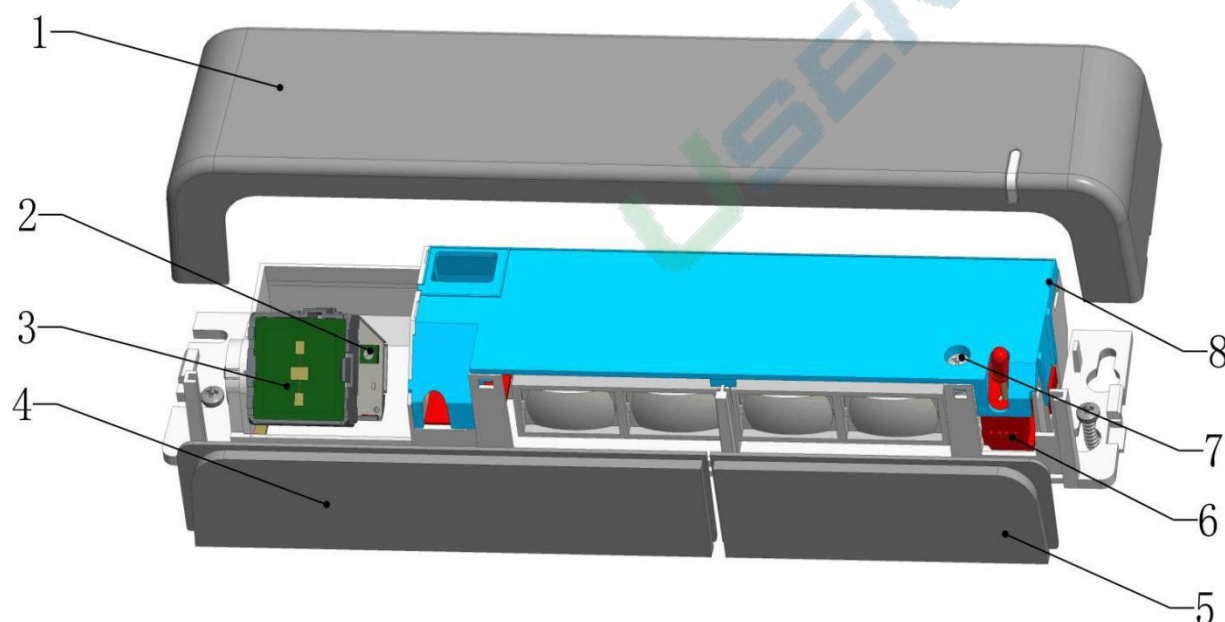


# Guardian 2.0

Radar & Active Infrared Sensor for Automatic Doors

## Description

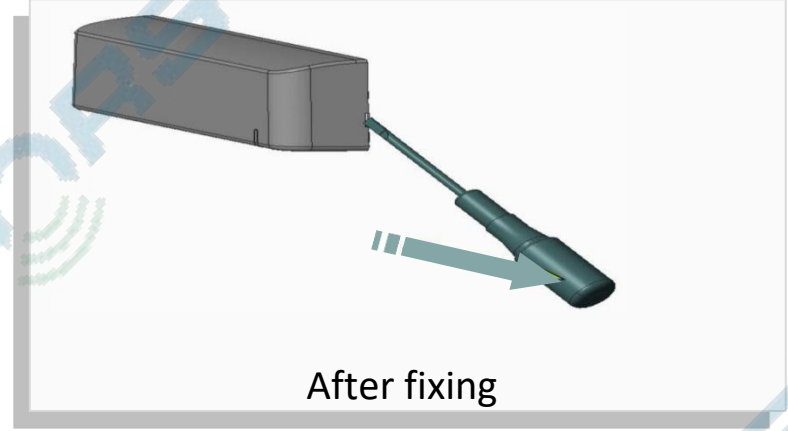
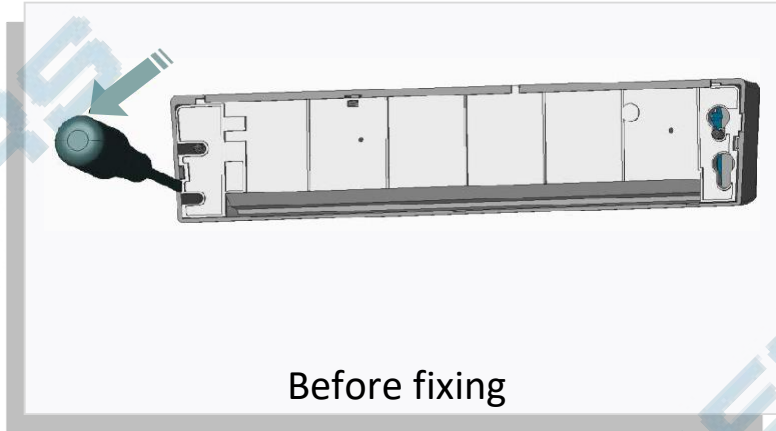


1. Main Connector
2. Regulation resistance of microwave sensor
3. Antenna
4. IR light blocking cover
5. IR light blocking cover
6. Dip switch
7. Detection range adjustment
8. [Component not explicitly named in the list]

