LM100
Medium Intensity Obstruction Light

Products description and application

LM100 series medium intensity aviation obstruction light Type B has been awarded the FAA,ICAO,CAAC certification.
Medium intensity type B is used to mark the constructions for aircraft warning at night. Red at night and steady burning /flashing working mode.Combined with advantages of advanced LED, optics and system control technology to satisfied the harshest applications.
Applying to the air traffic warning areas such as towers(Telecom,GSM), smokestacks (heat-engine plant, coking plant chemical plant etc.),buildings, port devise, construction machinery, wind power generator etc.
Applying to the 45-90m obstacle or on 45m -90m position of big obstacle.
Applying to outside environment.
Applying to high salt area.

Features

- Die-cast aluminum housing, surface electrostatic powder sprayed yellow,
- LED light source，lifespan up to 100000h.
- Three-profiteering design(Waterproof, shockproof, dust proof)
- Use UV resistant, shock resistant PC lampshade.
- Switchable work mode:steady burning /flashing (support field configuration)
- With fault alarm inspection and fault alarm output. (Normally on/off optional)
- Professional EMC design，Anti-electromagnetic interference.
- Professional optical design
- Lightning protection up to 10kv
- Optional GPS function

General Specifications

International standard	CAAC ICAO FAA	MH6012-2015 ICAO Annex 14 Volume I 6th Edition Advisory Circular 150/5345-43H	Aviation obstruction light Airport design and operation Specification for Obstruction Lighting Equipment

Electrical parameters		**Mechanical structure parameters**	
Operation voltage	AC110V-240V	Main material	Aluminium alloy
Working power frequency	50Hz/60Hz	Operating temperature	Ta-40℃ ~ +55℃
		Operating humidity	0%~95%RHP
Power consumption	30W(40times/min)	IP Rate	IP65
Power rating	65W	Base Color	Yellow●
Lightning protection	MH6012-2015 L- L 6kV	Weight	6.5 kg
	MH6012-2015 L-G 6kV	Entry cable	Side M20X1.5, Suitable cable diameter 9-14mm
	MH6012-2015 air discharge8kV		
	MH6012-2015 Contact discharge 6kV		
EMC	MH6012-2015		
Photocell	50-500 lux		

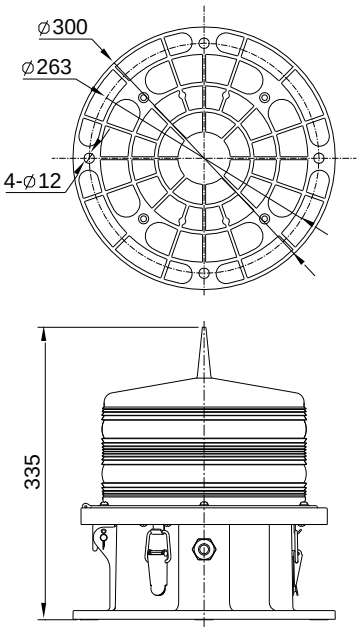
Optical parameters			
Light-emitting component	LED	Light color	Red(NVG IR option)
Intensity	2000cd±25%	Infrared minimum radiation intensity	246mw/sr
Vertical degree	≥3°	Operating mode	60 FPM

LM100
Medium Intensity Obstruction Light

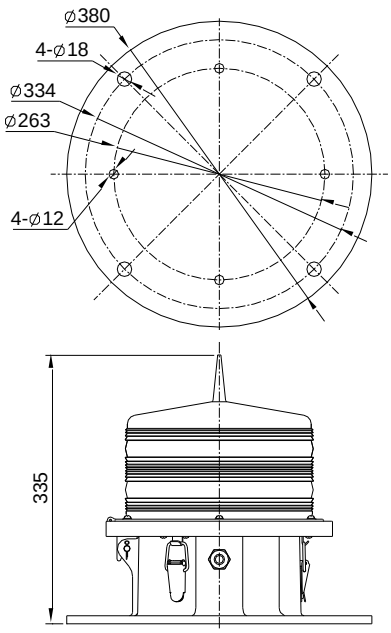
Horizontal degree Plane 360°

Mounting dimensions

Unit:mm

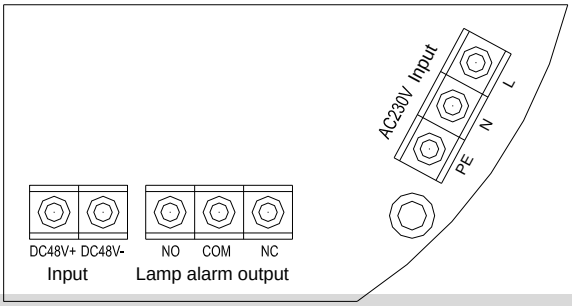


picture 1 regular base size(Side outlet)



picture 2 big base size(Side outlet)

