

MODEL 3DN-300

The 3Dn-300 dispensing tool from nScript gives you a unique combination of precision and flexibility. The 3Dn-300 is up to your challenge; it can provide you with consistent dispensing for simple but routine runs, or meet the demands of the most difficult 3D dispense applications. And with its cast aluminum or granite base, precision frame system, and highly accurate stages, the 3Dn-300 enjoys the best X/Y/Z accuracy in the industry.



X/Y Stage Type	AGS1000
X/Y Travel	300 mm × 300 mm
X/Y Accuracy	±5µm
X/Y Repeatability	±2µm
X/Y Resolution	0.1µm
Max X/Y Travel Speed	500 mm/s
Max X/Y Linear Acceleration	2g-20 m/s² (no-load)
Z Stage Type	ATS115
Z Travel	100mm
Z Accuracy	±6µm
Z Repeatability	±1µm
Z Resolution	0.5µm
Max Z Travel Speed	200 mm/s

Standard Equipment

Computer and Software

- Pentium 4™ with CD-ROM Drive
- Windows XP™ Operating System
- 17" LCD Monitor and Video Monitor
- Ethernet Network Port and RS232

Conveyor System

- O-ring style or belt driven conveyer
- SMEMA-compatible
- PCB, JEDEC tray or auer-style boat handling

Frame and Base

- Motion Base: Aluminum base, risers, and bridge
- Machine Frame: Welded Steel

I/O

- Digital I/O: 8 inputs, 8 outputs PSO†
- Analog I/O: 4 inputs (12-bit), 2 outputs (16-bit)

Installation Requirements

- Air Supply – 80 PSI to 120 PSI
- Power – 120V at 30A

Available Options

Conformal Mapping

- Laser sensor for normal and extended working distance
- Target Mapping – z-data of specific points on a given substrate
- Grid Mapping – coplanarity surface measurement over a symmetric grid
- Path Mapping – provides z-data along a custom predefined path

Vision System

- Digital camera link and firewire cameras
- Fixed focal length telecentric or high-magnification lenses
- Inspection for pattern matching or part presence
- Detect and measure colorimetric/monochromatic variations
- 2D and 3D complex feature gauging/measurement
- Inspection for aesthetic part variation

Dispense Pump

- Smart Pump™ 20 – 20 picoliter control
- Smart Pump™ 100 – 100 picoliter control
 - Dynamic flow control allows for adjustment as material properties change over time
 - Precise starting and stopping without tailing; tight volumetric control
- Positive Displacement Pump – nL control and cluster placement
- Air Pressure Pump – nL control and high volume placement
- Micro Mixer Pump – Real time 3 part mixing

Optional Features

- Ultrasonic needle cleaner
- Substrate heating
- Pre-heat and post-heat
- Free-standing loaders/unloaders
- Exhaust port

† The PSO (Position Synchronized Output) option provides versatile, on-the-fly synchronization of a laser's pulse and power output with XYZ motion.



Precise. Conformal. Reconfigurable.

nScript, Inc. • 12151 Research Pkwy, Ste 150 • Orlando, FL 32826 • Phone: 407-275-4720 • Fax: 407-275-4759
Visit us online at www.nscriptinc.com or email us at info@nscriptinc.com.