

## Products description and application

ZEN7e LED Light, using aluminum alloy as the lamp body, lightweight design provides reliable and energy-saving lighting solutions. It is applied for the indoor lighting of wind turbines, towers and nacelles and a supplementary lighting of indoor application.

Compliant to: IEC60598-2-5\IEC60068-2\IEC60529\IEC62262\EN55015 Certified to: UL

#### Features

- With high light efficiency and stability: It provides the high light efficacy and superb industrial stability by combining the leading LEDs and LED drivers.
- Tempered glass lighting cover for anti-aging.
- Long lifespan and environmental friendly:
  The LED fixtures have a lifespan above 50,000hrs and save at least 50% energy and free of maintenance.
- Compact and light structure, adjustable mounting bracket for easy site installation
- Simple and convenient wire connection.
- Emergency test switch: The emergency function can be tested once installation. It also have the switch-over function
- The battery can be replaceable.
- Emergency function:90 minutes emergency time
- Battery automatic maintenance function: The lamp needs to be charged and discharged once every three months. In the case of continuous power for three consecutive months, the lamp will automatically perform one charge and discharge without manual maintenance.
- Automatic detection function: When the lamp fails, the status indicator shows a red light flashing to remind.
- Battery indicator function: When the lamp is charging, the status indicator is flashing green to indicate the battery level.

### **General Specifications**

Electrical parameters		Mechanical parameters	
Operating voltage	AC120V~AC277V	Body material	Aluminum
Power frequency	50Hz~60Hz	Cover material	Tempered glass
Rated power	30W	Storage temperature	-40°C ~ +60°C
Power factor	>0.9	Operating temperature	-40°C ~ +60°C (Non-emergency)
Electromagnetic	IEC61000-4-2 CLASS 4		-30°C ~ +50°C (Emergency)
Compatibility	IEC61000-4-3 CLASS 3	IP rate	IEC60529 IP65
	IEC61000-4-4 CLASS 3 IEC61000-4-5 CLASS 4 EN55015	Anti-vibration IK Rate Anti-corrosion	IEC60068-2-6 3G IEC62262 IK05 ISO9227 C4
Relative humidity	10% - 95% (Non-condensing)	Body color	Sliver
Emergency duration Charging time	90 minutes 20h(Normal temperature)	Weight	2.3kg

114 datasheet-ZEN7e-1901-cn.1.0

# **ZEN7e LED Light**



**Optical parameter** 

Lifespan ≥50,000h

Color temperature Cold white: 5500K-6000K LED efficiency Cold white: 100lm/W CRI Cold white: CRI≥70

Total lumens 2700lm Emergency lumens 540lm

## **Mounting Dimensions**

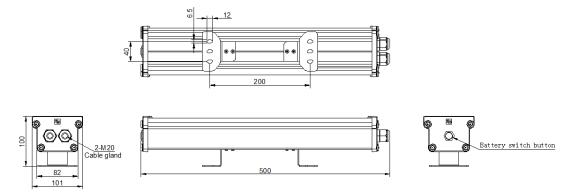


Figure 1-1

### **Installation Diagram**

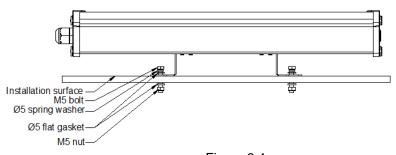


Figure 2-1

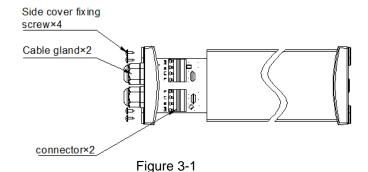
### **Installation Method:**

- Ensure that the supply voltage matches the rated voltage of the fixture.
- Fix it on the mounting surface with 2 nos or 4 nos M5 screws. The mounting surface should have enough mechanical strength and smoothness.
- Installation height is not limited.
- Place the bolts, washers and nuts according to the schematic diagram and tighten the two bolts with a wrench.

## **ZEN7e LED Light**



### Wiring Diagram



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Terminal block

Figure 3-2

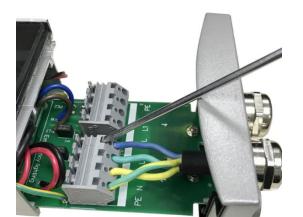


Figure 3-3

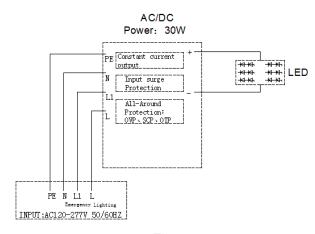


Figure 3-4

## Wiring step:

- Remove the 4 screws using cross recessed screwdriver, pull out the side cover to expose the terminal, as shown in Figure 3-1.
- 2. Pass the lead wire through the cable gland, the outer diameter of the cable should be φ8-14mm.
- 3. Use a small flat-blade screwdriver to insert a small square hole in the terminal block (Figure 3-3), to make the spring in the lower round hole pop open.
- 4. Connect the four single-core cables into the terminal block according to Figure 3-3, then pull out the screwdriver and ensure the compression of cable and the shrapnel in the terminal is pressed against the exposed copper wire of the single core wire.
- 5. Power wiring method please take the diagram above for reference:
  - L and N: for normal lighting;
  - L1 and N: for emergency lighting;
  - ON/OFF of L can control the ON/OFF of the lamp; When Power off, the lamp will automatically light up with battery pack.
- 6. After confirming the terminal is connected, use a 24mm open-end wrench to tighten the cable waterproof connector and clamp the cable to prevent sliding.
- 7. Push the side cover into the lamp body slowly, be careful not touch the cable and then insert the removed side cover screws into the side cover.

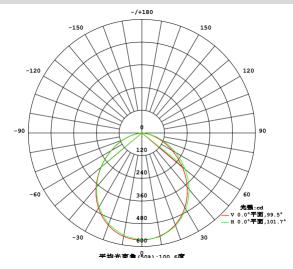
## **ZEN7e LED Light**



#### **Precautions**

- It is normal that the lamp has a temperature rise during operation.
- Before working, please confirm whether the working voltage is within the range. Overvoltage will damage the
  product and pose a safety hazard.
- When installing the wiring, please connect it accurately according to the wiring diagram to prevent short circuit. After the installation, please confirm the single core wire cannot be pulled out.
- Do not open any part of the lamp in order to avoid any danger when it works.
- As it is sealed structure, do not disassemble the lamp without professional people. Otherwise, the warranty is invalid.
- The lithium battery in the lamp is a consumable. It is recommended to charge and discharge the lamp once every three months during the storage. The battery has automatic maintenance function while working, therefore, no need for manual charging and discharging maintenance. Please charge every three months when the lamp is not used for a long time.
- The lamp generates heat during operation, the surface of the lamp cannot be covered, and flammable objects cannot be placed within 30 cm.
- Please note when replacing the battery: Reverse charging is prohibited; Do not short circuit the battery positive and negative; Please do not hit, knock, stab or unpack the battery pack;
- Please keep the battery away from heat source and do not throw the battery into the fire. Please deal with the old battery properly.

### **Light distribution curve**



Light distribution

Figure 4-1

Thank you for using our products, NANHUA as a signal transmission and high quality industrial lighting professional brand, Deeply trusted and loved by users in different industries around the world. Please be sure to use this product correctly on the basis of reading and understanding the instructions. Incorrect installation and use may cause fire, electric shock, etc. Due to product improvements, changes in specifications and patterns may be changed without notice, Hope for your understanding and support.

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