

PRINTER COMPARISON TABLE

MACHINE	BUILD VOLUME	SPEED	ACCURACY	RESOLUTION	RESIN & COST PER PART	COMMENTS
PHOTOCENTRIC LC OPUS	LARGE 370mm x 174mm x 200mm Large volume: x 4 bigger than Form3	VERY FAST Capable of printing 22 dental models at 100µm in 45 minutes	GOOD XY resolution of 81µm provides scanned data accuracy of ≥95% at <100µm and ≥70% at <50 µm	XY RESOLUTION Pixel pitch 81µm Z resolution 25µm,50µm, 100µm and for some resins 250µm and 350µm	LOW COST PER PART Dedicated Photocentric and open-source materials. As a manufacturer Photocentric can offer bulk discounts on large volumes.	LOW RUNNING COSTS Excellent desktop option for small to medium volume production Cleaning with environmentally friendly material (no IPA) Long screen and vat life
FORMLABS FORM 3	SMALL 145mm x 145mm x 185mm	VERY SLOW Capable of printing 8 dental at 100µm in 2 hours	GOOD	XY RESOLUTION Spot size 85µm With software modification 25µm	HIGH COST PER PART A closed system will only work with Formlabs materials.	HIGH RUNNING COSTS Expensive resins and expensive consumables Vat must be changed regularly Cleaning with IPA rather than environmentally friendly materials
FORMLABS FORM 3L	LARGE 335mm x 200mm x 300mm	SLOW Capable of printing 24 dental models at 100µm for 2.5 hours	GOOD Accuracy Range ± 100µm Surface in Accuracy Range 94% ± 8%	XY RESOLUTION Spot size 85µm With software modification 25µm	HIGH COST PER PART A closed system will only work with Formlabs materials	HIGH RUNNING COSTS Expensive resins and expensive consumables Vat must be changed regularly Cleaning with IPA rather than environmentally friendly materials
SPRINTRAY MOONRAY PRO 95	SMALL 182mm x 102mm x 200mm	SLOW Capable of printing 8 dental models at 100µm in 50 minutes	Data not available	XY RESOLUTION 95µm	HIGH COST PER PART A closed system will only work with SprintRay materials. (Subscription model for 3rd party resins)	HIGH RUNNING COSTS Limited build volume with expensive resins
ASIGA MAX 385 UV	SMALL 119mm x 67mm x 75mm	VERY SLOW Capable of printing 2 dental models (flat) or 6 dental models (vertical) at 100µm in 45 minutes	Data not available	XY RESOLUTION Pixel Pitch 62µm	HIGH COST PER PART Open-source materials	HIGH RUNNING COSTS A small build volume combined with expensive consumables. Vat must be changed regularly Software is difficult to use