



www.theorylight.com



Theorylight Series

TLSE 07 Smart Sensor

(Microwave motion sensor + infrared illumination light sensor)



ZigBee network control



Motion Sensor



Infrared illumination light sensor



Theorylight Remote Control



Regional Groups



Dimming control



On/off control

CE

RoHS

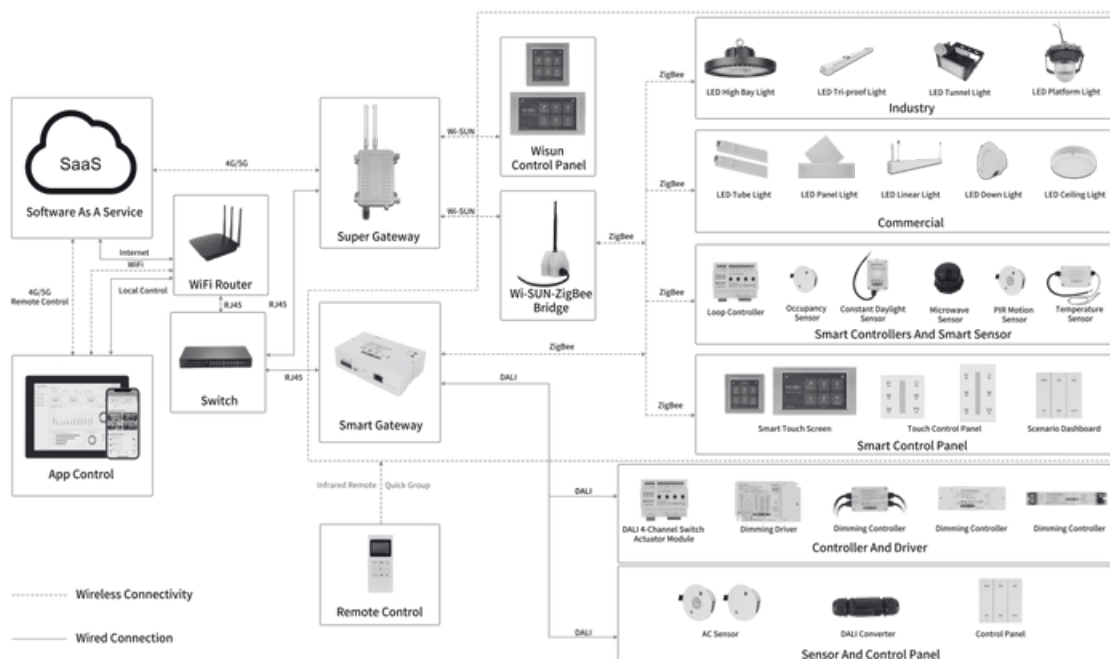
Application Scenario

- Warehouse
- Workshop
- Parking lot
- Shopping Mall
- School
- Corridor

Features

- TLSE07-TLZ is a motion sensor with built-in ZigBee module.
- Input 12Vdc.
- 10V PWM dimming signal output.
- Support ZigBee 3.0 protocol.
- Infrared remote control.
- 5.8G microwave sensing.
- Infrared illumination light sensing.
- Support OTA upgrade.
- Communication distance up to 30 meters.
- Small size can be embedded in lamps.

System Diagram



Product Parameters

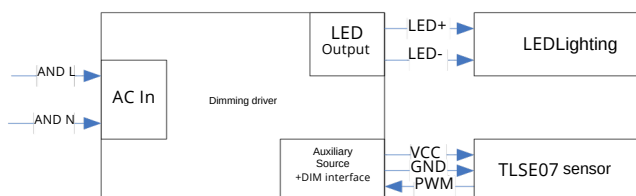
Warranty 5-year warranty

Application environment parameters

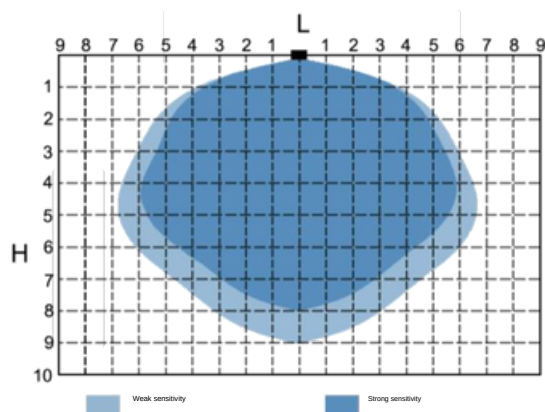
Operating temperature -20°C ~50°C

Wiring Diagram

Port Description	describe
VCC	12Vdc input
PWM	10V PWM dimming signal output
GND	land



Sensor detection range



Electrical parameters

Input voltage DC12V (power ripple requirement <400mV)
 Input current >
 Output signal 200mA
 Microwave 10VPWM
 frequency 5.8GHz±75Mhz,
 band ISM band

Structural parameters

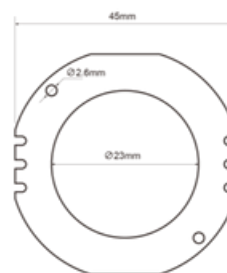
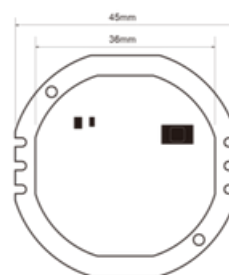
Structural FR4
 Materials

