MATBEAM1000

MATBEAM1000 is a converging lens module of LED matrix module, it employs multi-piece fly-eye lens stacked converging design and is protected by a technical invention patent. The lens has the characteristics of ultra high luminous density, high converging efficiency and high luminance. MATBEAM1000 lens and the matching LED matrix light source form a high-power LED matrix module, which can be applied to the particular lighting fixtures such as LED moving head gobo/beam/wash/spot hybrid, gobo projector, follow spotlight, beam light, searchlight, etc. The separable design of lens and LED matrix makes the maintenance and upgrade of LED matrix module simpler, faster and more convenient. Dust-proof is provided, light shape parameters can be customized on demand.

MATBEAM1000 Lens Module

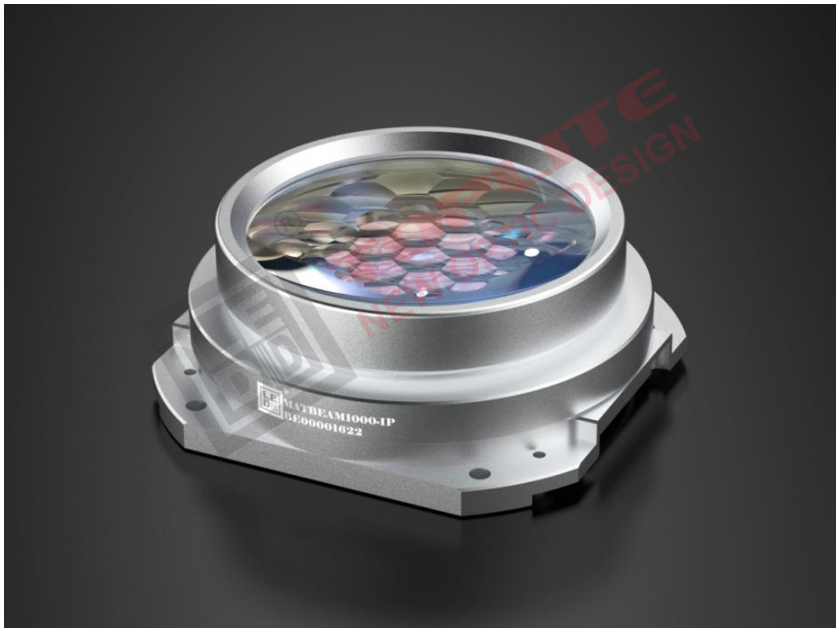

Figure1. MATBEAM1000

- Fly-eye lens unit: 37 pcs
- Lens aperture: Ø78mm
- Applicable power range: 360~1,480W
- Model No. and parameters:

Model No.	Focal length(F)	Focal spot(G)	Beam angle
MATBEAM1000-D16	56mm	16.5mm	57°
MATBEAM1000-D18	71mm	18mm	50°

The optical parameters, G and beam angle, are related to the LES of LED.

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- Mechanical dimension: L94mm × W92mm × H38.7mm

