

Optical Fly-eye Lens Matrix Module

MATGOBO550

The MATGOBO550 Series LED Matrix Modules feature a groundbreaking condenser optics design, utilizing a patented multi-layer optical fly-eye lens matrix, which focuses the rays from the LED matrix into a smaller area in space, offering high luminous density and brightness. The LED matrix supports the usage of up to 61 high-power LED chips. Through a simple way of installation, the condenser optics of the MATGOBO550 Series can be quickly assembled with the corresponding LED matrix to form an LED matrix module that is high-power and equipped with dust protection. This module boasts ease of use, maintenance, and upgradability.

The MATGOBO550 Series LED Matrix Modules are ideal for a wide range of lighting applications, including LED beam lights, outdoor searchlights, LED moving head hybrid lights, follow spotlights, gobo projection lights, and other speciality lighting needs. Additionally, optical customizations can be made to fit infrared or ultraviolet light sources to meet related industrial applications.

MATGOBO550 Series, Condenser Lens Assembly



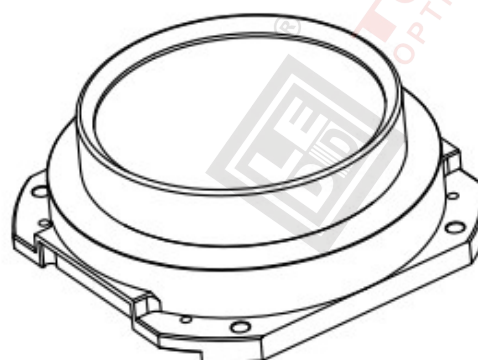
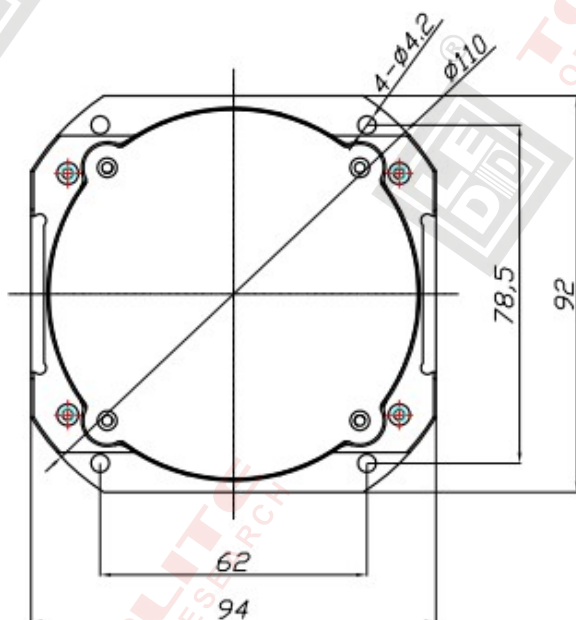
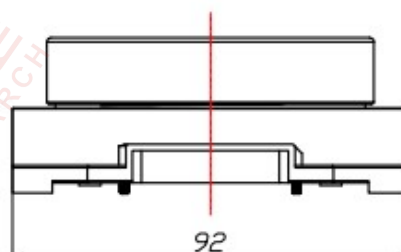
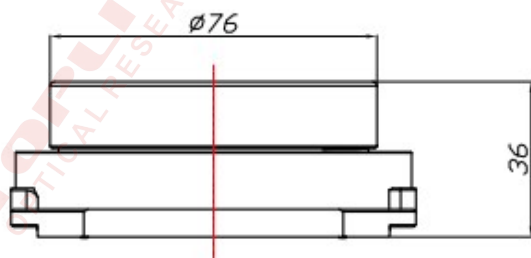
MATGOBO550-D24、550-D24RY
MATGOBO550-D26、550-D26RY
MATGOBO550H-D24、550H-D24RY
MATGOBO550H-D26、550H-D26RY

