

Automatic Laser Exposer & Scanning System: Model "ALESS"

Specialise Products Private Limited is an Indian Original Design Manufacturer (ODM), who Conceptualise, Design and Manufacture customized machines as per customer's requirement.

We already Conceptualised, Designed and Manufactured Laser Assisted 3D Bio Printer (**International Patent Applied**), 3D Direct printer (no need for Filament, directly input your materials in Powder/Granules OR Semisolid form), Liquid (Drop on Demand) 3D Printer, Automatic Laser Exposure and Scanning System (ALESS) to name a few. We are always eager to understand customer's pain points and provide customise solutions which are not available in the market.

Our "Automatic Laser Exposure & Scanning System Model ALESS" is designed for automatically control the Laser exposure location as well as Laser Exposure time. Customer can use "Well Plate and Petri Dish" for the sample and it can be exposed to Laser beam for predefined time and location.



Variable Power Density Laser Exposer System: Model # ALESS

Technical Specifications

Parameters	Specifications	Option				
Well Plates Compatibility	96 / 24 / 12	Optional: Petri Dish 60 mm / 35 mm				
Well Plate Size	127 x 85 mm	Optional: 60 mm / 35 mm				
Well Plate Diameter	Well Plate	Exposure Diameter (mm)	Depth (mm)	Petri Dish Diameter	Exposure Diameter (mm)	Depth (mm)
	96 well plate	7.0	11.3	60mm	52.8	34.8
	24 well plate	16.5	17.0	35mm	6.3	5.8
	12 well plate	22.8	17.0			
Bed Size	200 mm x 150 mm with arrangement for fixed location for Well Plate	Optional: Additional similar Arrangement for Petri Dish				
Fiber Coupled Laser	Arrangement to insert the Fiber Cable of the Laser	Laser will be arranged by customer				
Variable Collimator	~6-20 mm @ working distance ~10cm	Optional: Additional collimators for Petri Dish				
Laser Options	1064 nm / 915 nm / 850 nm / 750 nm / 638 nm / 532 nm / 450 nm	Power from 10 mW to 2 W (higher power option available)				
Laser Beam movement Accuracy	± 0.5 mm					
Laser Exposure Time	3 to 10 minutes	User Selectable				
Laser Exposure to Well	Perpendicular: Laser Beam Diameter should be covering each well diameter (one at a time) containing the cells at the bottom and filled with 100-200 microliters of media (max 60% of well height)	Optional: Same for Petri Dish				
Control	Through Built in Touch Screen	External Computer is not needed				
User's Input	Number of Wells: 96/24/12 Exposure Time: 3 to 10 minutes	Optional: Petri Dish Diameter				
Machine size & Weight	250x250x250 mm & 15 kg					
Power requirements	230V/50Hz					