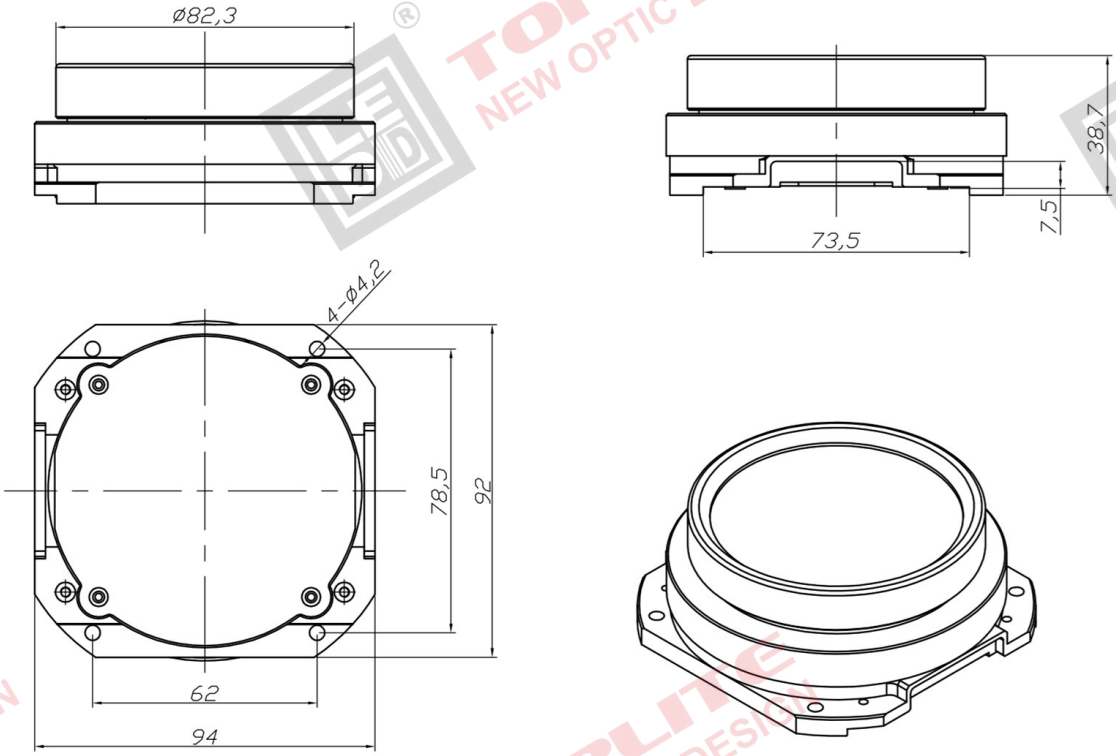

Figure2. Mechanical dimension of MATBEAM1000

LED Matrix Board

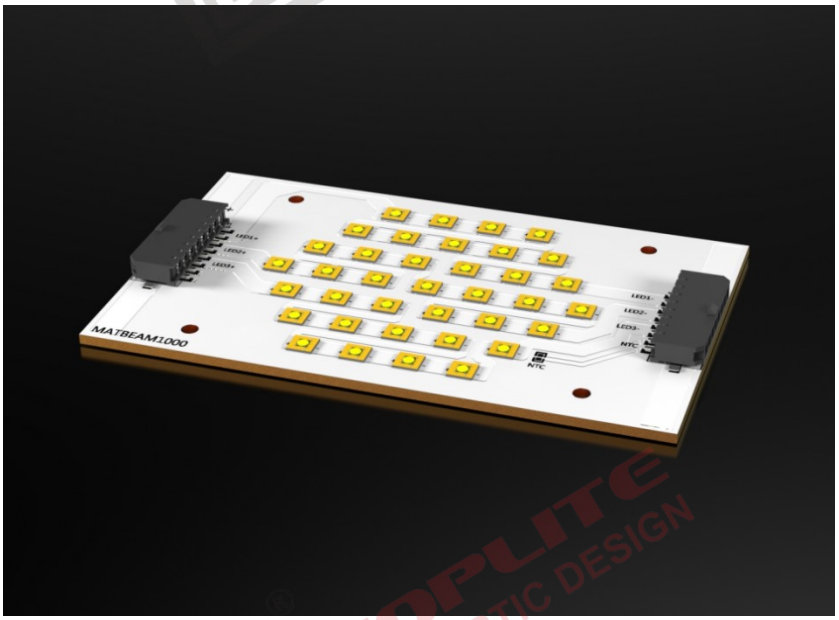

Figure3. LED matrix board, adapt with MATBEAM1000

- Quantity of LED: 37
- LED package required: 3030 / 3535 / 5050
- Total Power: unit power × 37, up to 1,480W

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- PCB layout drawing: available upon request
- LED matrix board sample: available upon request during the test phase
- Bulk order: please purchase the LED matrix board from qualified LED packaging manufacturers.

