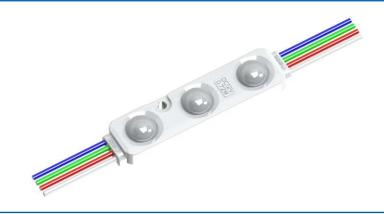
#### Product datasheet





### **Backlighting RGB**

M23AA17Q

## 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)

#### **Product main benefits**

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

#### **Product features**

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









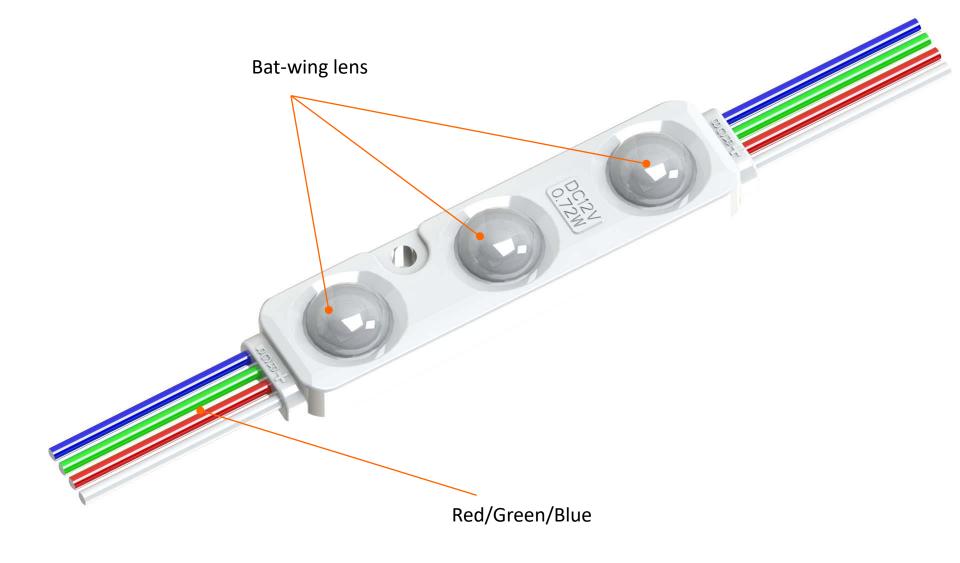




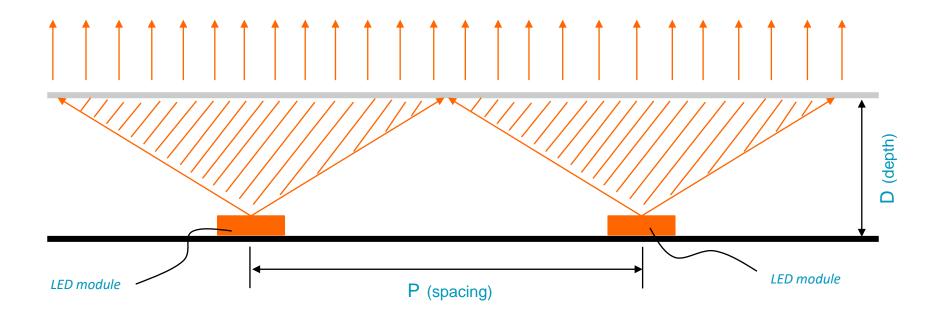












optical performance proportion = 
$$\frac{D(depth)}{P(spacing)} \le 1:1.5$$

- 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.



## 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.)
		Red: 620-625nm	Red: 8lm			
M23AA17Q	R/G/B	Green: 520-530nm	Green: 16lm	29	580	59
		Blue: 460-470nm	Blue: 5lm			

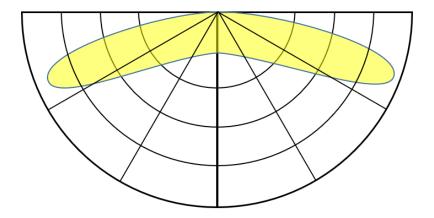


# **Environmental and Application Conditions**

Operating Environment ( t <sub>a</sub> )	-25°C to +55°C	
Storage Temperature Range ( t <sub>s</sub> )	-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	

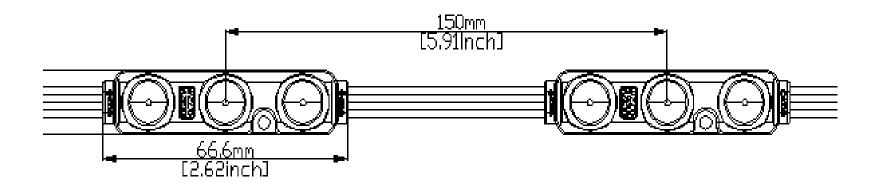


# Light distribution



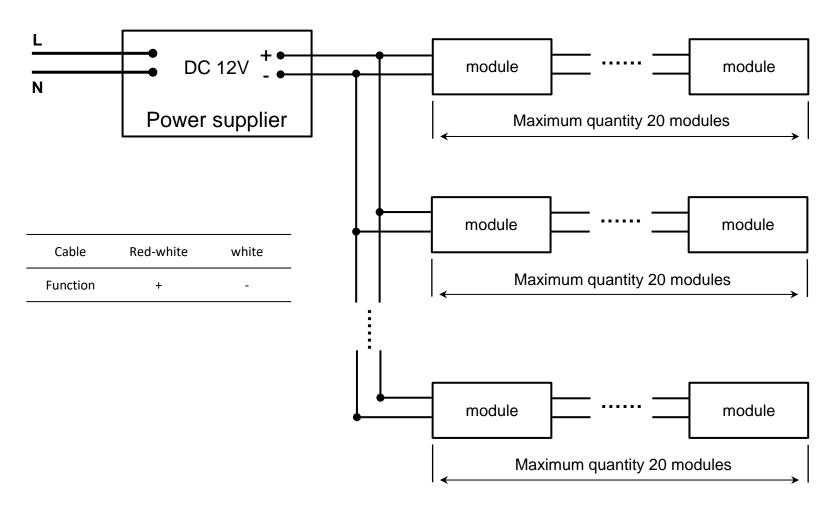
Beam angle: 160°

# Product line drawing





## Wiring method



<sup>\*</sup> The secondary cable recommend > AGW18, < 3 meter



## **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).