+</td> </tr> <tr> <td>GND</td> <td>Ground</td> </tr> <tr> <td>NTC</td> <td>NTC sensor</td> </tr> <tr> <td>NTC_GND</td> <td>NTC ground</td> </tr> </tbody> </table>	Symbol	Function	V+	V+	GND	Ground	NTC	NTC sensor	NTC_GND	NTC ground				
	Symbol	Function													
	V+	V+													
	GND	Ground													
	NTC	NTC sensor													
NTC_GND	NTC ground														
NTC parameters	Resistance: 5000 Ohm Beta value: 3950														
Environmental															
Operating temperature	-20 ~ +60 °C														

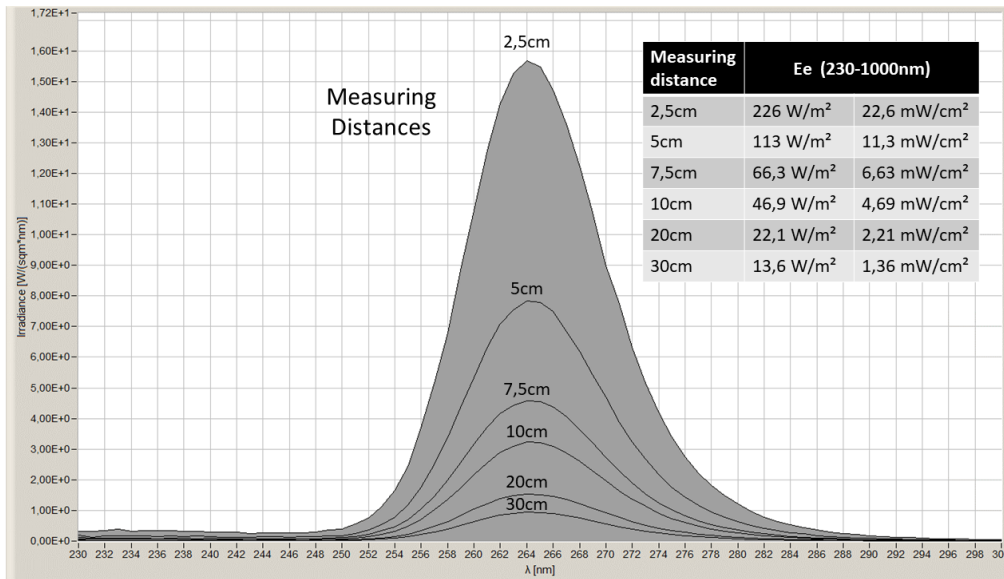
Storage temperature -40 ~ +80 °C

Directives - standards - certificates

Directives RoHS
CE

Safety standards EN60598-1
EN62031
IEC62471

Measurement results



While LuxaLight has made every reasonable effort to ensure the accuracy of the information in this brochure, LuxaLight does not guarantee that it is error - free, nor does LuxaLight make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. LuxaLight reserves the right to make any adjustments to the information contained herein at any time without notice. LuxaLight expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalogue are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult LuxaLight for the latest dimensions and design specifications.