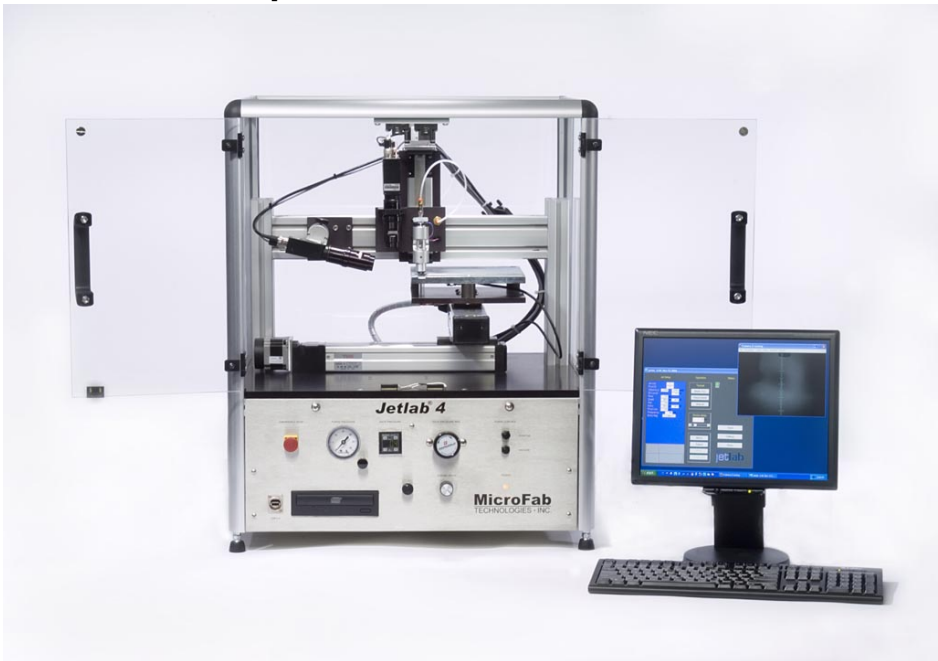


Product Description



In response to our customers’ requests for a low-cost tool to allow exploratory microdispensing investigations, MicroFab is pleased to offer the jetlab® 4. The newest member of our highly successful jetlab® family, currently in use in 23 countries worldwide, leans heavily on the successes of prior generations. By carefully considering the performance and budget requirements of laboratories exploring ink jet as a solution to their deposition challenges, jetlab® 4 provides a cost effective work station for research purposes.

Standard Features

Software controlled X-Y positioning; 160x120 mm<sup>2</sup> substrate size & print area; manual Z axis control of printhead height; Print-on-the-Fly (both axes simultaneously) or Point-to-Point printing; raster & vector printing modes; arbitrary printing resolution and direction; complex print job definition through scripting; software based rotation correction; CCD camera for drop observation mounted at 15°, allowing drop impact visualization and coarse substrate alignment; manual pneumatics controls; JetDrive Drive Electronics unit with bipolar and arbitrary waveform modes, and single and burst modes.

Available Options

CCD camera for substrate observation; heated workpiece holder and printheads; motorized Z-stage; drop and fiducial image analysis routines; electronic pressure control; HEPA filter & blower; 21x26 cm substrate size (4xl); improved positioning accuracy (4xl-A); integrated ultra-balance for calibration (4xl-B); computer controlled pressure/vacuum regulator.

Specifications

	Subsystem	Standard	Optional
	X-Y travel	160 X 120 mm printable area	210 X 260 mm printable area (4xl)
	Velocity / Acceleration	50 mm/s / 1500 mm/s <sup>2</sup>	
	Accuracy / Repeatability	±30µm unidirectional / ±20µm	±25µm / ±5µm (4xl-A)
Panel	PC; monitor; keyboard and mouse; XP Pro; USB 2.0 &	Ethernet ports; DVDRW	

Precise pressure/vacuum regulator with digital readout for jet operation;
Electro pneumatic pressure/vacuum regulator and three state pneumatics
Horizontal camera at 15V for jet setup, front alignment, inspection, alignment, drop of a fiducial image analysis software
Printheads & Jetting Devices Select one or more
(not included in base price) from PH-41, PH-41H & PH-47
Mounts all MicroFab standard printheads; Interchangeable
Printing, repetition with offset, inverts, maintenance, & TTL controls; arbitrary printing resolution and direction
Print Modes Print-on-the-Fly and Point-to-Point
Jet Drive Electronics Jet Drive™ III: bipolar and arb mode

**Additional Information (PDF)**

- [Brochure](#)
- [Detailed Specifications](#)
- Dimensions & Weight
- CAD Machine Views