

● LUXBEAM® LRS-WQ PLUS

Maximum power for static 3D print systems

The LUXBEAM® Rapid System WQ Plus is a robust, liquid-cooled, plug-and-play light engine for professional 3D printing, static additive manufacturing and prototyping — high performance with the flexibility the industry keeps asking for.

4.1 MP

WQXGA PIXELS

≤ 10 W

UV OUTPUT · 405 NM

1.9 μm

FINEST PIXEL PITCH

> 99%

POWER UNIFORMITY

LUXBEAM® LRS-WQ PLUS

Power, resolution and [ultimate pixel control](#)

Optimized for UV wavelengths from 365 to 460 nm with precise temperature control through liquid cooling, the LRS-WQ Plus puts up to 10 W of UV power in the image — more than any other single-LED UV projector — which is what makes it a static printer's engine for large build areas.

● RECOMMENDED USE

- ✓ High-power static stacked configuration



Full specification

IMAGING	
DMD Type	DLP9000 0,9" WQXGA
Resolution	WQXGA 2560 x 1600 px
Pixel pitch	1.9–130 µm
Image size	4.9–332.8 × 3–208 mm
Image plane	15–69222 mm ²
Operation Mode	Native pixel mode
Power Uniformity	>99% after software correction
Contrast Ratio	Up to 1000:1

LIGHT & POWER	
Projector Output Power	Up to 10 W (460/405nm), 9 W (385nm), 7.5 W (365nm)
Wavelength	365–465 nm
Power density	0.01–9.13 W/cm ²
LED Options	460 nm / 405 nm / 385 nm / 365 nm
LED Driver	Bifrost S; Constant Flux with Optical Feedback
Power consumption	Max 300W
Power Supply	48 V DV

MECHANICAL & THERMAL	
Dimensions w/o lens	215 mm (H) x 105 mm (W) x 188 mm (L)
Total weight	4 kg (w/o lens and PSU)
Cooling system	Liquid Cooling (Air Cooling on request)
Frame Sync	External frame synchronization

PLATFORM & SOFTWARE	
Software	LAMA Standard (included)
Image Data	Single Image Pattern Upload with LAMA
Communication	Ethernet (platform-independent web interface)
UV / IR Safety	LED Safety Switch (enable/disable)

Lens options

PL LRS lens options for the WQ Plus — 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 μm	4.9 × 3 mm ²
PL LRS 0.5 HC	50 mm	269 mm	3.8 μm	9.7 × 6.1 mm ²
PL LRS 1.0 HC	71 mm	269 mm	7.6 μm	19.5 × 12.2 mm ²
PL LRS 2.0 HC	90 mm	269 mm	15.1 μm	38.7 × 24.2 mm ²
PL LRS 3.6	148 mm	237 mm	28 μm	71.7 × 44.8 mm ²
PL LRS 4.6	178 mm	281 mm	35 μm	89.6 × 56 mm ²
PL LRS 5.3 VIS	161 mm	376 mm	40 μm	102.4 × 64 mm ²
PL LRS 8.3	375 mm	469 mm	63 μm	161.3 × 100.8 mm ²
PL LRS 9.9	493 mm	564 mm	75 μm	192 × 120 mm ²
PL LRS 11.7	575 mm	668 mm	90 μm	230.4 × 144 mm ²
PL LRS 17.2	884 mm	976 mm	130 μm	332.8 × 208 mm ²

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