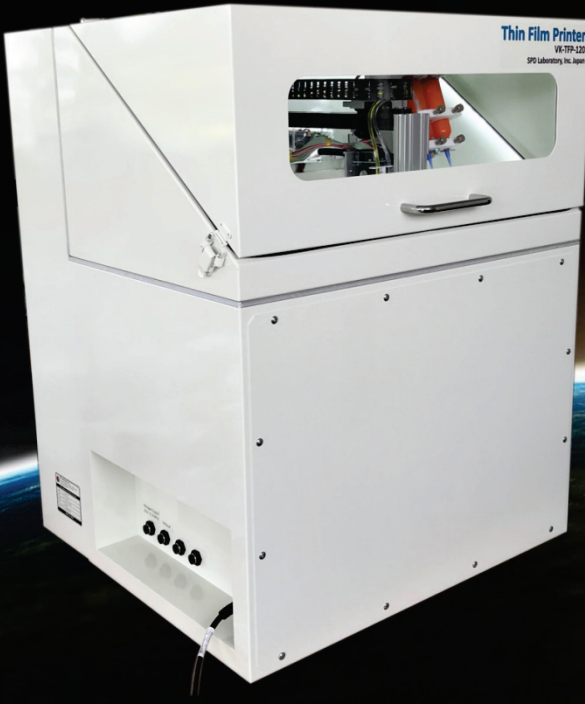




Thin Film Printer

Model: VK-TFP-120

Ideal Solution For Perovskite Solar Cell Preparation without a Glovebox



- Four piezoelectric-inkjet-print heads for functional thin film preparation .
- Two coating units for paste dispensing such as conducting carbon paste, silver paste, and cell encapsulating resin.
- Fully automatic chemical feeding system with purging draining and cleaning tasks.
- Compatible with wide range of solvents .
- Entire process performed under an inert gas environment.

Specifications

Number of Printing Heads	4
Type of Print Head	Piezoelectric 128 nozzle, 80 pl/droplet, 16.5 mm print width
Number of Dispensing Nozzles	2 (φ 0.2 mm to 1 mm)
Maximum Printable Area	120 mm × 120 mm
Substrate Temperature	RT – 155 °C
Printing Environment	Complete process perform in a nitrogen purge airtight chamber
Machine Control Method	Through the USB port using PC Software
Raw Materials	Up to 4 different chemical solutions for inkjet printing Up to 2 paste for dispense coating
Raw Material Inserting Method	Filled in to 60 ml Syringes
Dimensions	L 600 × W 600 × H 760 mm
Weight	50 kg

Special Features

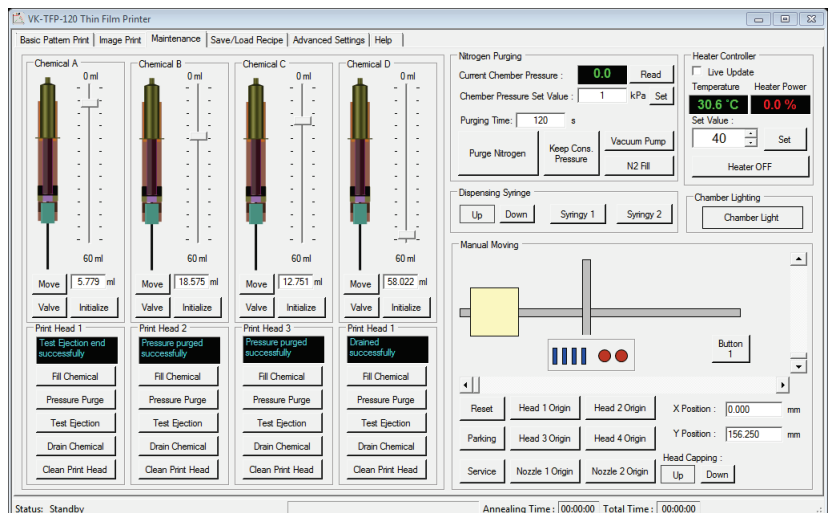
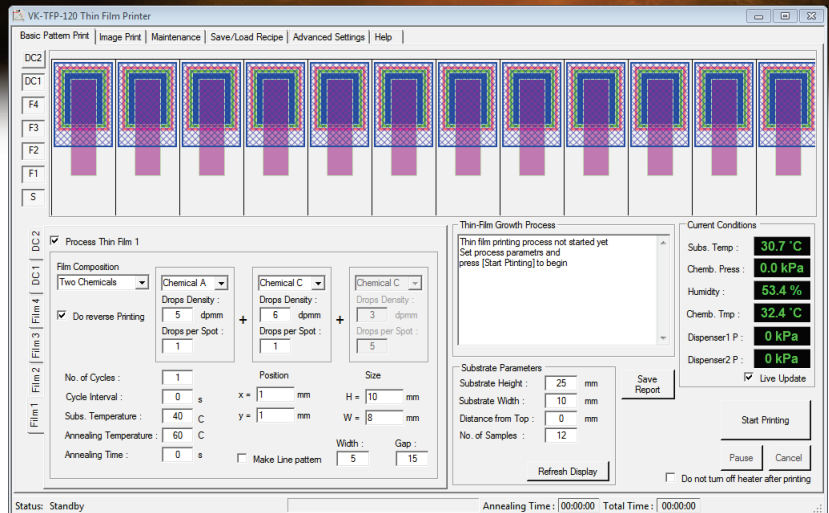
Capability of making single or combined chemical film :
Up to four different chemical solutions can be utilized to make single chemical or combined chemicals thin film formation by ink jet printing technique.
Example: $\text{CH}_3\text{NH}_3\text{I} + \text{PbCl}_2$, Spiro-OMeTAD

Capability of Paste Dispensing for Film Formation :
Up to two different thick coatings can be dispensed with a single nozzle (Φ = 0.2 - 1 mm). Example: Conducting carbon past, Encapsulating resin , Ag paste, etc.

Automatic Loading/Purging Function :
Machine will automatically pump raw chemical solutions to the printing heads and remove air from the system.

Automatic Draining Function :
This function will pump raw chemicals safely back to the storage syringes.

Automatic Cleaning Function :
This function automatically cleans print heads and all tubing using a given chemical solution.



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