



Ultrasonic Nano Spray Coater

Brand: SONO-CELL®

Model: SNR500

Standard Features

- Bench Top ultrasonic precision spray coater is mainly used for research and development. Ultrasonic spray coating technology can produce highly uniform nano-scale thin film coatings for a variety of applications.
- Sonaer's ultrasonic spray nozzle, with a variety of frequencies and plume shaping attachments to suit the applications
- High efficiency spray, the material usage ratio > 95%., Spray pattern uniformity $\pm 2\%$
- Maximum spray area coverage: 500mmx500mm
- Precision Syringe Pump Liquid Dosing/Dispensing
- Full digital ultrasonic generator:
 - Sonaer's multi-DSPs closed loop control technology provides highly stable operation
 - Auto Atomization Power Adjustment (AAPA)
 - Real time operating frequency display
 - VMD Simulation based on physical properties of the medium during atomisation
- XYZ servo robot motion system [600mm(X) x 600mm(Y) x 100/200mm (Z)], maximum speed of 1000mm/s on X&Y axes.
- Self-cleaning ultrasonic nozzle prevents clogging.
- All system components are compatible with the typical solvents such as; THF, acetone, DMAC, toluene, chloroform, and polymers such as; urethanes, polycarbonates, silicones, styrene.
- Exhaust system interface: ready for connecting to exhaust system of workshop or lab. HEPA filter facility.
- Integrated control of the nozzle, liquid delivery, and motion system by full color touch panel with user friendly interface.
- Built in PC and full color HMI with touch screen and keyboard
- User friendly control software for process parameter setting
- Dimensions (cm): 160 W x 120 D x 175 H, Weight: 350Kg (Note- Dimensions and weight may vary subject to the level of customization)
- Power input: 220-240VAC 50/60Hz, single phase, 16A
- Ethernet connection and Camera for remote process monitoring and record keeping or troubleshooting
- Laser targeting for coating position

Optional Features

- Multiple nozzle configurations for layering of different chemistries and ease of setup for multiple spray applications.
- Continuous Flow Syringe Pump provides continuous liquid delivery for extended operation
- Ultrasonic Dispersion: A variety of methods to prevent agglomerating and depositing are available to suit the application
- Customized substrate platform, Heated (Max 250°C), with or without Vacuum Chuck
- Gas Tight Enclosure