

UV LED Curing for the 3D Printing Industry

Reliable LED equipment benefits the 3D printing industry by providing stable curing for extending printing cycles, increasing print accuracy.

Application Overview

PolyJet is one of the mainstream 3D printing technologies today. The PolyJet 3D printer sprays photosensitive resin material layer by layer onto the print tray until the parts are completed. Each layer of material is cured with ultraviolet light while being sprayed, and can be taken out and used immediately without secondary curing. It can realize the combination of color and multi-materials in a single printing to produce a prototype close to the real product. It can also be used to print quick molds and verify product designs. Full-color multi-material 3D printer can mix six materials at the same time to achieve 500,000 colors, different textures, transparency and softness. Products are widely used in medicine, education, engineering models.

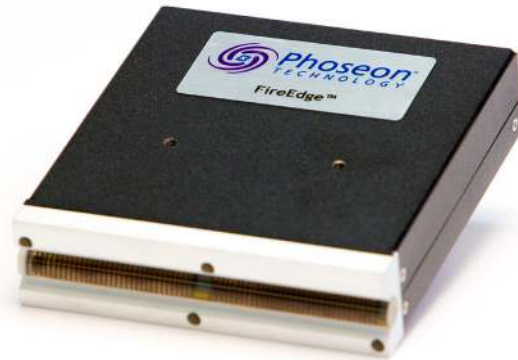


Phoseon Advantages

Using the Phoseon FireEdge™ FE400 air-cooled curing light source, end customers can run stably for a long time (the model printing cycle of the model is more than 48 hours). The printing process with highest efficiency, printing accuracy and yield can fulfill end customer's stringent requirements.

Compared with domestic and foreign LED light source manufacturers, the key advantages of Phoseon LED light source include:

1. **Small and compact structure:** Very suitable for the limited space and complicated installation structure of the printer. And there are basically no wearing parts, eliminating the need for replacement and maintenance.
2. **Stable performance:** With Phoseon's TargetCure™ technology (<https://phoseon.com/industrial-curing/technology/targetcure/>) the continuous stable and reliable output of the light source ensures the quality consistency of the printed objects.
3. **High-power air-cooled design:** Air-cooled heat dissipation and exhaust prevent water pipes from occupying the internal space. High intensity UV irradiation can improve the surface drying performance of each layer of the resin, thereby ensures the printing accuracy of the model.
4. **Instant on/off:** It can be used immediately without preheating, and can seamlessly match the response time of the inkjet nozzle. It is especially suitable for scanning high-speed printing.
5. **Energy saving and environmental protection:** Safe and stable UV-A products without mercury, ozone or radiation.



About Phoseon Technology

In 2002, Phoseon Technology (<http://www.phoseon.com>) pioneered the use of LED technology for UV curing applications. As the world leader in UV LED curing, Phoseon uses patented LED technology to provide ruggedized, high-performance products and application-specific solutions for a variety of applications. The company is 100% focused on LED technology and provides world-wide sales and technical support.



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