

Product datasheet



Backlighting RGB

- M23AA17Q
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Areas of application

- Can be Red/Green/Blue light
 - Backlighting of channel letters and light box
 - best for 50mm to 250mm depth (2inch to 10inch)
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Product main benefits

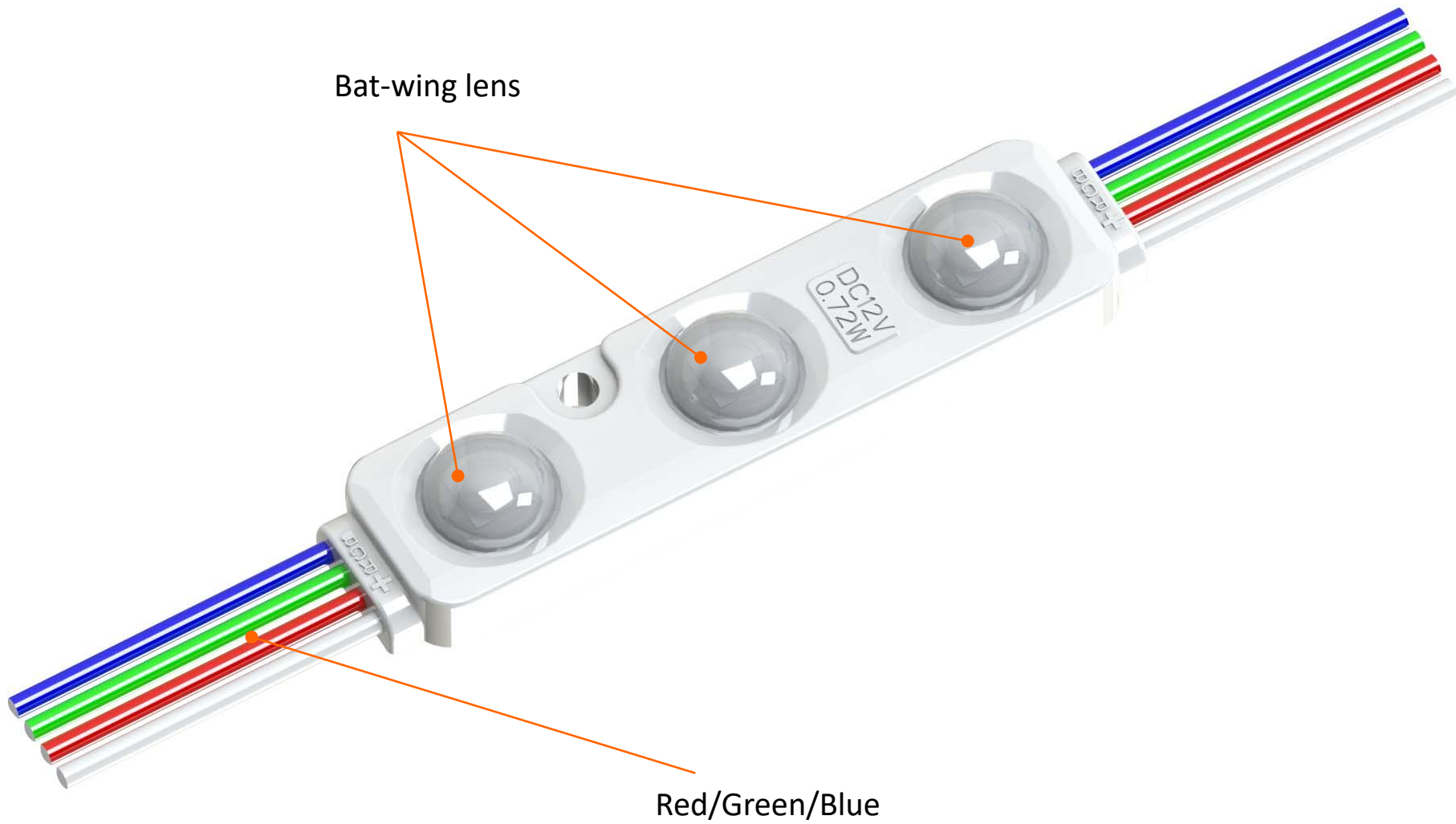
- Good optics (bat-wing lens) design to achieve good optical performance
 - 5 years warranty
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Product features

