

● LUXBEAM® LRS-MCX-HD

Highest productivity through scrolling

The LUXBEAM® Rapid System LRS-MCx HD is designed for high-throughput 3D printing and additive manufacturing, in static or scrolling configurations using one or more projectors.

2.1 MP

NATIVE HD PIXELS

≤ 10 W

UV OUTPUT · 405 NM

50 µmSTITCHED PIXEL
PITCH**NEOS**

SHARED PLATFORM

● LUXBEAM® LRS-MCX-HD

Achieve the highest productivity from a single subsystem by **stacking and scrolling**

A narrow footprint enables the stackability of modules with stitched images down to a 50-micron pixel pitch. In a scrolling dynamic configuration that gives the highest manufacturing throughput from a single-pass linear motion system, and the liquid-cooled modules offer a long lifetime at the ultimate performance.

● RECOMMENDED USE

- ✓ Multihead scrolling systems
- ✓ High-power static configuration



Full specification

IMAGING	
DMD Type	0,95" 1080p HD (VIS/UV)
Resolution	1920 x 1080 px
Pixel pitch	2.7–187 µm
Image size	5.2–359 × 2.9–202 mm
Image plane	15–34293 mm ²
Operation Mode	Native pixel mode, scrolling; Subpixelation SPX mode (requires LAMA Pro)
Power Uniformity	>99% PPC corrected

LIGHT & POWER	
Projector Output Power	Up to 10 W (460 / 405 nm), 9 W (385 nm), 7.5 W (365 nm)
Wavelength	365–405 nm
Power density	0.01–11.91 W/cm ²
LED Options	460 nm / 405 nm / 385 nm / 365 nm
LED Driver	Bifrost S; Constant flux with Optical Feedback or Fixed Current
Power consumption	Max 300 W
Power supply	12 V DC

MECHANICAL & THERMAL	
Dimensions w/o lens	270 mm (H) x 94 mm (W) x 230 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 HD — 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	2.7 μm	5.2 × 2.9 mm ²
PL LRS 0.5 HC	50 mm	268 mm	5.4 μm	10.4 × 5.8 mm ²
PL LRS 1.0 HC	71 mm	268 mm	10.8 μm	20.7 × 11.7 mm ²
PL LRS 2.0 HC	90 mm	269 mm	21.6 μm	41.5 × 23.3 mm ²
PL LRS 3.6	148 mm	239 mm	40 μm	76.8 × 43.2 mm ²
PL LRS 4.6	178 mm	279 mm	50 μm	96 × 54 mm ²
PL LRS 5.3 VIS	161 mm	376 mm	57.2 μm	109.8 × 61.8 mm ²
PL LRS 8.3	375 mm	463 mm	90 μm	172.8 × 97.2 mm ²
PL LRS 9.9	493 mm	263 mm	107.2 μm	205.8 × 115.8 mm ²
PL LRS 11.7	575 mm	667 mm	128.6 μm	246.9 × 138.9 mm ²
PL LRS 17.2	884 mm	975 mm	187 μm	359 × 202 mm ²

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