Wiring diagram



Installation method of use

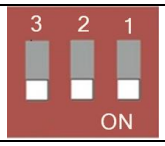
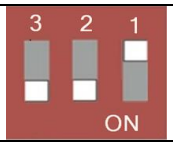
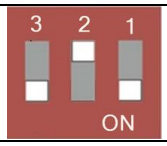
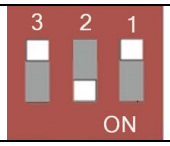
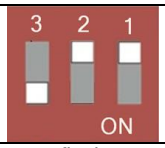
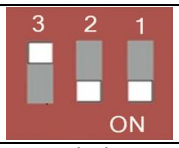
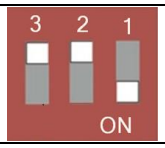
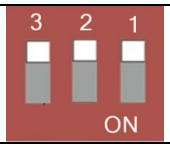
- Make sure the light on a smooth surface which has enough strength, if there is no mounting surface, we can customize special mounting bracket as request.
- Open the 3 hasps on the bottom, turn around the light, Exposed terminal row.
- Access the power cord from the waterproof joint, Correctly connect the power signal wire and the ground wire according to the terminal definition on the label.
- After finishing the connection, fasten the buckles. Check whether the power cables are connected correctly before power on.
- GPS synchronization test should be in the outdoor environment without any block. Synchronization takes about 15 minutes (Only suit for the type of synchronization with GPS).

Lightdial switch function using the method

LM100
Medium Intensity Obstruction Light

By adjusting the 1st, 2nd, and 3rd digits, different flashing modes and manual modes can be adjusted
• With multiple units of this product together, a sequential flash system can be realized by adjusting the 4th, 5th, and 6th digits.
• Method for flash work mode: disconnect the power supply, take apart the light and dial the switch with screwdriver.

•BIT1- BIT3：Steady burning /flashing setting bit: (factory default setting flashing frequency 60 times/min)

Dial code	0 0 0	0 0 1	0 1 0	1 0 1
Dial sample figure				
Light work mode	steady burning(auto) (steady burning at night)	Flash(auto) 20times/min	Flash(auto) 30times/min	Flash(auto) 30times/min
Dial code	0 1 1	1 0 0	1 1 0	1 1 1
Dial sample figure				
Light work mode	flash 40times/Min	Flash 60times/min	Manual steady	Manual off

•BIT4：Bottom aviation light setting position in sequential flash system: (factory default setting has no sequential flash function)

Dial code	1	0
Dial sample figure		
Light work mode	Non-sequence flash function	Sequential flash function, this light is the bottom aviation light

•BIT5：The middle layer aviation light setting position in the sequential flash system: (factory default setting has no sequential flash function)

Dial code	1	0
Dial sample figure		
Light work mode	Non-sequence flash function	Sequential flash function, this light is the middle layer aviation light

•BIT6：The top aviation light setting position in the sequential flash system: (factory default setting has no sequential flash function)

Dial code	1	0
Dial sample figure		
Light work mode	Non-sequence flash function	Sequential flash function, this light is the top aviation light

• BIT7 and BIT8: reserved.
Remarks 1: when turnover to number end is 1, Turnover to ON is 0.
Remarks 2: auto steady burning function means that the light could see whether it is daytime or night, when it is night, it would be steady burning.
Remarks 3: Manual steady burning function means that the light would see whether it is night or not, it tacitly confirm that it is steady burning all the time.
Remarks 4: Manual steady off function means that turning off the light all the time for test.
Remarks 5: No matter how in any mode, it would have 1 second for itself examination when connecting to the electricity.

LM100
Medium Intensity Obstruction Light

Sequenced Flashing Systems.

Catenary support structure systems composed of L-885 light units must have a sequenced flashing characteristic.
2. This system consists of three lighting levels on or near each supporting structure. One light level is near the top, one at the bottom or lowest point of the catenary, and one midway between the top and bottom.

3. The flash sequence must be middle, top, and bottom.

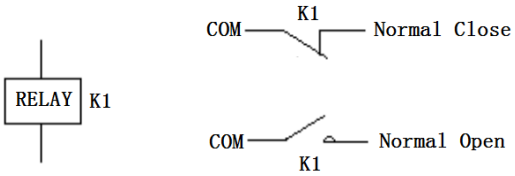
4. The interval between the beginning of the top and the beginning of the bottom flashes must be about twice the interval between the beginning of the middle and the beginning of the top flashes.

5. The interval between the end of one sequence and the beginning of the next must be about 10 times the interval between middle and top flashes.

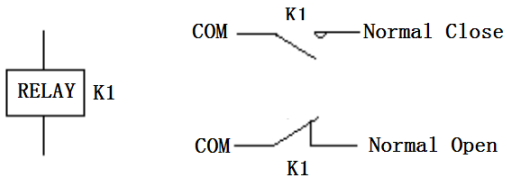
6. The time for the completion of one cycle must be one second (±5 percent).
7. The factory setting of all L-885 lamps is: non-sequential flash function. If this function is needed on site, set it according to the installation position of the lamp and refer to the adjustment instructions of the 4th, 5th and 6th DIP switch.

Fault alarm function

When the light don't connect the power supply or the work current for light is low: relay has no action,"COM"and "Normal Close" terminals closed, as shown.



When the light connect the power supply and work normally: the relay work, "COM"and "Normal Open" terminals closed, as shown.



- If need to receive the"disconnection"signal when no power supply connection or fault,alarm signal wire should connect at "COM"+"Normal Open"Terminal;
- If need to receive the "closed"signal when no power supply connection or fault,alarm signal wire should connect at "COM"+"Normal Close" terminal.

Precautions

- 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, isotropic alcohol, carbon tetra-chloride, cyclone and so on, otherwise, the product will be corrosion.
- Ensure that the power connection part is correct before using.
- Temperature rise when light working is normal phenomenon.
- Please do not open any components except professional serviceman.