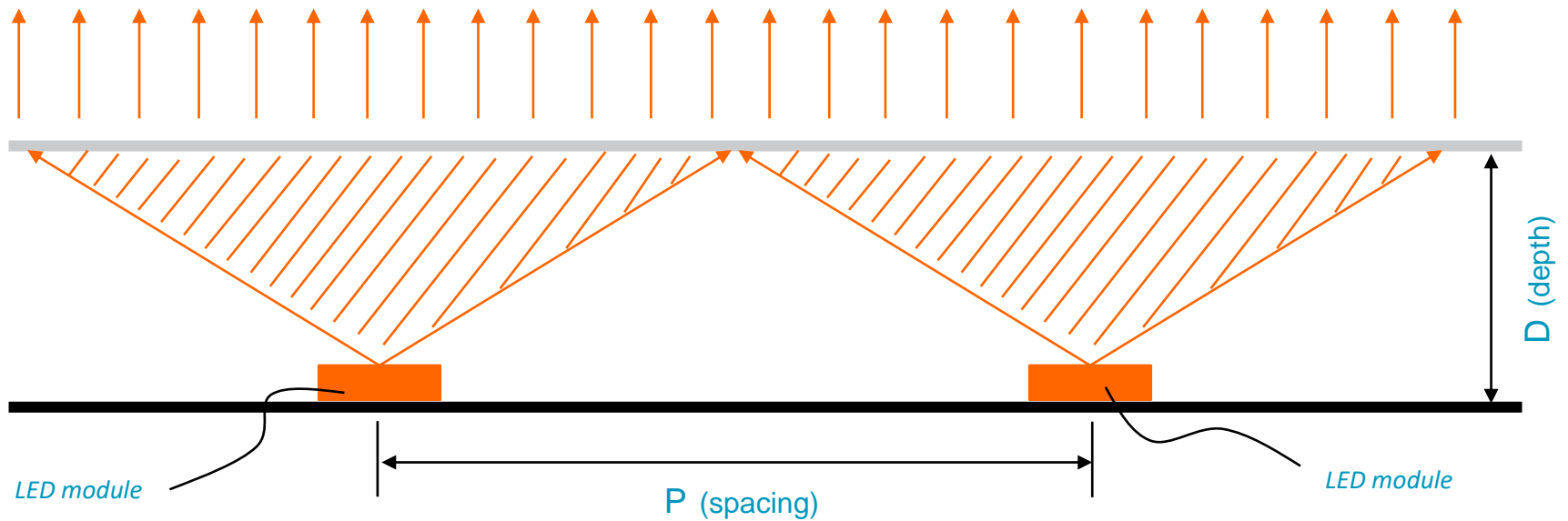
- 12VDC
 - Beam angle 160°
 - CE marked and UL listed
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EPSTAR



Product datasheet



$$\text{optical performance proportion} = \frac{D(\text{depth})}{P(\text{spacing})} \leq 1:1.5$$

- The proportion of “P” and “D” can show the performance of lens optics design.
- The bigger proportion, the wider light spot.
- The proportion is for reference from lab, actual layout need based on real application.

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Electrical data

Product Description	Typical Voltage	Energy Consumption (W/module)	Energy Consumption (W/chain)	Energy Consumption (W/ft.)	Additional Information (modules/chain)
M23AA17Q	12VDC	0.72	14.4	1.5	20

Photometrical data

Product Description	Light color (designation)	Color (CCT, wavelength)	Typical Brightness (lumen/color)	Typical Brightness (lumen/module)	Typical Brightness (lumen/chain)	Typical Brightness (lumen/ft.)
M23AA17Q	R/G/B	Red: 620-625nm Green: 520-530nm Blue: 460-470nm	Red: 8lm Green: 16lm Blue: 5lm	29	580	59

