

## End-Use Application Focus

Understanding that the ultimate goal of printed electronics is to enhance real-world applications, we prioritize end-use functionality. Our solutions are tailored to meet the unique requirements of diverse applications.



Printed Circuit Boards /  
Electronic Packaging



Display / Lighting /  
Touch Screens



Flexible Hybrid Electronics /  
Wiring Harnesses



Passive Components /  
Resistors / Capacitors /  
Inductors



RFID / Sensors / Shielding /  
Antennae

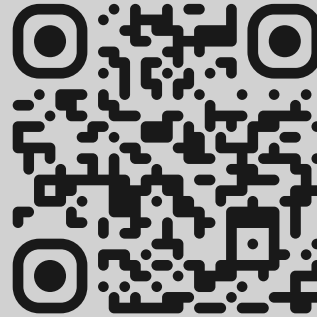


Photovoltaics



Wearables

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**ElectroJet™**  
Additive Printed Electronics

## Multi-Layer, Multi- Material Digital Printed Electronic All-in-One Systems



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## The Printers

### ElectroUV3D-3200

UV LED Large 12"x24" Flatbed Electronics Inkjet Printer, Made for True Manufacturing of Printed Electronics

### ElectroUV3D-1216

UV LED Tabletop 12"x16" Flatbed Electronics Inkjet Printer, Ideal for Prototyping of Electronics

## Key Features



### Independent Control

Capacity to independently control 3D or flat prints with strong adhesion to multiple substrates.



### Exceptional Print Quality

Precision Dot Control™ provides industry-leading print quality with y-axis absolute positioning accuracy and repeatability.



### Easy Layering Process

Easy layering process for space-saving on multi-layer components with complete height adjustability catering to substrates up to 6".

## The Materials

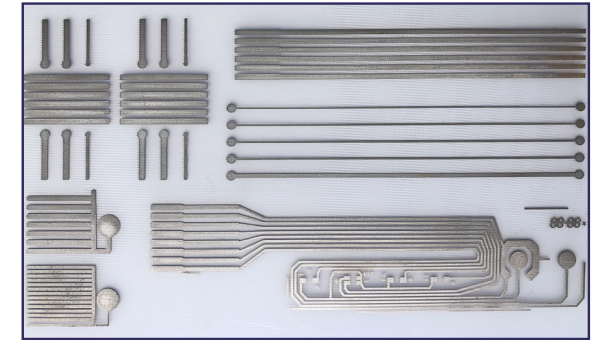
Our comprehensive portfolio features a range of conductive, insulating, and functional specialty inks that seamlessly complement each other.

### Particle-Free Silver Conductive Inks

Our particle-free silver conductive material offers top-tier conductivity, comparable to bulk silver with resistivity as low as  $10^{-8} \Omega \cdot M$ . With rapid sintering efficiency, it reaches  $80^{\circ}C$  in 5 minutes or mere seconds above  $100^{\circ}C$ . It boasts superior printability, reliability, achieving repeatability within 1%, and excellent adhesion to various substrates, making it ideal for diverse applications.

### Dielectric Photopolymer Insulating Ink

Our dielectric photopolymer material provides excellent electrical insulation between conductive layers, bonds strongly to high-energy substrates, and offers versatile formulations for diverse applications, effectively shielding against moisture, chemicals, and physical abrasion.



### Specialty Inks

Innovative materials enhance functionality across various applications. Primer improves adhesion and conductivity between surfaces and conductive ink. Security Ink adds subtle watermarking for enhanced security. Solder Mask Ink boosts durability against solder processes, while Support Ink aids intricate 3D printing with water-soluble features.

## The Processes

Our comprehensive approach encompasses a myriad of processes meticulously designed to maximize the efficacy of materials, printers, and the ultimate benefits for end-users.

- Pre-Print Processes
- Print Optimization
  - Multi-Material / Multi-Layer
  - Dielectric Templating
  - Multi-Pass for Conductive Specs
- Post Print Sintering

## Multi-Material, Multi-Layer Capabilities

Our systems enable the digital printing of silver conductive inks and UV-curable dielectric insulating/building inks. It features inline LED UV curing for dielectric insulating inks and inline heat sintering for silver conductive inks. With high resolution, top of the line inkjet heads, it allows for multi-material, multi-layer printing of electronic circuits and components.