



**SMARTSOL**  
TECHNOLOGIES  
AMERICA

■ **Solutions Portfolio for the High-Tech Industry**

*Assembly, Automation & Inspection Technologies*

[www.smartsolamerica.com](http://www.smartsolamerica.com)





# SMARTSOL TECHNOLOGIES

SMarTsol Technologies is a company founded in February 2012 in Guadalajara with the objective of offering products of value for our customers.

We are a supplier with the expertise in process analysis and consulting for the High-Tech Industry, including industrial, electronics, automotive, aerospace, metalworking, medical, telecommunications and commercial sectors.

We help our customers to optimize and automate their production processes; our services includes:



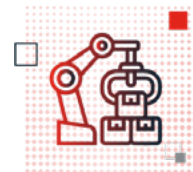
Capital Equipment Sales



Technical Support



Distribution



Integration for Automation



Process Analysis & Consultancy



Training

Our facilities in the most strategic locations in Mexico and United States allow us to improve delivery times and provide technical support and customized trainings for our customers:

Demonstration and Distribution Center in Guadalajara, Jalisco

- 3 training rooms
- 1 demo room

Demonstration Center in Ciudad Juarez, Chihuahua

- 1 training room
- 1 demo room

Demonstration Center in Queretaro, Queretaro

- 3 training rooms
- 1 auditorium
- 1 demo room

Demonstration Center in Tijuana, Baja California

- 1 training room
- 1 demo room

AZ Office in Mesa, Arizona

Demonstration Center and Warehouse in El Paso, Texas

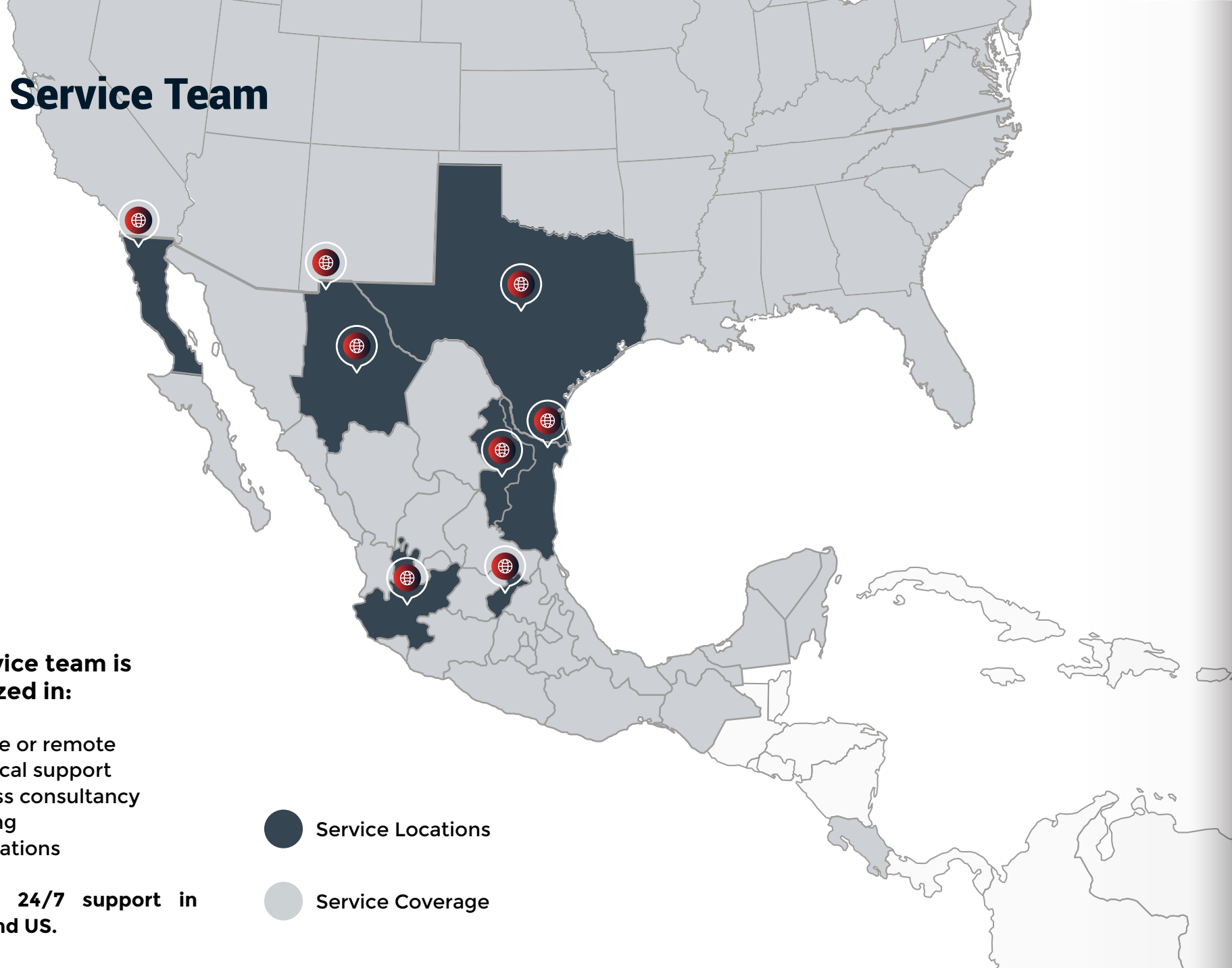
Our personalized service has made possible to gain customers and suppliers trust, exceeding their expectations.

