

Variable Optical Imaging System

Imaging Projection Lens Assembly

IMM55LS

IMM55LS belongs to the product family of IMM imaging projection lens assembly. It consists of multiple lenses assembled in a aluminum alloy housing. All of the lenses are made of special glass materials using high precision grinding and surface polishing processes, and coated with multiple layers of high-transmittance film, through precise assembly, form a low-dispersion lens with high resolution, offering high-quality imaging. Arranging specific condensing lens set, LED with large LES, and IMM55LS lens in group to form an imaging projection system with fixed beam angle and short light path. The projected light spots exhibit high clarity, uniform, fullness, and low distortion. IMM55LS is particularly well-suited for high-power and compact-size LED pattern projection and profile lighting applications.

Applications scope: High-definition LED imaging lights, pattern projection lights, profile cutting lights, profile spotlights, and more.

Application Areas: Stage performances, cultural and tourism landscapes, film and video shooting, commercial photography, museums, art galleries, and more.



Main Parameters:

Product Model	IMM55LS-F19	IMM55LS-F26	IMM55LS-F33
Product Type	Lens assembly		
LED	High integrated LED or COB, $LES \leq \Phi 60\text{mm}$, for higher imaging quality $LES \leq \Phi 22\text{mm}$ is preferred. LED matrix module, e.g. MATGOBO		
Condensing Lens Set	IMMDX707280, lens diameter: $\Phi 70\text{mm}$, $\Phi 72\text{mm}$, $\Phi 80\text{mm}$, Used to adapt to single LED, like COB		
Gate (Effective Gobo Size)	$\leq \Phi 60\text{mm}$		
Coatings	Multi-layer anti-reflection		
Beam Angle	19° (gate size is $\Phi 55\text{mm}$)	26° (gate size is $\Phi 55\text{mm}$)	33° (gate size is $\Phi 55\text{mm}$)
Length of light path	276mm	248mm	230mm

Schematic diagram of imaging light path

A typical imaging system schematic diagram is showed here. It consists of four parts, from left to right they are, LED, condensing lens set, gate (Gobo), and imaging lens. The condensing lens set is composed of three plano-convex lenses, and the gate (effective gobo size) is less than $\Phi 60\text{mm}$.

