Flex 5X

- High–precision additive deposition system with 5–axis motion for 3D printing of diverse functional materials.
- Print module accommodates material viscosity from 0.7 to 500 cP; printable feature sizes: 10 µm – 200 µm.
- High–resolution motion stages and digital vision alignment achieve print accuracy within ±10 µm.
- Aerosol Jet KEWA software synchro–nizes motion, vision and printing operations.
- Powermill™ and VMTools™ CADCAM plugins support toolpath generation.



FLEX 5X BASE SYSTEM INCLUDES	
Ultrasonic atomizer cassette	Capable of handling liquid materials viscosities to 0.7–15 cP
Pneumatic atomizer cassette	Capable of handling liquid material with viscosities of 1 to 500 cP with mix and stirring
Fine feature deposition head	Set of 100, 150, 200 and 300 mm nozzles with printed features ranging from 10 mm to 200 mm
Divert shutter	Used to divert the aerosol stream between the deposition head and the substrate. A mechanical shutter is also provided to meet specific needs
Process control module (PCM)	The PCM manages the various flows required for the pneumatic and ultrasonic deposition processes as well as the subsystem interfaces
KEWA interface module (KIM)	The KIM manages deposition control utilities including temperature, shuttering, and interface between KEWA software and the PCM
Vision Modules	Digital process viewing and alignment allows real–time viewing of the printing process and alignment to part fiducials
Axes	5 axis system with X, Y table, rotational Theta, Phi, and Z overhead
Software	Powermill, VMTools (AutoCAD plug–in), and KEWA operating system
Build volume	200 x 300 x 200 mm

OPTIONS INCLUDE	DESCRIPTION
Additional nozzles	Interchangeable wide nozzle print heads: 0.635 mm, 1.0 mm round, and 3 mm slotted
3–axis printing platen	Interchangeable, 350 mm X 250 mm, heated vacuum platen for 3 axis printing
Ultraviolet (UV) cure module	UV LED module with intensity of 9,200 mW/cm2 and wavelength 385 nm
Infrared (IR) cure module	Fiber coupled diode laser @ 2Watts and 853 nm. Inert gas shroud for curing oxygen sensitive materials.

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