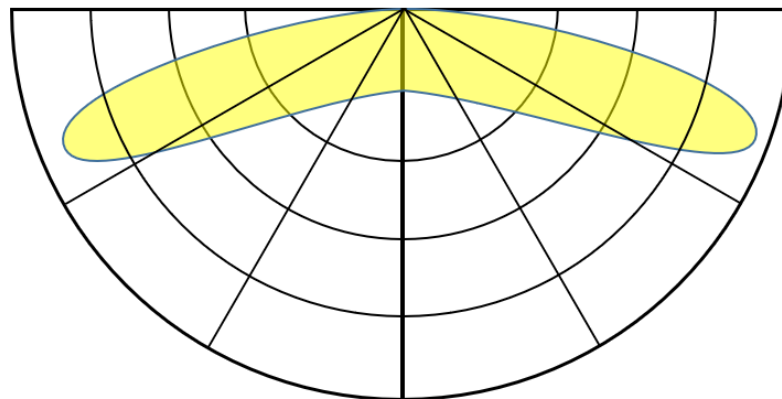
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Environmental and Application Conditions

Operating Environment (t_a)	-25°C to +55°C
Storage Temperature Range (t_s)	-40°C to +85°C
Max. operating (case) temperature (t_c)	70°C
IP Rating	IP67
Lifetime (L70B50)	50,000 hours
Dimming mode	Dimmable
Cutting Resolution	Cut on wire between every module

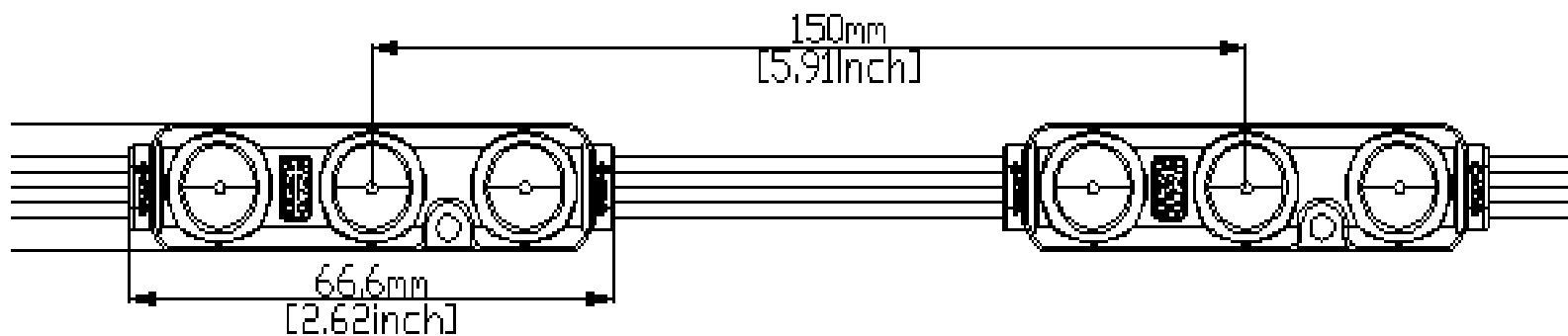
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Light distribution



