

KEY FEATURES & SPECIFICATIONS

- DLP® Digital Micromirror Device (DMD)
 - DLP9000 .9" WQXGA Type-A DMD
- DLP® Support Chips
 - DLPC900 Digital Controllers
- Resolution
 - 2560 x 1600 (WQXGA)
 - > 4 Million Micromirrors
- Pattern Rates
 - 1-bit: 9,500Hz
 - 8-bit: 250Hz
 - 8-bit Grayscale Video: 60Hz
- 2 Configurable I/O triggers for synchronization with cameras and other external devices
- USB 1.1 / HDMI / DisplayPort
- 4 Modes of Operation
 - Video
 - Pattern on the fly
 - Prestored pattern
 - Video pattern
- Compatible with all Windows platforms
- Modular Optics Design
- High Uniformity, Low Distortion Optics
- Adjustable Projection Lens
- Optically Efficient from 365nm to 405nm
- Supports Multiple Mounting Options



The **3DLP9000 .9" WQXGA Light Engine** is a unique light engine designed for optical efficiency in the **365nm to 405nm** spectral range and features 4 million pixels resolution, representing the largest build area for a DLP 3D printer on the market. The 3DLP9000 offers optimal UV efficiency, world-class distortion & uniformity, focus flexibility, and mounting options to benefit applications with even the most stringent accuracy and precision requirements.

3DLP9000 CONTENTS

- DLP® LightCrafter™ 9000 Controller Board
- DLP9000 .9" WQXGA DMD & Support Chips
- Remote Board
- DLiDriver 1000 20A LED Driver Board
- Optics
- LED Block Assembly (365nm, 385nm, 405nm or 460nm)
- Linear Stage
- DLP® LightCrafter™ 9000 Firmware & Software Bundle
- Power Supply & Cable / USB Cable / HDMI Cable / DisplayPort Cable



**Optional Add-Ons: 45 Degree Mounting Bracket, Additional Linear Stage, Additional LED Block Assemblies*

3DLP9000 UV Light Engine

SPECIFICATIONS

Controller Board	DLP® LightCrafter™ 9000	
Digital Micromirror Device (DMD)	DLP9000 .9" WQXGA Type-A DMD	
Support Chips	DLPC900 Digital Controllers	
Window Coating	VIS	
Optimized Wavelength*	365nm - 460nm	
Resolution	2560 x 1600 (WQXGA)	
Micromirror Pitch	7.6µm	
Controller Software	DLP® LightCrafter™ 9000 Firmware & Software Bundle	
Controller Interface	USB 1.1 HDMI DisplayPort	
Pattern Rates	1-bit: 9,500Hz 8-bit: 250Hz 8-bit Grayscale Video: 60Hz	
USB Transfer Rate**	<0.5 fps	
On Board Memory	48MB Parallel Flash (2x)	
Binary Pattern Storage	400	
I / O Triggers	Master/Slave	
Illumination	LED (365nm, 385nm, 405nm, or 460nm)	
Projection Lens Configurations	30µm	100µm
Aspect Ratio	16:10	16:10
Throw Ratio	~1.6	~1.9
Working Distance	93mm-160mm	320mm-530mm
Projection Width	61mm-92mm	192mm-320mm
Pixel Size at Image Plane	30µm +/- 6µm	100µm +/- 25µm
Power	3W at 405nm 2.5W at 385nm 1W at 365nm	3.25W at 405nm 2.75W at 385nm 1.25W at 365nm
Distortion	0.1% at 30µm 0.2% at 24µm / 36µm	0.1% at 100µm 0.2% at 75µm / 125µm
Uniformity	>85%	>90%
ANSI Contrast	250:1	250:1
FOFO Contrast	1000:1	1000:1
Design	On-Axis, 0% Offset Telecentric Illumination Near-Telecentric Projection Modular Optics Design Projection Tube SM2 Compatible Projection Lens End Cap SM3 Compatible	
Dimensions	15in x 11in x 5.9in / 12.1lb	
Mounting Options	Light Engine Base Linear Stage Linear Stage + 45 Degree Mounting Bracket	

DLi DIGITAL LIGHT
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*Designed for use within and warranted for the specified wavelength range.
See TI DMD data sheets for all recommended operating conditions
**Typical value, can vary depending upon data compression ratio and PC used

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