Our portfolio includes only premium brands, also we provide all the technical support for our customers including spare parts distribution. SMarTsol team will provide you global best practices of the industry at a local level.





# Field Service Team



## Our service team is specialized in:

- On-site or remote technical support
- Process consultancy
- Training
- Applications

Providing 24/7 support in Mexico and US.

● Service Locations

● Service Coverage

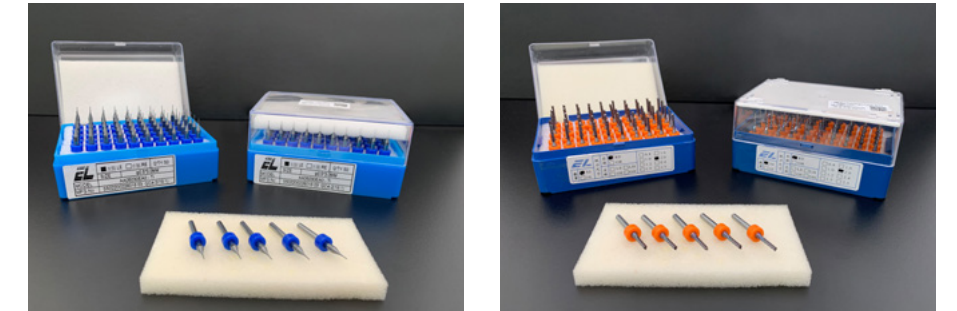


## Leader on Routers Machines.

*Best in Class Speed and High Precision.*



Variety of Machine configurations and capacity to handle from small up to big boards.





**SMARTSOL**  
TECHNOLOGIES

## Automation and Dispensing Robots.

### Precision Assembly.

#### Features:

- High speed: max jetting speed 500 points/S
- High precision: min dispensing amount 0.1nl
- Min dispensing dot: Dia 0.1 mm
- Min dispensing line width: 0.15 mm
- Closed loop weighing system offsets
- Inline design and iron casting structure
- Non-contact auto laser measuring height
- CCD auto vision system
- Auto nozzle cleaning



