

# LM102

## Medium Intensity Aviation Obstruction Light



### Products description and application

LM102 Medium Intensity aviation obstruction light Type B is used to Mark the high buildings for aircraft warning. It can operate in the working mode of red flashing/steady burning at night: And Combined with the advanced LED light source, optical and system control technology to meet the most demanding applications.

Suitable for towers, chimney, high building, bridge, large construction machinery, large port machinery, wind turbine generation and any other potentially hazardous obstructions to air traffic.

Suitable for outdoor environments.

Suitable for high salinity areas.

### Features

- Aluminum alloy die-cast shell with electrostatic powder spray surface treatment has good anti-vibration and corrosion resistance features.
- Anti-UV and shock-resistant PC housing; Flammability level: UL94V-2.
- LED Light source, long lifetime and low power consumption.
- Professional EMC design, Anti-electromagnetic interference.
- Wind resistance rating:  $\geq 240\text{km/h}$ .
- With fault alarm detection and fault alarm output function. (NO/NC optional);
- Optional synchronization function (GPS).
- Optional function.

### Specifications

|                             |  |  |                              |                                |
|-----------------------------|--|--|------------------------------|--------------------------------|
| International               | CAAC   | MH6012-2015                            | Aviation obstruction light   |                                |
|                             | ICAO   | ICAO(Annex 14) Volume I, Sixth Edition | Airport design and operation |                                |
| <b>Electrical parameter</b> |  |  | <b>Mechanical parameters</b> |                                |
| Voltage input               | AC100V~ AC240V /DC48V                              |  | Storage temperature          | Ta-40°C ~ +70°C                |
| Fault alarm                 | Dry contact (NO or NC optional)                    |  | Operation temperature        | Ta-40 °C ~ +55°C               |
| Average Power Consumption   | $\leq 16\text{W}(40\text{FPM})$                    |  | Humidity                     | 0% ~ 90% RH<br>(Not condensed) |
| Maximum power               | 32W  |  | IP Rate                      | IP66                           |
| Lightning surge             | IEC61000-4-5 L- L 3KV ,<br>IEC61000-4-5 L-G 6KV    |  | Weight                       | 1.8kg                          |
| Electrostatic Discharge     | IEC61000-4-2 Contact discharge 8KV                 |  | Wire Connection mode         | with 1m lead wire              |
| <b>Optical parameter</b>    |  |  |                              |                                |
| Light source                | LED  |  |                              |                                |
| Color                       | Red  |  |                              |                                |
| Work mode                   | Flashing   |  |                              |                                |
| Lifespan                    | $\geq 100,000\text{h}$                             |  |                              |                                |
| Horizontal degree           | 360°   |  |                              |                                |
| Vertical degree             | 3°   |  |                              |                                |
| Flashing rate               | Night:20/30/40/60FPM,steady burning; Default 40FPM |  |                              |                                |
| Flashing duration           | 670ms  |  |                              |                                |
| Effective intensity         | 2000 $\pm 25\%$ cd                                 |  |                              |                                |
| Photocell on/off level      | 50-500lux  |  |                              |                                |

