

● LUXBEAM® LRS-MCX WQ

Maximize your productivity

The LRS-MCx WQ is built for scaling DLP 3D printing in professional AM machines — WQXGA resolution from the LUXBEAM® LB9500 controller, and an API that integrates with any motion controller.

4.1 MP

WQXGA PIXELS

≤ 10 W

UV OUTPUT · 405 NM

99%

POWER UNIFORMITY

NEOS

SHARED PLATFORM

● LUXBEAM® LRS-MCX WQ

Achieve maximum productivity from a single subsystem by **stacking and scrolling**

The LRS-MCx UV Series drives the performance of UV-SLA light engines. A narrow footprint lets modules stack with stitched images, and in a scrolling dynamic configuration that gives the highest throughput from a single-pass linear motion system.

● RECOMMENDED USE

- ✓ Scrolling multihead UV
- ✓ Micro 3D print



Full specification

IMAGING	
DMD Type	DLP9000X/XUV 0.9" WQXGA
Resolution	2650 × 1600 px · WQXGA
Pixel pitch	1.9–130 μm
Image size	4.8–335 × 3–209.4 mm
Image plane	14–70149 mm ²
Operation Mode	Native pixel mode, scrolling; Subpixelation SPX mode (requires LAMA Pro)
Power Uniformity	99% after Software Correction

LIGHT & POWER	
Projector Output Power	Up to 10 W (460 / 405 nm), 9 W (385 nm), 7.5 W (365 nm)
Wavelength	365–460 nm
LED Options	460 nm / 405 nm / 385 nm / 365 nm
LED Driver	Bifrost LRS; Constant flux with Optical Feedback
Power consumption	Max 300 W
Power supply	48 V DC

MECHANICAL & THERMAL	
Dimensions w/o lens	270 mm (H) x 92 mm (W) x 240 mm (L)
Total weight w/o PSU	5 kg (w/o lens)
Cooling system	Liquid Cooling
Frame Sync	External Frame Synchronization

PLATFORM & SOFTWARE	
Software	LAMA Standard (included)
Image Data	Pattern Streaming with LAMA
Communication	Ethernet
UV / IR Safety	LED Safety Switch enable/disable

ADDITIONAL SPECS	
Features	NEOS, PPC, LAMA STD, SSw

Lens options

PL LRS lens options for the MCx WQ — working distance, mounting distance, pixel pitch and native image size.

LENS MODEL	WORKING DIST.	MOUNTING DIST.	PIXEL PITCH	NATIVE IMAGE
PL LRS 0.3 HC 405nm	16 mm	268 mm	1.9 μ m	4.9 $\times$ 3 mm ²
PL LRS 0.5 HC	50 mm	268 mm	3.8 μ m	9.7 $\times$ 6.1 mm ²
PL LRS 1.0 HC	71 mm	268 mm	7.6 μ m	19.5 $\times$ 12.2 mm ²
PL LRS 2.0 HC	90 mm	269 mm	15.1 μ m	38.7 $\times$ 24.2 mm ²
PL LRS 3.6	148 mm	239 mm	28 μ m	71.7 $\times$ 44.8 mm ²
PL LRS 4.6	178 mm	279 mm	35 μ m	89.6 $\times$ 56 mm ²
PL LRS 5.3 VIS	161 mm	376 mm	40 μ m	102.4 $\times$ 64 mm ²
PL LRS 8.3	375 mm	463 mm	63 μ m	161.3 $\times$ 100.8 mm ²
PL LRS 9.9	493 mm	263 mm	75 μ m	192 $\times$ 120 mm ²
PL LRS 11.7	575 mm	667 mm	90 μ m	230.4 $\times$ 144 mm ²
PL LRS 17.2	884 mm	975 mm	130 μ m	332.8 $\times$ 208 mm ²

Working and mounting distances are nominal; consult the datasheet for tolerances under your configuration.