Cleaning Calibrating System



Twin Rail



Piezoelectric Valve



Jet Valve



Auger Valve



Pneumatic Micro Injection



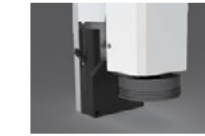
Heating Controller



Wire Feeding Device



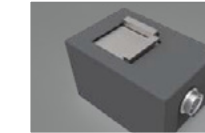
Pressure Sensor



Visual Inspection



Displacement measurement sensor



Tip Position Corrective Device



Nitrogen Concentration Analyzer



Nitrogen Generator



Fume Extractor



Tip Cleaner

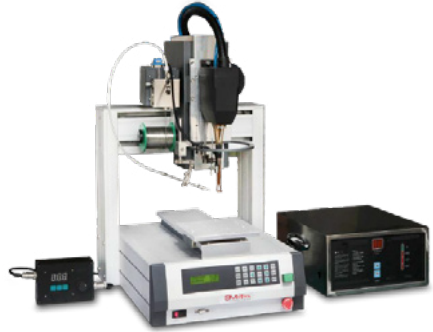


## Automation & Soldering Systems.





## Automation, Hotbar, Screwing and Resistance Welding.



Resistance Welding



**Hotbar Robot**  
Automatic loading and unloading  
Closed-loop control for pressure and temperature



Hotbar Soldering Robot



Air-Blowing Type Screwing Robot

## Smart Soldering Critical Rework ESD Control Fume Exhaust.



Hand identification and auto start-stop



Plug-Type soldering tip

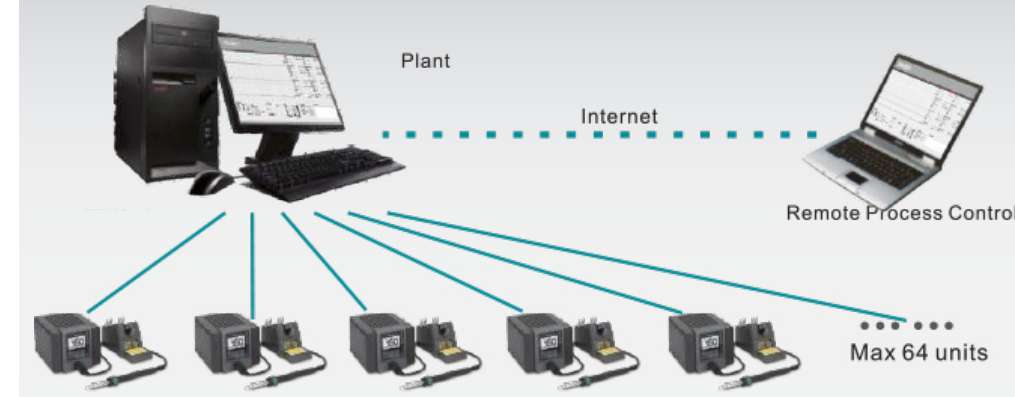


Plug-Type heating element



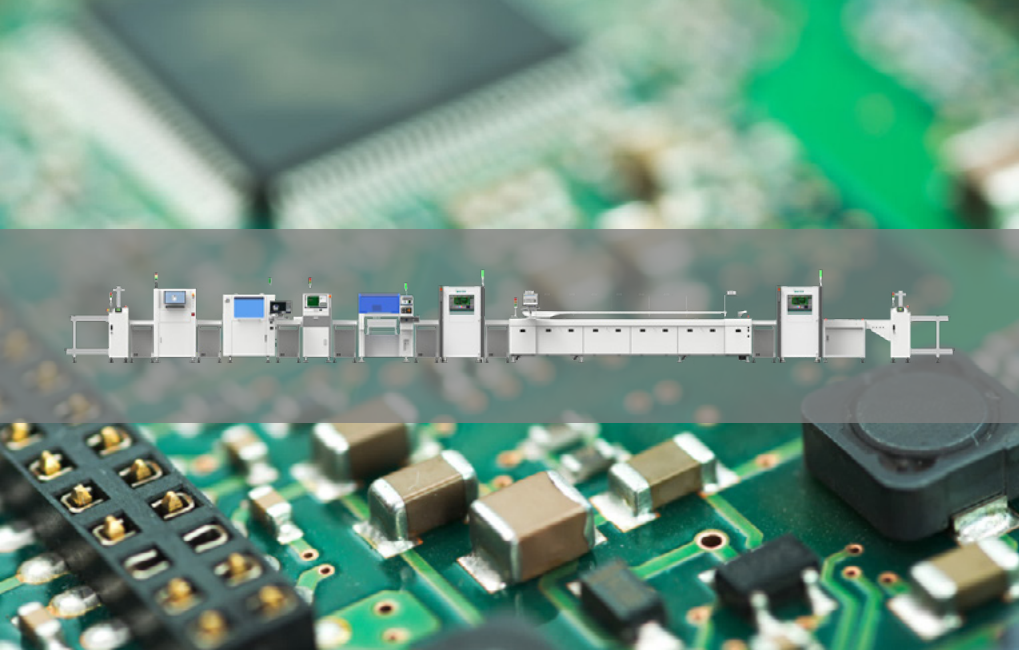
Rework Station

- Soft Hot Air
- Balanced Heat
- Smart Power
- Constant Flow
- Zone Heating
- Auto Identification
- Touch Switch
- Pre-set Temperature
- Power-Off Protection
- ESD 检测
- ESD Test
- Auto Sleeping
- Low Power Consumption
- Auto Shutdown
- Auto Shutdown
- °C/°F Interchangeable