Control and dimming

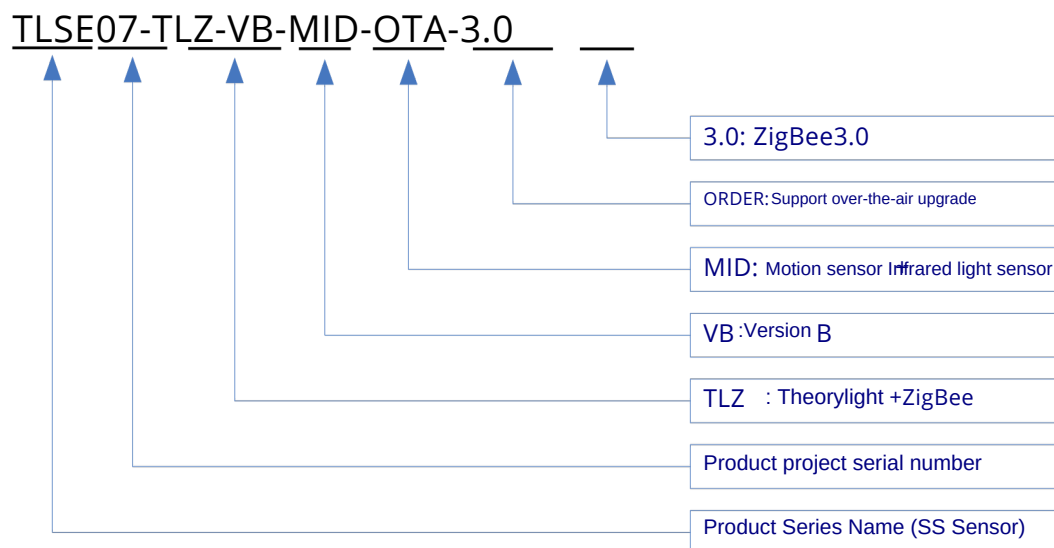
Dimming 10V PWM dimming
 Smart Components ZigBee/ microwave motion sensor + infrared illumination light sensor

Dimensions

Unit: mm



Model code



Product Parameters

	Smart Module	Input voltage	Output signal	Infrared remote control distance	Wireless communication distance	Maximum detection range	Illumination range
TLSE07- TLZ- VB-MID- OT A- 3.0	MID= Microwave motion sensor + red External illumination light perception	DC12V (power ripple requirement < 400m V)	10V PWM	10m	30m	8m	0-600Lux

Packaging data

Product Model	Smart Modules	Gross Weight	Remote packaging size distance	Maximum detection range	Illu packaging method
TLSE07-TLZ-VB-MID-OTA-3.0	8.7g	\	\		1pc/box

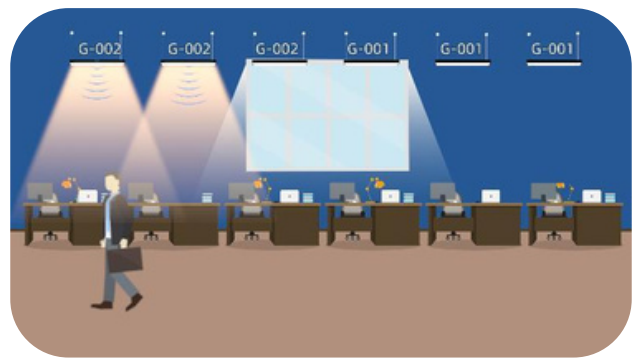
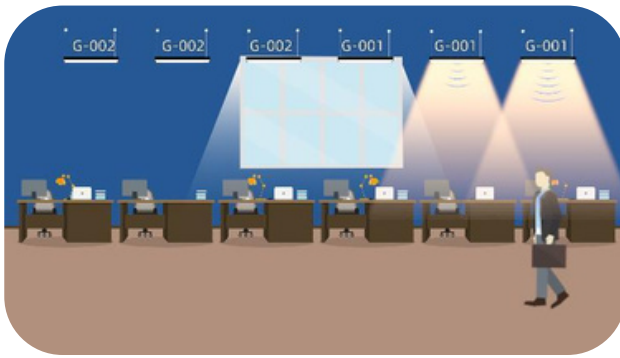
Set Operation

1. The sensor control needs to be used with our TLCD01 remote controller.
2. For detailed operation, please refer to the "TLCD01 Remote Controller Manual"

Typical working scenarios



Technology's Theorylight smart lamps have built-in motion sensors and light sensors, and can also be connected to external smart sensors. The "Theorylight" remote control can be used to edit groups and set parameters of the devices. By adopting standard ZigBee technology, the Theorylight series of lamps have the inherent advantages of long transmission distance, multiple channels, and automatic relay.



Users can use the Theorylight remote control to set the sensor parameters of the Theorylight lamps in groups or individually with one click;

The Theorylight remote control can adjust the brightness of a single lamp or a group of lamps. The Theorylight smart lamps work together with the motion sensors in the same group, and the light sensors intelligently control the lamp switches according to the ambient brightness.

Theorylight smart lamps are available in a variety of styles and categories, and are compatible with panel lights, linear lights, tri-proof lights, mining lamps, and T8 tubes. They can be widely used in different scenarios such as offices, warehouses, factories, and parking lots.