

Xennia Sinopia

High-precision materials deposition system

The Xennia Sinopia high accuracy XY materials deposition system is fully customisable for development, prototyping or production duties in industrial or clean-room environments, allowing multiple fluids to be deposited with state-of-the-art precision.

Ideal for fluid development and precision deposition

The Xennia Sinopia is the ultimate fluid development and precision deposition tool for printed electronics, biotechnology/ pharmaceutical or other fluid development applications. With a range of substrate sizes, high accuracy and multiple fluid capability, the Sinopia provides developers with a powerful and flexible tool.

Powerful performance with flexible options

The Xennia Sinopia is built around a state-of-the-art motion stage with solid granite base, high performance air bearings and linear motors guaranteeing repeatability of $\pm 1 \mu\text{m}$. The Sinopia is available with motion stage sizes ranging from 350 x 350 mm to 1600 x 1200 mm. Most types of industrial piezo printhead can be accommodated in configurations incorporating up to eight printheads, enabling deposition of a large number of different fluids. Individual fluid control systems for each printhead enable multiple fluids to be jetted under optimal conditions.

Each Sinopia system can be individually configured to meet application specific requirements. Systems can be supplied with a wide range of options including a programmable Z axis, heated and/or vacuum substrate platens, integrated UV lamp, alignment camera system and drop watching system.

Intuitive printing with detailed control

Powerful XenJet print software is integrated into the Sinopia, allowing simple one click operation of the printer, or engineering level access to the detailed operation of the system as required. Optional software upgrades deliver the ability to print variable dat and process DXF/Gerber file formats.

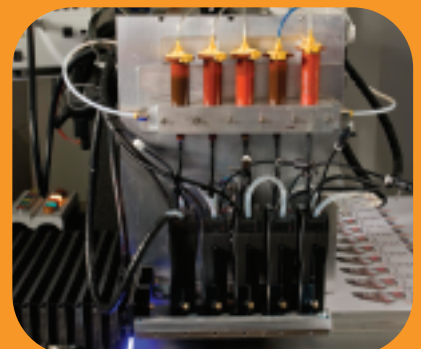
Cleanroom compliant

The Xennia Sinopia can be supplied in conformance with clean-room requirements down to Class 100 (ISO 5) classification.

Application development support

Xennia offers a full application development and support service, including fluid formulation and process optimisation along with inkjet training, to help customers successfully implement inkjet technology into their production process.

- Printed electronics
- Displays and lighting
- Photovoltaics



Xennia Sinopia

Specifications

Fluid type	Wide range of aqueous, solvent and UV fluids
Printheads	Up to 8 (Most types of industrial piezo printheads)
Printable area	350 x 350 mm up to 1600 x 1200 mm
Motion resolution	0.1 μm (XY)
Repeatability	$\pm 1 \mu\text{m}$
Print speed	Up to 300 mm/s (11.8 in/s)
XY positioning	Linear motor, air bearings on granite motion stage
Z positioning	Stepper motor
Fluid control	Combined industrial and low volume syringe ink system (most printheads) Small volume recirculating ink management system (recirculating printheads)
Printhead maintenance	Manual purge and wipe
Software	XenJet print software with integrated user interface Variable data and DXF/Gerber capability available as an option
Dimensions (WxDxH)	2.1 m x 2.7 m x 2.0 m (83 in x 107 in x 79 in) (approx. for 600 x 600 mm version including guarding)
Power supply	120/230V, 50-60Hz, single phase (or three phase dependent on UV power requirement)
Clean-room compliance	Class 100 (ISO 5)
Optional accessories	Programmable Z axis Vacuum and/or heated platen Integrated UV lamp Alignment camera system Variable data capability DXF/Gerber file processing

Subject to technical modification without notice



Xennia Technology Ltd

Monroe House • Works Road • Letchworth • Hertfordshire SG6 1LN • UK
telephone: +44 (0) 1462 705220 • facsimile: +44 (0) 1462 705221 • email: enquiries@xennia.com

www.xennia.com

 **TENCATE**

Xennia is part of Royal Ten Cate

www.tencate.com