### Installation method of use

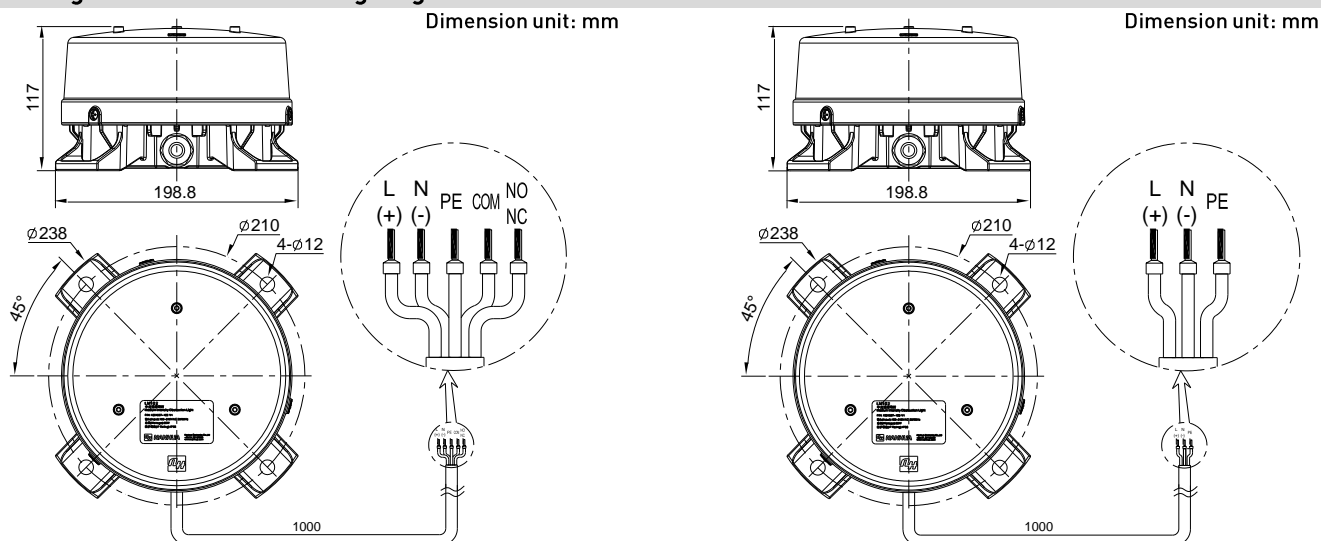
- Secure the light on a smooth surface which has enough strength, if there is no mounting surface, we can customize special mounting bracket as request.
- When installation, please stay away the nearby light source, at the same time, ensure the photocell do not cover by the near object: (suitable for the type with photocell).
- Make sure the power supply can match the rated power of light before connecting.
- GPS synchronization function test in the outdoor without blocking the environment test, synchronization takes about 30 minutes .(suitable for the model with GPS);
- According to the mark on the wiring label of the lamp lead wire, connect the power cable and the alarm wire correctly. Please pay attention to the polarity of the positive and negative poles for the DC voltage.
- The flash rate 40FPM by default. If you need to customize, please inform the lamp manufacturer before purchasing.

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### Mounting dimensions and Wiring diagram



Note: The specific input voltage is based on the order.  
The specific alarm signal is subject to the order.

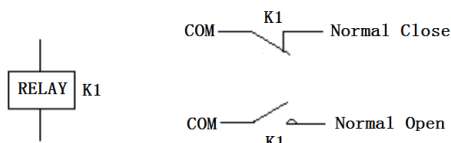
Picture 1 with fault alarm function

Note: The specific input voltage is based on the order.

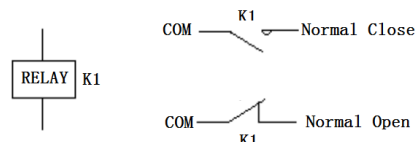
Picture 2 without fault alarm function

### Fault alarm function

•when the lamp is not receiving a power supply or a lamp failure: The relay has no action, "common terminal" and "normal close terminal" close, as below:



•The lights are connected to the power supply and are working properly: Relay action, "common terminal" and "normal open terminal" close, as below:



- If there is no power access, or failure are received "disconnect" signal, the alarm signal line connected to the "common" + "normally open"
- If the "closed" signal is received when there is no power supply access or fault, the alarm signal line is connected to "common" + "normal closed"

Note: The LED fault alarm of the light, please inform the lamp manufacturer at the time of purchase.

### Fault detection function description

•When the light is not operate or When more than 25% of the LED beads are in failure, The lamp will have a fault alarm signal output.

### Precautions

- For high-power lamp, the surface temperature is high, it cannot be covered. And the distance from the object no less than 3m, to avoid burns or fire.
- The part of material of products is PC( like lamp cover and lamp shell ), so it cannot direct or indirect touch the organic solvent, such as industrial alcohol, banana oil, Isopropanol , Carbon tetra chloride, cyclohexanone and so on, otherwise, the product will be corrosion cracking.
- Ensure the power connection part is correct before using and temperature rise when light working is normal phenomenon.
- It with delay judgment about 15s after photocell change detected and about 10 s delay after alarm detected which as normal phenomenon.
- Please do not open any components inside by yourself and do not look light horizontally to protect your eyes while the light working.
- Please make sure that the ambient temperature conditions should match this product. Otherwise it will not work properly.
- This product is a sealed structure, non-professional maintenance personnel should not disassemble. Otherwise, the company will not be guarantee.
- Please do not operate with electricity.

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