

3Dn-Tabletop™

The 3Dn Series Factory in a Tool (FiT) offers cutting-edge technology, with a powerful and robust high-speed, high precision motion platform tailored for 3D manufacturing. Its versatility surpasses conventional standards by seamlessly producing complete products rather than just individual parts.

This user-configurable system streamlines the transition from CAD designs to fully functional electronic products. The system effectively manages and synchronizes multiple tool heads either in series or in parallel, ensuring seamless operation and unparalleled efficiency. Its capablities include:

- 3D printing structures and housings using our nFD™ material extrusion toolhead
- Precision microdispensing and embedding of conductive traces with our Smartpump[™] toolhead (with pentip size as small as 10 µm, printed lines 20 µm, and dots as small as 50 µm)
- Precise placement of electronic components with our PNP™ toolhead
- Micro-milling of fine surface features with our nMill™ toolhead

X/Y Accuracy X/Y Bidirectional Repeatability X/Y Maximum Speed X/Y Travel Range X/Y Resolution	± 10 μm ± 1 μm 300 mm/s 300 x 150 mr 100 nm
Z Accuracy	± 6 µm
Z Bidirectional Repeatability	± 1 μm 50 mm/s
Z Maximum Speed	
Z Travel Range	100 mm
Z Resolution	100 nm



Dimensions: 97 x 92 x 122 cm

Weight: 500 lbs/227 kg

Power: Single Phase; 120 VAC

Features:

3D manufacturing configuration:

Smart Pump™, nFD™, nFD-HT™, nMill™, and nPnP360™ for FiT solutions

- 10,000+ materials
- All operations set in CAD, executed on single system, through nStudio, nScrypt's inhouse UI
- 3/4/5/6 multi-axis motion platforms with automatic tool changes
- Precision can achieve submicron for accurate and repeatable results









