增材制造

工业级曝光光机

Industrial-Grade Optical Engine



采用UV LED或激光光源为照明光源，DLP芯片实现图像调制，利用高精度成像镜头实现大尺寸、高精度和低畸变曝光，也可采用多台拼接的方式实现更大尺寸的曝光，本产品可用于树脂，陶瓷和弹性体材料的3D打印。

This product adopts UV LED or laser as the illumination light source, utilizes a DLP chip for image modulation, and achieves large-format, high-precision, and low-distortion exposure through high-precision imaging lenses. Larger exposure areas can be further realized by means of multi-unit splicing. It is applicable to 3D printing of resin, ceramic, and elastomer materials.

产品特点

采用工业设计标准，系统温度输出功率实时监测，超强稳定性；
Industrial-grade design, features real-time system temperature and output power monitoring for exceptional stability;

全封闭光路设计，预防了材料挥发带来的售后问题；
Hermetically sealed optical path, prevents post-sale issues caused by material volatilization;

超小体积，更易实现高精度多画幅拼接；
Ultra-compact architecture, enables high-precision multi-engines tiling within minimal space;

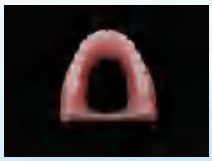
高帧内对比度，以及边缘锯齿图像处理算法，使打印轮廓更清晰、细腻。
Advanced image processing, delivers superior intra-frame contrast and anti-aliasing for razor-sharp print.

应用场景

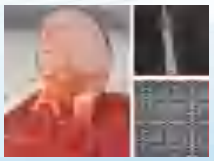
陶瓷打印
Ceramic Printing



齿科
Dental Aligner Mold Printing



微纳打印
Micro-nano Printing



弹性体材料
Elastomer Material



产品参数

型号Model	LTP-sUHD-Px
技术平台Platform	DLP650TE
分辨率Resolution	3840×2160 XPR
输出功率Output Power	405nm@16W
打印精度Printing Resolution	25μm 、50μm 、75μm 、100μm 、120μm
打印画幅Image Size	96mm×54mm@D130mm 192mm×108mm@D223mm 288mm×162mm@D345mm 384mm×216mm@D453mm 450mm×324mm@D479mm
偏移量Offset	0%
对比度Contrast(ANSI)	>1000:1
均匀性Uniformity	>90%
畸变Distortion	<0.1%
供电Power Supply	24V/2A
输入接口Input Interface	HDMI*1:USB*1
通信接口I/O	RS485
尺寸Dimension	240mm ×159mm× 247mm

大画幅拼接光机
Static-stacked Optical Engine



	参数Parameter	LTP-sUHD-Mx	备注
光机 Optical Engine	DLP平台DLP Type	DLP650TE	
	分辨率Resolution	7680×4320	XPR
	光源Light Source	激光405nm光纤耦合 Laser 405nm fiber coupling	
	打印精度Print Resolution	50μm	
	单台打印画幅Image Size/Unit	192mm×108mm	
	功率密度Power Density	90mW/cm²	
	拼接台数Number of tiling units	4	可定义拼接台数 The number of tiling can be customized
	拼接画幅Stitched Frames	384mm×216mm	可根据需求设定融合区域宽度 The width of the blending area can be set according to application
	单台曝光面功率Single Exposure Surface Power	Max.19W	按照激光器模块数量配置 Configure according to the number of laser modules
	对比度Contrast	>1000:1	ANSI
	均匀性Uniformity	>90%	Typic.13 points
	畸变Distortion	<0.1%	
	拼接精度Tiling Precision	~50μm	
	外形尺寸Dimensions	445mm×343.2mm×316.5mm	
	工作距离Working Distance	225~230mm	镜头到曝光面：225~230mm Lens to exposure surface:225~230mm
		287±2mm	载板到曝光面 Carrier board to the exposure surface
光源 Light Source	光功率Optical Power	0~50W	
	通信接口Communication Interface	RS485	
	散热方式Thermal Management	水冷散热Water Cooling	
	寿命Life Time	10000H+	
	外形尺寸Dimensions	445mm×343mm×316.5mm	

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