**Network management**  
Perfect combination of data trace and process control





**Selective Soldering.**  
*Highest Flexibility and Efficiency Total Solution.*



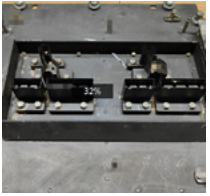
**All-in-One Compact**



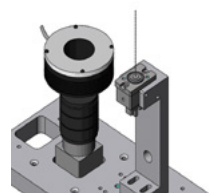
**Basic InLine System**



**Mass Production Solution**



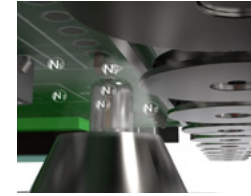
**Independent Z-Direction**



**Micro Drop Jet Fluxer**



**Nitrogen Preheat**



**Multi-Wave**

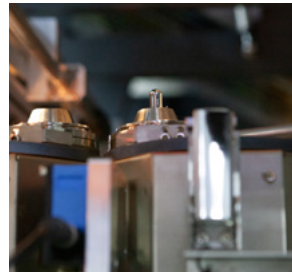
**Modular Soldering System**



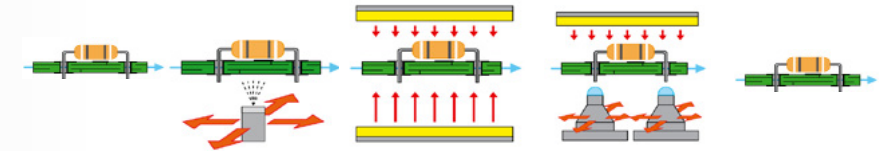
**Flux Jetting Module**



**Preheating Module**



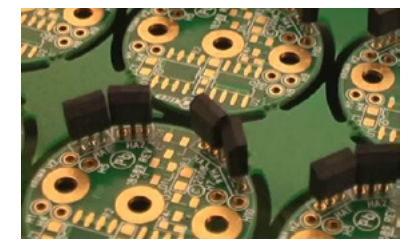
**Soldering Module**



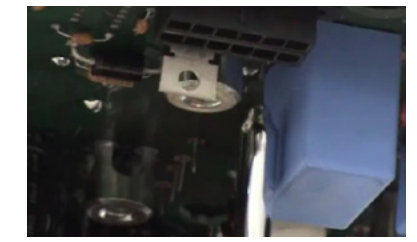
**Board-in Flux Jetting Preheat Soldering Board-out**



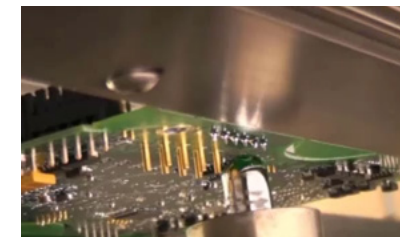
**Difficult components with wave soldering**



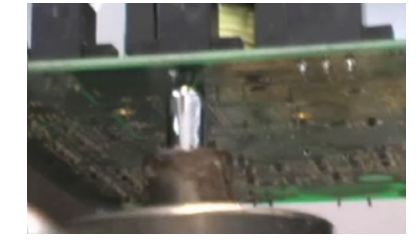
**The through-hole component requires more heat**



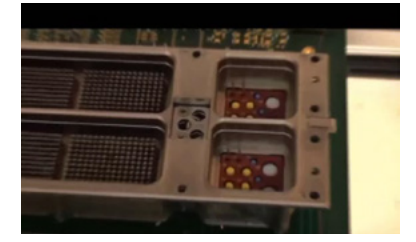
**Special nozzle for high component**



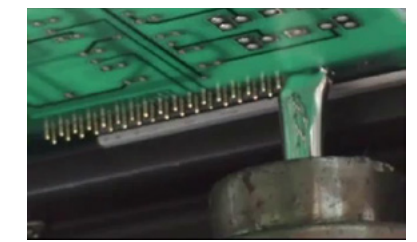
**Long lead pin connectors**



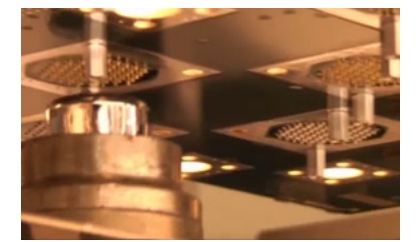
**Capacitors and transformers or other components**



