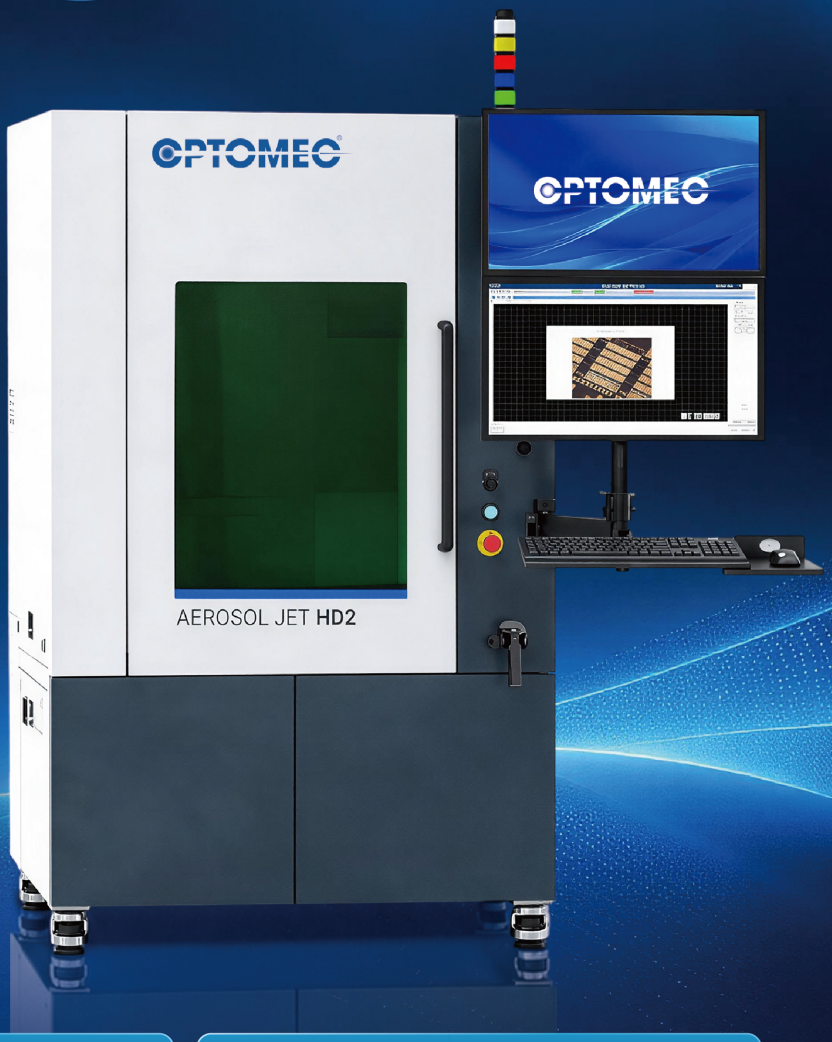
HD2 3.5X

- A high–precision additive deposition system with inline and standalone production automation.
- Print module supports diverse off–the–shelf materials; 3–axis print volume 300 × 300 × 100 mm, feature sizes 10—200 mm.
- High–resolution linear stages & digital vision alignment deliver ±10 mm print accuracy and ±2 mm repeatability.
- Integrated 4th indexing axis rotates parts at 3 arc min accuracy and ±15 arcsec repeatability.
- KEWB™ sequencer: GUI–based full system control with Powermill™ & VMTools™ CADCAM plugin integration.



HD2 3.5X BASE SYSTEM	
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	Cognex digital process viewing and alignment allows real–time viewing of the printing process and alignment to part fiducials
Axes	3–axis system with Y table and X,Z overhead. Additional rotary indexing table for aligning to sidewalls of chips and assembles
Software	Powermill and VMTools (AutoCAD plug–in) for toolpath generation and KEWB for system operation
Build volume	200 x 300 x 200 mm

ADDITIONL MODULES INCLUDE	DESCRIPTION
Wide feature print head package	Interchangeable wide nozzle print heads: 0.635 mm, 1.0 mm round, and 3 mm slotted. Extends printed feature size range from 10–200 micron to 10–2800 microns
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. Typically used for insitu tacking and curing of UV curable materials
Infrared (IR) cure module	Fiber coupled diode laser @ 2Watts and 853 nm. Inert gas shroud for curing oxygen sensitive materials. Typically used for sintering oxygen sensitive metal inks like copper or sintering on temperature sensitive substrates

sales@optomec.com | www.optomec.com