

# SZG121 **ultra-bright** microwave led high bay light



## Applications:

- Warehouses
- Plant and workshop
- Maintenance workshop
- Equipment workshop
- Outdoor canopy
- Logistics Center
- Exhibition Hall

## Description of performances:

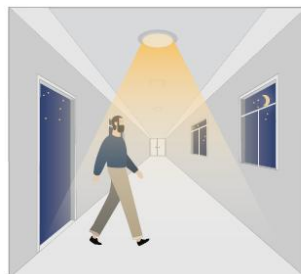
|                                                          |                                                |                                                         |                                                         |                                                  |                                                                                                         |
|----------------------------------------------------------|------------------------------------------------|---------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| luminous efficiency of led chip<br><b>250 lm/W</b>       | light efficacy of luminaire<br><b>200 lm/W</b> | energy efficiency rating of luminaire<br><b>Class 1</b> | Induction dimming<br><b>microwave induction dimming</b> | microwave induction height<br><b>Max. 15m</b>    | microwave induction mode<br><b>light priority mode<br/>motion sense dimming<br/>three stage dimming</b> |
| bluetooth remote control<br><b>APP/bluetooth gateway</b> | power efficiency<br><b>≥95%</b>                | total harmonic distortion<br><b>≤10%</b>                | beam angle<br><b>120°/90°/60°</b>                       | shell material<br><b>ADC12 die-cast aluminum</b> | IP protection<br><b>IP66</b>                                                                            |

## Functions of microwave sensor:

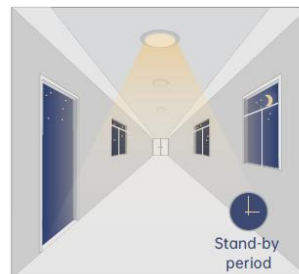
### 1. Light sensing priority function



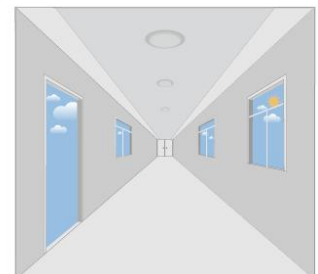
When the ambient brightness is less than the preset light on value, the light will turn on automatically.



The sensor detects someone moving and the lights are on 100%.

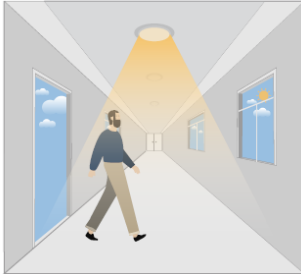


After the delay time is over, no one moves in the sensing area, and the brightness of the light dims and enters the waiting time state, until it is detected that someone is moving again, and the light is fully on, following this cycle.

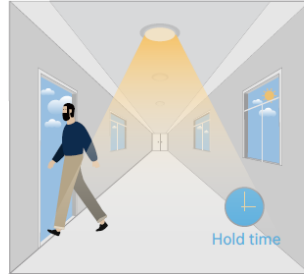


When the ambient light brightness exceeds the light off value, the light automatically turns off.

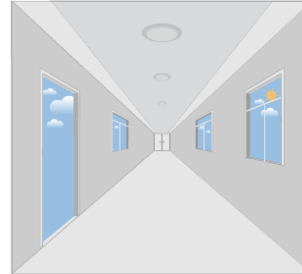
## 2. Motion sensing dimming



After detecting movement, the sensor automatically turns on 100% full brightness.

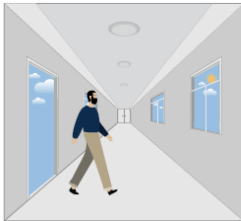


After the sensor cannot detect movement, it automatically enters a delay time.

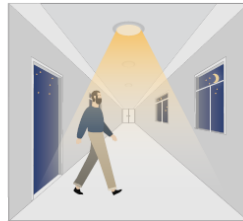


Automatically adjust to low light after a delay time.

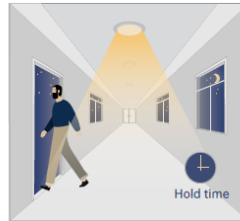
## 3. Three stage dimming



When the ambient light is bright enough, even if motion is detected, the sensor will not light up.



When the ambient light brightness is insufficient and movement is detected, the sensor automatically lights up.



After the sensor cannot detect movement, it automatically enters a delay time; The light will be on 100% during the delay period.