**High-quality and High-speed soldering for large connectors**

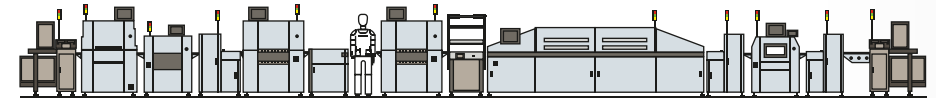


**High-quality soldering for connectors**



**Large aviation connectors**





## Board handling & Automation.

- SMEMA Interface
- Auto and/or manual width adjustment
- Touch screen and/or button type operation
- Buzzer, SMEMA Interface LED Display
- Compact Design
- Durable Structure ESD cover (optional)
- Available in several sizes (width and length)
- Customized automation equipment.

MAGAZINE TYPE	L	W	R	MAX. PCB SIZE		MIN. PCB SIZE	
				L	W	L	W
S(097)	355	320	570	330	250	50	50
Y(096)	460	400	575	440	330	50	65
L(093)	535	460	570	530	375	50	60
XL(100)	535	530	575	530	460	50	100
2XL(101)	620	530	575	610	460	50	100
SW(099)	620	320	575	600	236	50	60



## Depanelizing Solutions.

*Automatic control.  
Fast and high precision.*

This line it can be integrated with the production line: the gantry structure and flight light path are designed to facilitate access to the production line.

According to the production requirements, the special loading and unloading and in-line system can be equipped to realize the full automation of production and greatly improve the production efficiency. It is specially designed for FPC and PCB processing.



**Online laser Cutting Machine (UV / GREEN LASER)**

It can be integrated with the production line: the gantry structure and flight light path are designed to facilitate access to the production line.



**Laser cutting machine. (Single/Double Platform)**

Designed for FPC And PCB Processing. Special loading and unloading and in-line system can be equipped to realize the full automation line.



**Vision Automatic Cutting Machine**

Can simultaneously perform sub-board cutting and circuit board placement, equipped with high-speed CCD visual automatic correction system.



## PCB Cleaning Machine.

*Innovative Solutions of PCB Cleaning for removal of ESD & Particles.*

Before cleaning the object, cleaning machine separates particles from the object electrically through anti-static bar, and then specialized high polymer cleaning roller removes dusts and particles.

**Adhesive roll removes contaminants on the surface of cleaning roller in real-time.**

**Features:**

- The touch screen control interface, easy operation
- The ion wind wand quickly remove static PCB surface
- By pass mode provided
- Display function with counting function and the numerical control rate
- Dust sticky paper roll replacement cycle reminding function
- With vacuum adsorption function & SMEMA compatible and more.



**PCB Cleaning Machine**

**PCB Double-sided Cleaning Machine**



## Marking Solutions.

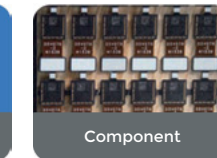
**Laser marking machine**



Full-automatic control. Allowed to choose O2 (UV/FAYB) laser marking system, XY precise platform, CCD+MARK precise position.

**Options:**

- UV laser marking machine
- UV flip laser marking machine
- Fiber laser marking machine
- Fiber or green laser marking machine
- CO2 laser marking machine
- CO2 flip laser marking machine

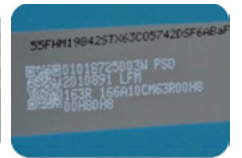


**Printing machine**



Fully automatic control. Printing system with XY precision positioning and CCD+MARK precise positioning.

- The printing position accuracy is less than 0.02mm.
- Supportprinting different types of materials such as PCB, FPC, and metal shield.
- Rotate multiple angles for printing.







# SMARTSOL TECHNOLOGIES AMERICA



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