MATBEAM1000 LED Matrix Module

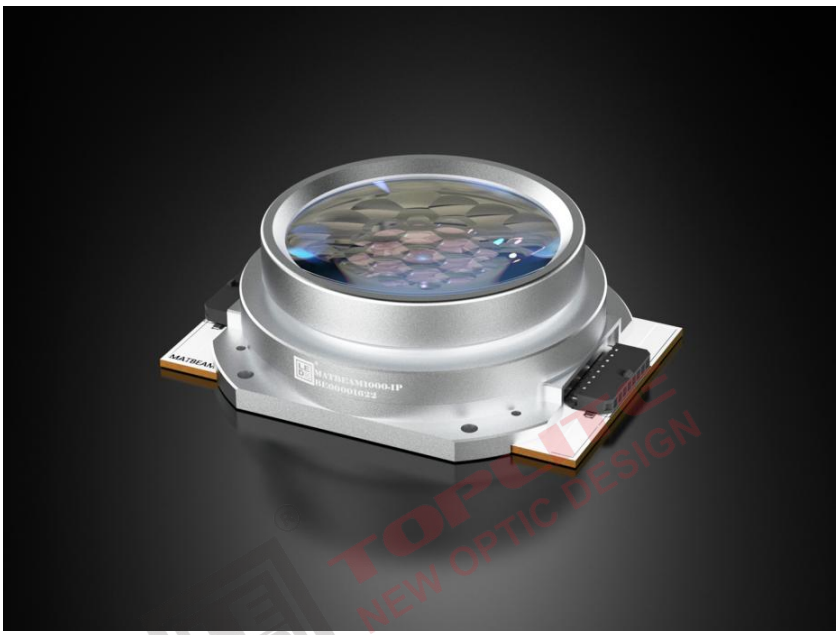

Figure4. MATBEAM1000 LED matrix module

- Photoelectric characteristics:

Table 1, Photoelectric characteristics

LED matrix board			
LED	package size 5050, maximum power 25W		
Quantity	37		
Input	6.0A × 3		
Power	800W		
Optics			
Model No.	Focal length(F)	Focal point(G) Iris	Beam angle of light pattern
MATBEAM1000-D16	56mm	16.5mm	57°
MATBEAM1000-D18	71mm	18mm	50°

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- Test data:

Table 2, test data of beam light

Test data of illumination	
Luminous flux	65,000 lm
illumination①	Model No.: MATBEAM1000-D16 Collimating lens set: IMMBEAM224230 System light emitting aperture: Ø224 Throw distance: 10m Result: 90,000lx, beam angle 3.6°
illumination②	Model No.: MATBEAM1000-D18 Collimating optics: D-BEAM320 reflector System light emitting aperture: Ø320 Throw distance: 10m Result: 125,000lx, beam angle 2.9°
Note: The test parameters in the above table are for reference only. The specific data is related to the selected LED, packaging process, SMD position accuracy, heat dissipation and assembly accuracy and other factors, please refer to the actual situation.	

- Light pattern:

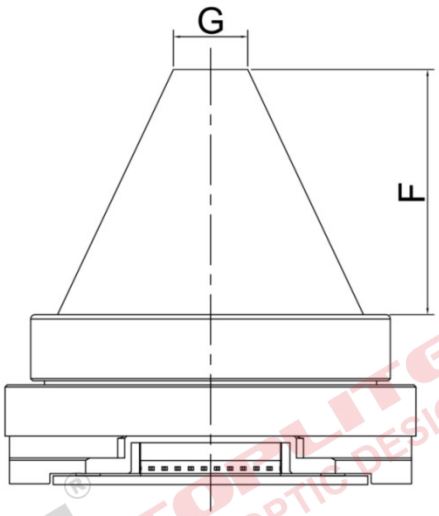

Figure6. Light pattern of MATBEAM1000 LED matrix module

Special note: Under the current lens assembly models, the G value and its spot shape are related to the light emitting surface and shape of LED.

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