Press Information

Kyocera launches new air-cooled UV LED light source “G7A Series”

G7A Series offers revolutionary curing performance and compact size.

Kyoto/London, 17th June 2025. Kyocera Corporation has developed a new air-cooled, UV LED light source that ranks among the smallest in its class[1] while providing revolutionary curing performance for applications such as ink, resin curing and adhesion. The G7A Series will be available in June 2025.

Kyocera’s G7A Series, air-cooled UV-LED light source

Main features

- Achieves the highest irradiance in its class[2]
- Contributes to space saving with market-leading miniaturization
- Customizable irradiation width to suit a wide variety of printed materials
- Stable operation enabled by monitoring functions for irradiation status

Development background

In recent years, UV curing light sources have faced important challenges, including reducing CO_2 emissions by decreasing power consumption, lowering ozone emissions, and complying with mercury regulations. Additionally, there is a growing demand for space saving solutions in today’s manufacturing, which has led to a need for more compact light sources with higher curing performance.

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[1] Among air-cooled UV LED with a total irradiation of 300 mJ/cm² or more; Kyocera research, March 2025.

[2] Among air-cooled UV LED light sources for UV curing applications; Kyocera research, March 2025.

Kyocera's UV LED light sources not only have a low environmental impact, but also adopt an air-cooled system that does not require cooling water, even with high output. As a result, additional equipment such as a water-cooling system is unnecessary, enabling a more compact installation. Through this, our product contributes to greater efficiency and reduced environmental impact for various devices used in manufacturing sites, such as printing, adhesion, and liquid gasket.

Features

1. Achieves the highest irradiance in its class[2]

By utilizing Kyocera's proprietary ceramic substrate with heat-dissipation as well as a module heat dissipation design that includes a heat sink, we have maximized energy efficiency while achieving an irradiance of 20 W/cm² (at 0 mm irradiance distance), the highest among air-cooled UV LED light sources in this class. Additionally, by achieving a total dose of 400 mJ/cm² at 50 m/min, which is an important indicator of curing performance, we have achieved high-speed curing performance comparable to water-cooled UV LED light sources, all within a compact design.

2. Contributes to space saving with market-leading miniaturization

Compared to the conventional high-output G5H Series, the G7A Series has a footprint 62% smaller and a height 10% lower, placing it among the world's most compact (120 x 52 x 151 mm) UV LED light sources with the same optical performance. The G7A offers a 30 mm irradiation window, contributing to space savings while preserving high curing performance.

Kyocera's G7A Series (left) and conventional G5H Series (right)

3. Customizable irradiation width to suit a wide variety of printed materials

The G7A has a scalable structure in 120 mm increments, allowing the irradiation width to be adjusted from a minimum of 120 mm to a maximum of 2,400 mm, by connecting multiple light source units. This enables flexible customization of the irradiation width to suit a wide variety of printed materials. Further, the system can connect to external devices via serial communication, permitting fine adjustments to the LED irradiation width in increments of approximately 30 mm.

Example of two 120 mm connected units

4. Stable operation enabled by monitoring functions for irradiation status

The G7A Series features monitoring functions via serial communication, allowing for LED temperature, LED current, fan operation time, and accumulated LED lighting hours. It can detect lighting and system errors, and provides notifications for filter replacement and LED lifespan, ensuring stable system operation.

Through the G7A Series, Kyocera will contribute to space saving in a wide range of industrial printing and curing applications, while contributing to a sustainable global environment.

Product specifications

Product name		G7A Series air-cooled, UV-LED light source		
LED wavelength		365 nm[3]	385 nm	395 nm
Peak irradiance	Working distance 0 mm	13 W/cm^2	20 W/cm^2	
	Working distance 10 mm	9 W/cm^2	12 W/cm^2	
Dose (at 50 m/min)		300 mJ/cm^2	400 mJ/cm^2	
Irradiation width		120 mm (units can be combined to reach 2,400 mm)		
Dimensions (W x D x H)		W 120 x D 52 x H 151 mm		
Irradiation window size (D)		30 mm		
Weight		1.0 kg		
Production site		Shiga Higashiomi Plant, Japan		

To inquire about Kyocera's UV LED light source technologies, please visit [UV LED Light Sources | KYOCERA].

High resolution images are available for download by clicking the following link:
https://spgroup.box.com/s/glea0yyisek8h5rje0zux9dd3afmusrg

[3] LED with a wavelength of 365 nm is scheduled to be available around July 2025.

For more information on Kyocera: uk.kyocera.com

About Kyocera

Kyocera has been successful in Europe for over 50 years. From its European headquarters in Esslingen am Neckar, KYOCERA Europe GmbH operates 28 sites including manufacturing facilities, with products ranging from fine ceramics, electronics, automotive, semiconductor and optical components to industrial tools, LCDs, touch solutions, industrial printing components, solar systems and consumer goods such as kitchen and office products.

KYOCERA Europe GmbH is a company of the KYOCERA Corporation headquartered in Kyoto/Japan, a world leader in semiconductor, industrial and automotive components as well as electronic components, printing and multifunction systems, and communications technology. The technology group is one of the world's most experienced manufacturers of smart energy systems, with more than 45 years of industry expertise. The Kyocera Group comprises 288 subsidiaries (31 March 2025). In England, Kyocera has a subsidiary in Frimley, KYOCERA Fineceramics Ltd. With around 77,200 employees, Kyocera generated net annual sales of around EUR 12.43 billion in the 2024/2025 fiscal year.

Kyocera is ranked 874 on Forbes magazine's 'Global 2000' list for 2024, and ranked as 'The 100 Most Sustainably Managed Companies in the World' according to the Wall Street Journal. For the second year in a row, Kyocera qualified for the Dow Jones Sustainability Index (Asia-Pacific). As well, Kyocera receives a Bronze rating on EcoVadis Sustainability Survey and was acknowledged as a 'Top 100 Global Innovator 2025' for the ninth time by Clarivate, being one of the world's leading innovators.

Kyocera also takes an active interest in cultural affairs. The Kyoto Prize, a prominent international award, is presented each year by the Inamori Foundation — established by Kyocera founder Dr Kazuo Inamori — to individuals worldwide who have contributed significantly to the scientific, cultural, and spiritual betterment of humankind (equivalent to approximately €596,500 per prize category).

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