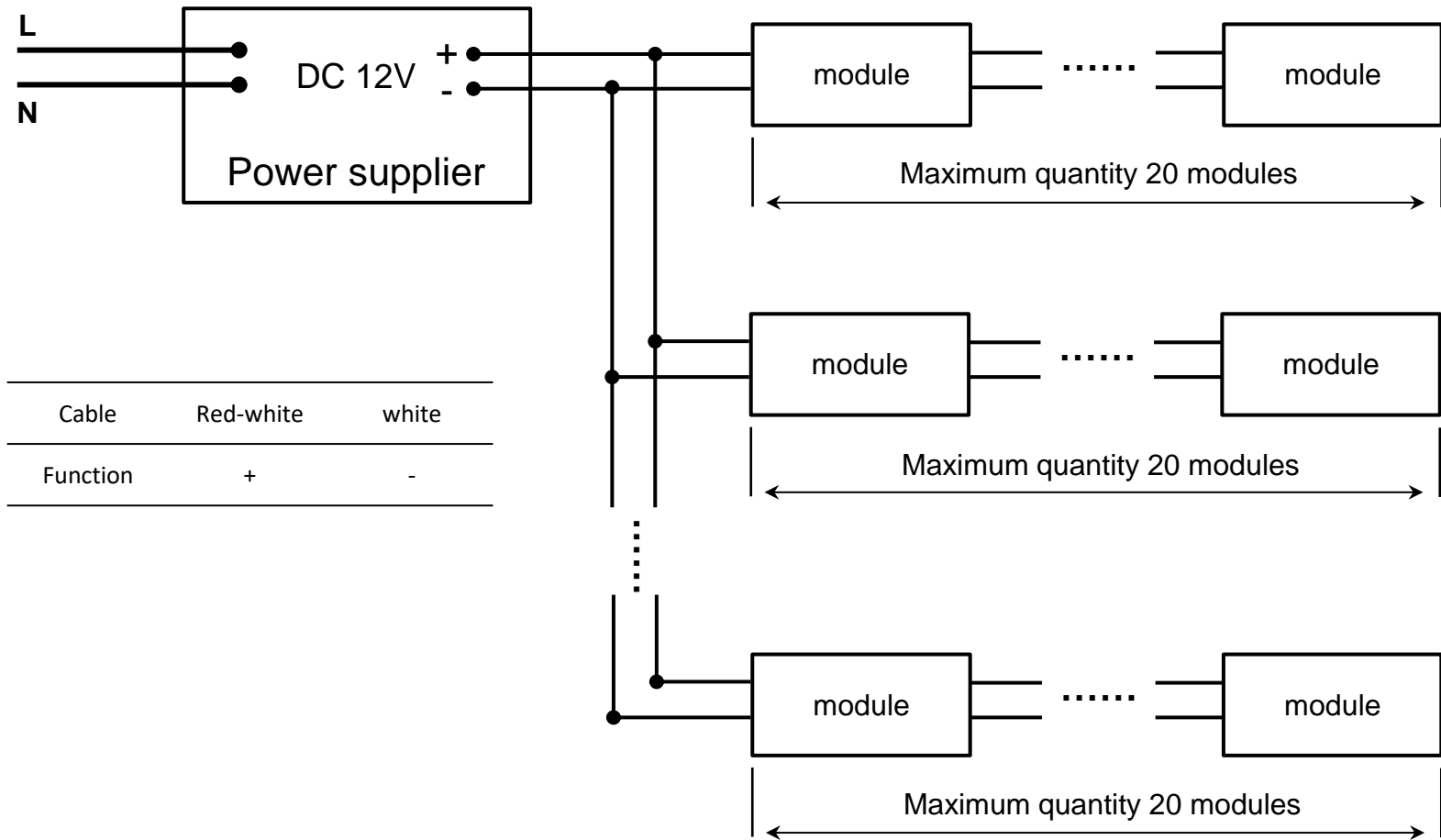
Beam angle: 160°

Product line drawing



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Wiring method



* The secondary cable recommend > AWG18, < 3 meter

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Package

Product description	Package unit (modules/carton box)	Package unit (chains/carton box)	Carton box Dimensions (length x width x height)	Volume	Gross weight
M23AA17Q					

Additional product information

- Installation of LED modules (with power supplies) needs to be made under consideration of all valid regulations and norms.
- Installation by qualified electrician only.
- Parallel connection is mandatory for safe electrical operation. Serial connection of LED modules is discouraged. Unbalanced voltage drop in serial connection can cause hazardous overload
- Electrical contact is achieved with the contact cables or the terminals of the module. Please refer to the technical data for maximum number of LED modules that can be operated on one control gear.
- To avoid mechanical damage, the LED modules have to be attached securely to the intended mounting surface. It is recommended to avoid heavy vibration.
- LED modules are dimmable by means of PWM (pulse width modulation).