



LUXBEAM® – LRS-MCX REFERENCE STAGE

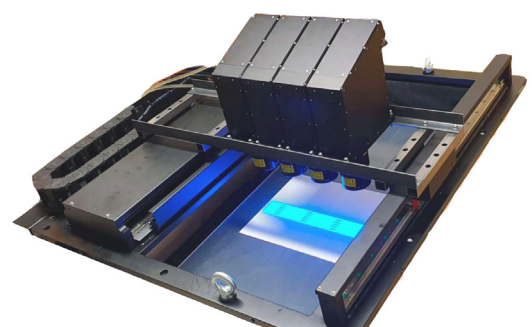
LUXBEAM® – LRS-MCX REFERENCE STAGE

Plug-and-play solution for multihead scrolling

While introducing multihead scrolling as the most advanced solution for scaling up productivity of 3D Print Stereolithography systems, Visitech adds a plug-and-play reference stage to its portfolio. It is designated especially to customers that have good expertise with static 3D print machine development and production and that would like to explore business opportunities in 3D Print Additive manufacturing through implementing scalable motion systems for enlarged build areas.

FLEXIBLE REFERENCE STAGE PLATFORM

The reference stage is designed to be installed in both, bottom-up and top-down configurations. It can take in up to 4 LRS-MCx photoheads. Depending on the projection lens selection, a variety of configuration options is feasible, allowing for seamless stitching of native images with pixel pitch as small as 50 micron. The reference stage can be used both in UV Stereolithography as well as in installations for polymer-based Powder Bed Fusion.



LUXBEAM® – LRS-MCX REFERENCE STAGE

Scroll Range

- 700 mm

Clearance

- 500 mm

Scroll Speed

- 300 mm/sec

Number of Photoheads

- 2 - 4

Configuration Options

UV

- 4 heads with LRS-50
- 3 heads with LRS-90n
- 2 heads with LRS-107
- 2 heads with LRS-126n
- 2 heads with LRS-187

IR

- 2 heads with NIR 16x

Software

- Luxbeam® Additive Manufacturing Application (LAMA)

LUXBEAM[®] – LRS-MC_x Reference Stage

Properties	
Scroll range	700 mm
Repeatability	+/-2 micron with photoheads
Absolute accuracy	+/-3 micron with photoheads
Maximum speed	300 mm / sec with photoheads
Maximum acceleration	3 m /sec ² with photoheads
End switches	Optical, NPN Normal open
Maximum load	30 kg
Total weight	150 kg (without photoheads)
Dimension baseplate	1100 mm (L) x 1000 mm (W)
Overall dimension	1100 mm (L) x 1089 mm (W), incl. cable guide channel
Controller box dimensions	530 mm (L) x 399 mm (W) x 337 mm (H)
Input voltage	220 V
Drive architecture	Single drive
Configuration options	Top down Bottom up
Maximum offset between photoheads	285 mm (center to center)

Configuration with lens	Number of Photoheads	Pixel Pitch in Image (µm)	Total Pixel count	Total Build size (mm ²)
LRS-MC _x -HD-UV/HY with LRS-50	4	50	12.920 x 7.620	646 x 381
LRS-MC _x -HD-UV/HY with LRS-90n	3	90	6.700 x 5.077	603 x 457
LRS-MC _x -HD-UV/HY with LRS-107	2	107	5.457 x 3.831	584 x 410
LRS-MC _x -HD-UV/HY with LRS-126n	2	126	4.476 x 4.182	564 x 527
LRS-MC _x -HD-UV/HY with LRS-187	2	187	2.663 x 3.443	498 x 644
LRS-MC _x -WX-NIR with LRS-NIR 16x	2	175	3.200 x 2.548	560 x 446