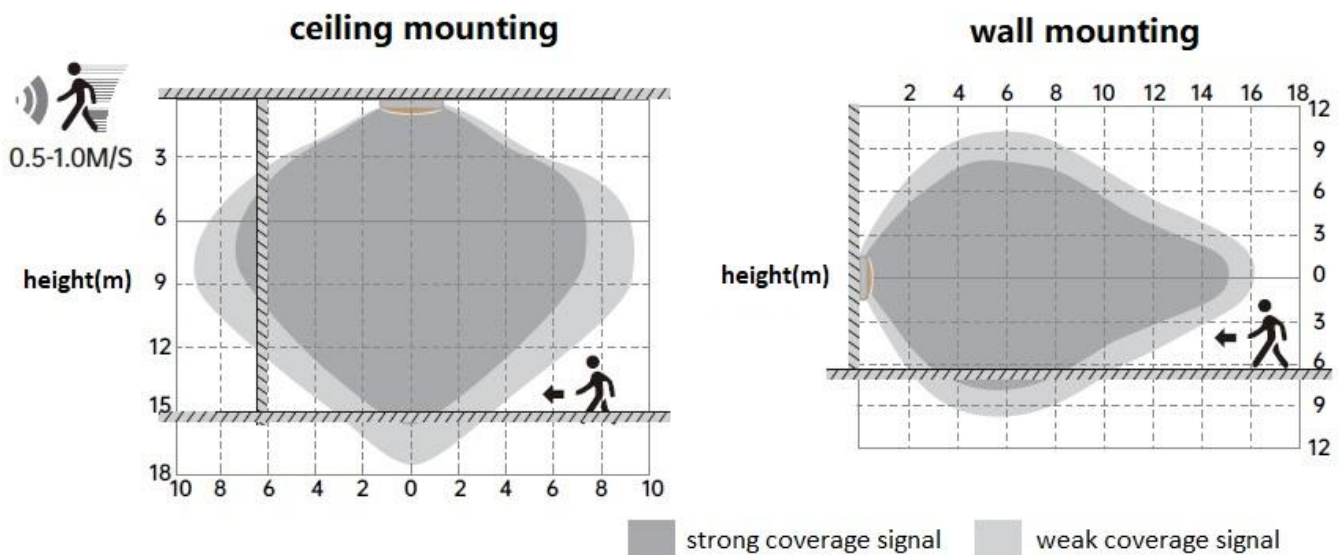


After the delay time, the sensor automatically enters the waiting time to maintain the waiting brightness.



After the waiting time ends, the sensor automatically turns off the light.

## Microwave induction range diagram



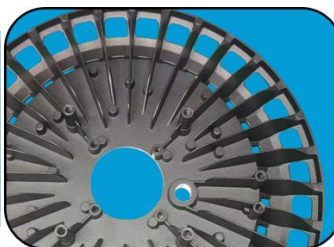
## Product details:



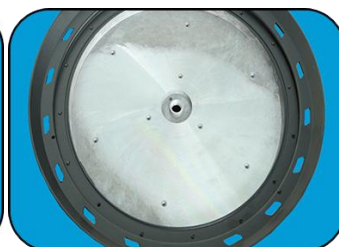
secondary energy-saving dimming of microwave sensor



circular lens with more led chips and higher light efficiency



precision die-casting aluminum heat dissipation body



precision machined aluminum substrate bonding surface, fast heat dissipation

## Technical parameters:

| Parameter items                     | 100W                | 150W                | 200W                |
|-------------------------------------|---------------------|---------------------|---------------------|
| Input voltage (V)                   | 90-305Vac           | 90-305Vac           | 90-305Vac           |
| Power efficiency                    | 95%                 | 95%                 | 95%                 |
| Power factor                        | ≥0.95               | ≥0.95               | ≥0.95               |
| Surge lightning protection (V)      | 6000                | 6000                | 6000                |
| Total harmonic distortion           | ≤10%                | ≤10%                | ≤10%                |
| Luminous efficiency for led (lm/W)  | 250                 | 250                 | 250                 |
| Light efficacy for luminaire (lm/W) | 200                 | 200                 | 200                 |
| Energy efficiency rating of lamp    | Class 1             | Class 1             | Class 1             |
| Luminous flux of lamp (lm)          | 20000±5%            | 30000±5%            | 40000±5%            |
| Correlated color temperature (K)    | 3000/4000/5000/6000 | 3000/4000/5000/6000 | 3000/4000/5000/6000 |
| Color rendering index (Ra)          | ≥75                 | ≥75                 | ≥75                 |
| Beam angle (°)                      | 60°/90°/120°        | 60°/90°/120°        | 60°/90°/120°        |
| Lifespan of led chip (h)            | ≥100,000            | ≥100,000            | ≥100,000            |
| Energy-saving dimming               | Microwave sensor    | Microwave sensor    | Microwave sensor    |
| Mounting height of sensor (m)       | ≤15                 | ≤15                 | ≤15                 |
| microwave induction radius (m)      | 5                   | 5                   | 5                   |
| Working temperature (°C)            | -35°C - +50°C       | -35°C - +50°C       | -35°C - +50°C       |
| IP protection                       | IP66                | IP66                | IP66                |
| Dimensions (mm)                     | φ280*175            | φ330*182            | φ380*185            |
| Weight (Kg)                         | 2.5                 | 3.2                 | 3.8                 |
| Mounting mode                       | Ring/U-bracket      | Ring/U-bracket      | Ring/U-bracket      |
| Warranty                            | 5 year              | 5 year              | 5 year              |

**Note:** 1. According to GB 30255-2026: the luminous efficacy of Class 1 energy-efficient luminaire is 170-180 lm/W; for Class 2, it is 145-155 lm/W; and for Class 3, it is 100-110 lm/W.

2. Energy saving rate is compared with the conventional luminaire of class 3 energy efficiency rating.