MATGOBO550P-D24、550P-D26
MATGOBO550PH-D24、550PH-D26

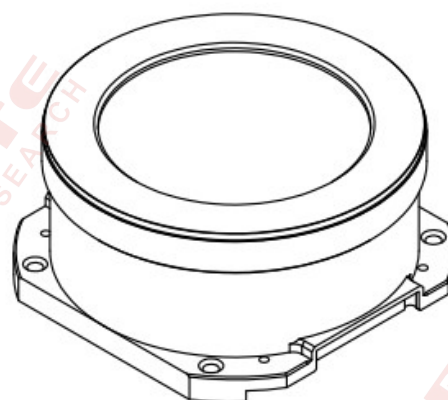
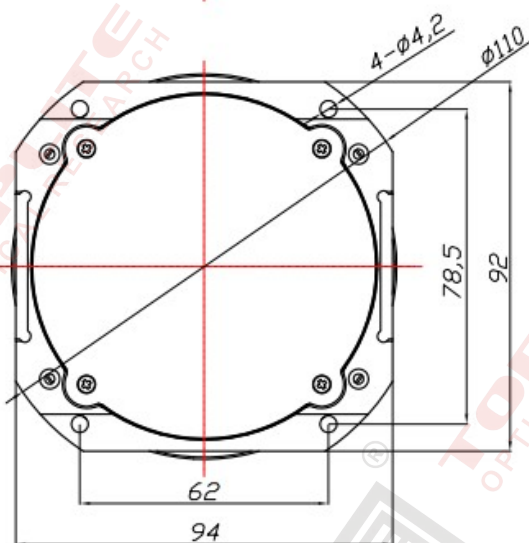
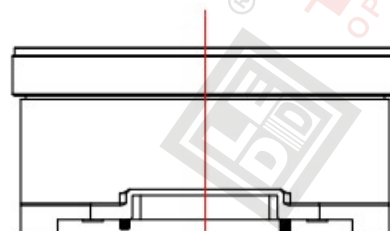
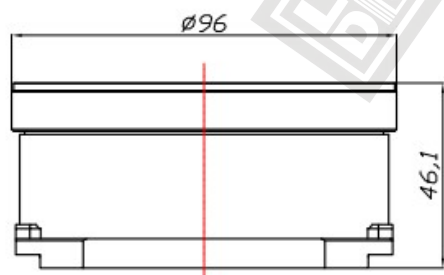
- LED required: the quantity is 55, outer packaging size ≤ 5050
- Light emission size: $\Phi 68\text{mm}$
- Focal length(F): $60 \pm 2\text{mm}$, refer to model selection list for details
- Focal spot diameter (G): $\Phi 10 \sim 28\text{mm}$, depending on the LES of LED in use, refer to model selection list for details

- Beam angle of light pattern: 54~58 degrees
- Mechanical dimension:

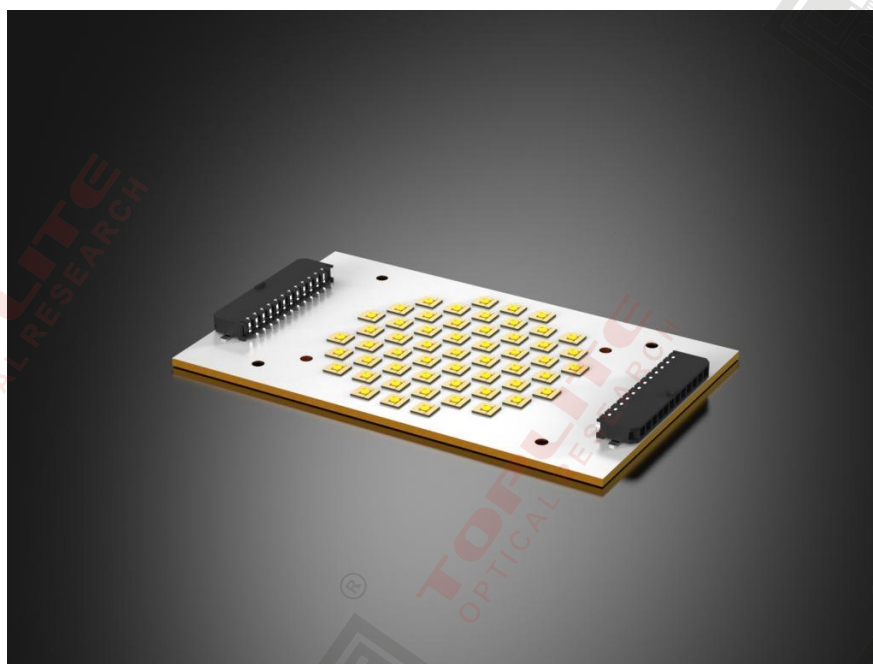
Model No.	Mechanical dimension	Model No.	Mechanical dimension
MATGOBO550-D24	94*92*36mm	MATGOBO550-D26	94*92*36.6mm
MATGOBO550-D24RY		MATGOBO550-D26RY	
MATGOBO550H-D24		MATGOBO550H-D26	
MATGOBO550H-D24RY		MATGOBO550H-D26RY	



Model No.	Overall dimension	Model No.	Overall dimension
MATGOBO550P-D24	94*92*46.1mm	MATGOBO550P-D26	94*92*46.6mm
MATGOBO550PH-D24		MATGOBO550PH-D26RY	

