

High Magnification Zoom Lens Set

IMMSP Series

IMMSP is a range of imaging projection lens products with variable focus. This product range has multiple models of lens sets, each model consists of 3 lenses, every lens is assembled with a matte black metal casing. The lens set has ultra-high resolution and can achieve a wide range (up to 10X) of linear zoom. Supporting the use of LED compound eye matrix modules, e.g. MATGOBO or MATBEAM, which power range is from 190 to 2400W and can be adapted to monochrome, bicolor, and multi-color LED. The optical system has high efficiency and can obtain highly uniform, clear and sharp light spot. Application: Imaging grade lighting equipment such as LED gobo projector, LED moving head light, LED BSW hybrid, etc.



Model selection list I:

Model No.	Light emission size (Φ)	Gate (Φ)	Zoom range	LED Matrix Module (can be paired with)
IMM16SP133-Z0540	133mm	≤16mm	5~40°	MATGOBO190 MATGOBO370 MATBEAM360 MATBEAM1000 MATGOBO0740/0760 MATGOBO1340/1360
IMM22SP127-Z0653	127mm	≤22mm	6~53°	
IMM22SP140-Z0654	140mm	≤22mm	6~50°	
IMM22SP141-Z0650	141mm	≤22mm	5~50°	
IMM22SP148-Z0550	148mm	≤22mm	5~50°	
IMM22SP149-Z0555	149mm	≤22mm	5~55°	

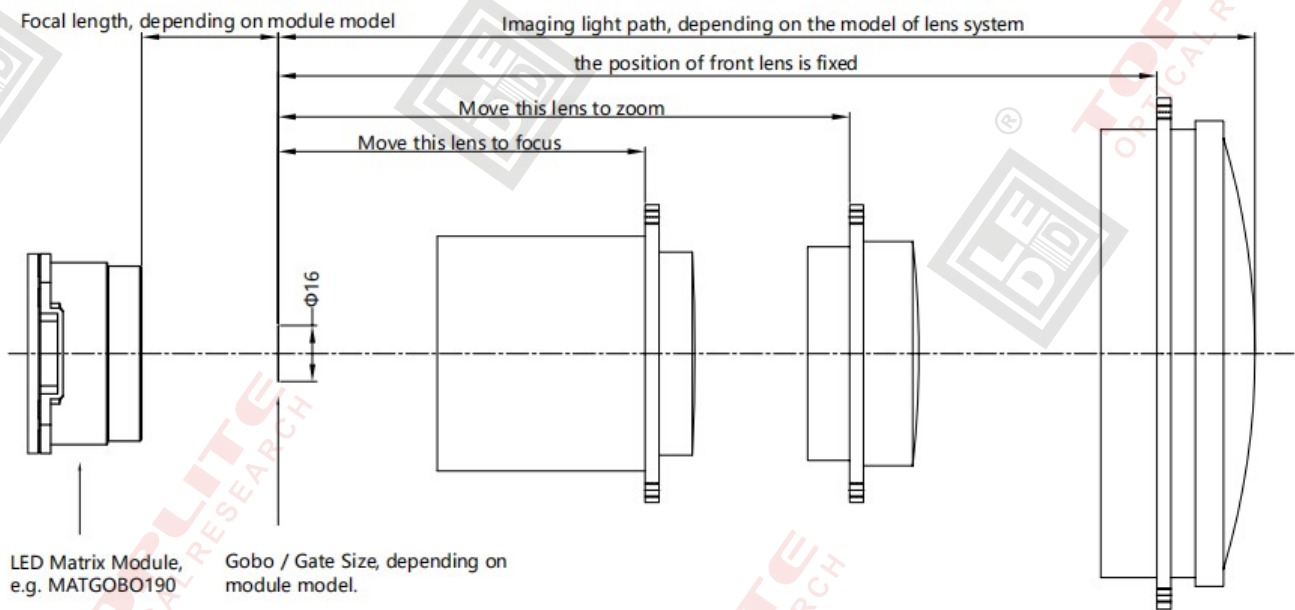
Model selection list II:

Model No.	Light emission size (Φ)	Gate (Φ)	Zoom range	LED Matrix Module (can be paired with)
IMM25SP147-Z0650	147mm	≤25mm	6~50°	MATGOBO190/190PH MATGOBO370/370PH MATGOBO600 MATGOBO600P/600PH MATBEAM360 MATBEAM1000 MATGOBO0740/1340 MATGOBO0760/1360 MATGOBO1940/1960 MATGOBO3060
IMM26SP170-Z0651	170mm	≤26mm	6~51°	
IMM26SP174-Z0650	174mm	≤26mm	6~50°	
IMM26SP177-Z0550	177mm	≤26mm	5~50°	
IMM28SP188-Z0550	188mm	≤28mm	5~50°	
IMM28SP199-Z0550	199mm	≤28mm	5~50°	
IMM28SP207-Z0550	207mm	≤28mm	5~50°	

In the above two model selection lists, the zoom angle range of each model is measured based on the maximum value of gate diameter. In practical situations, the angle is related to the diameter of aperture that is used in the optical system. The general rule is that angle values can be estimated proportionally to the size of the aperture. Taking IMM28SP207-Z0550 as an example, in the form II it describes that zoom angle range is 5 to 50 degrees when using a aperture of Φ28mm . If using the LED compound eye matrix module MATGOBO190-D10, with a power of 400W and aperture of Φ 10mm, according to the estimated zoom angle range, it becomes from 1.8 to 18 degrees.

The same model of LED compound eye matrix module may have different aperture (its focusing spot) sizes due to the different LED packaging and emitting surfaces it is paired with. Please refer to the actual situation.

Light path diagram:



The above diagram shows a typical lighting system, in which includes three parts, from left to right they are: LED matrix module, gate, and IMMSP lens set. In practical application, the rightmost output lens is fixed (from gate), the middle lens can be moved to achieve high magnification zoom, and the left lens can be moved to achieve focus adjustment (focusing to adjust clarity). The distance between the gate and the emitting surface of a LED compound eye matrix module depends on the relevant parameters of the LED compound eye matrix module used in this lighting system.