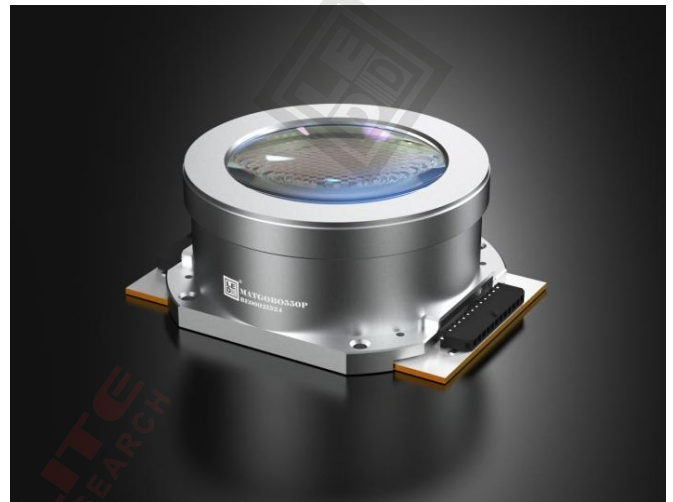
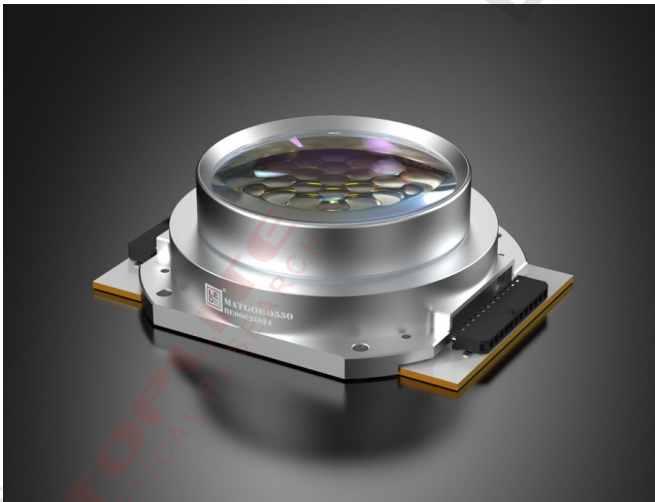


LED Matrix



- LED quantity: 55
- Outer packaging size: 5050, or smaller
- Total power: 2,200W, depending on the LED in use, single LED power x quantity
- LED matrix PCB layout: available

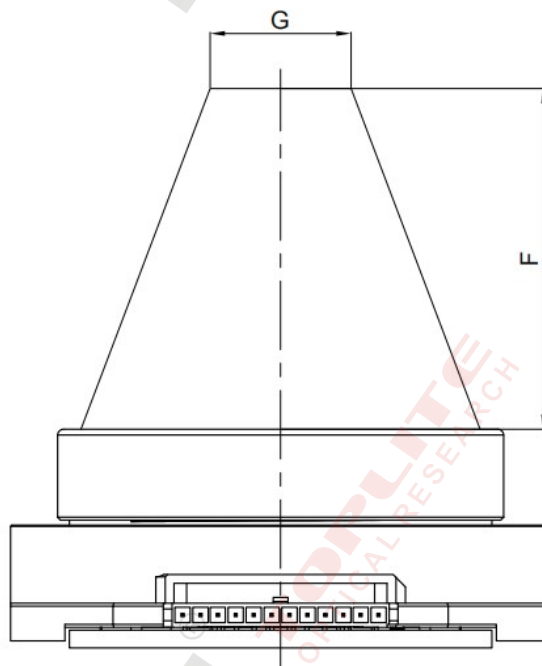
MATGOBO550 Series LED Matrix Module



MATGOBO550-D24、550-D24RY
 MATGOBO550-D26、550-D26RY
 MATGOBO550H-D24、550H-D24RY
 MATGOBO550H-D26、550H-D26RY

MATGOBO550P-D24、550P-D26
 MATGOBO550PH-D24、550PH-D26

- Light pattern: different MATGOBO550 models have their own G and F values, please refer to the model selection list



● Model selection list and test data

Model No.	LED	LED Qty	Drive current	Power	Luminous flux	G	F	Angle
MATGOBO550-D24	5050-20W	55	6A×5	1100W	85,000 lm	24mm	58±2mm	58°
MATGOBO550-D24RY								
MATGOBO550-D26						26mm	60±2mm	54°
MATGOBO550-D26RY								
MATGOBO550H-D24					90,000 lm	24mm	58±2mm	58°
MATGOBO550H-D24RY								
MATGOBO550H-D26						26mm	60±2mm	54°
MATGOBO550H-D26RY								
MATGOBO550P-D24					85,000 lm	26mm	58±2mm	58°
MATGOBO550P-D26						28mm	60±2mm	54°
MATGOBO550PH-D24					90,000 lm	26mm	58±2mm	58°
MATGOBO550PH-D26						28mm	60±2mm	54°
Beam test: <ul style="list-style-type: none">● Model No.: MATGOBO550H● Test dedicated collimation optical system: IMMBEAM224230● Throw distance: 10 m● Beam angle: 4°● Illumination: 85,000 lx								

Special Note:

The test data provided in the aforementioned lists are for reference only. Specific performance data may vary depending on factors such as the chosen LED specifications, the manufacturing process of the LED matrix board, the cooling system, and the overall assembly precision. Therefore, please refer to actual conditions for accurate performance figures.

Usage tips:

In the same optical system, if you aim to achieve a higher luminous flux output, you can try increasing the diameter size of G recommended in the above selection lists, for example, by adding 2mm. This will enhance the system's light output but may result in a slight reduction in uniformity.