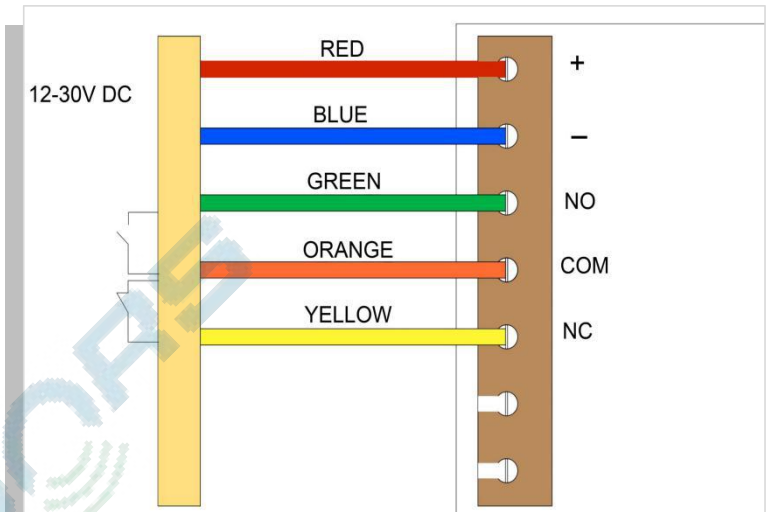
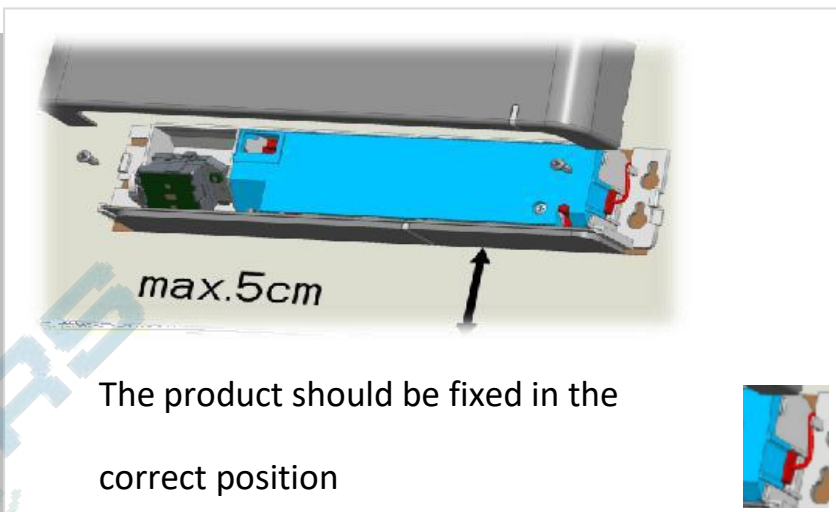
## Technical Specifications

Technology:	<b>Microwave Doppler Radar</b> Transmitter frequency: 24.150 GHz Transmitter radiated power: < 20 dBm EIRP Transmitter power density: < 5 mW/cm <sup>2</sup>	<b>Active Infrared</b> Infrared wavelength: 850 nm
Detection Mode:	<b>Motion</b> Min. detection speed: 5 cm/s	<b>Presence</b> Typical response time: < 300 ms
Angle:	15° to 50°	- 5° to + 8°
Supply Voltage:	12V - 30V DC +/- 10%	
Mains Frequency:	50 Hz - 60 Hz	
Max Power Consumption:	< 2.2 W	
Output:	Relay (free of potential change-overcontact) Max contact voltage: 30V DC/ V AC Max contact current: 2A (max)	
Mounting Height:	1.8 m to 3 m	
Temperature Range:	From - 25 °C to + 70 °C	
Noise:	< 70 dB	
Retention Time :	1s	
Degree of Protection:	IP54	
Dimension:	271 mm (L) x 59 mm (H) x 41 mm (W)	
Material:	ABS & PMMA	
Cable Length:	3 m	

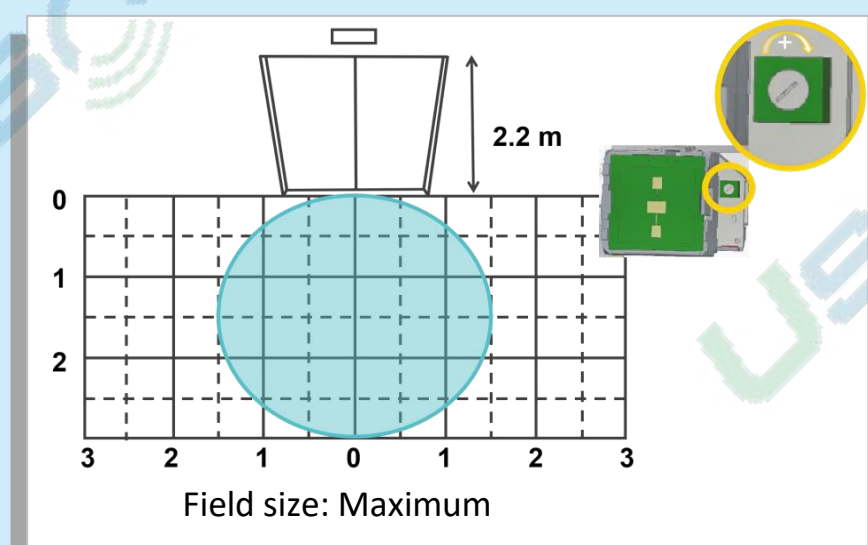
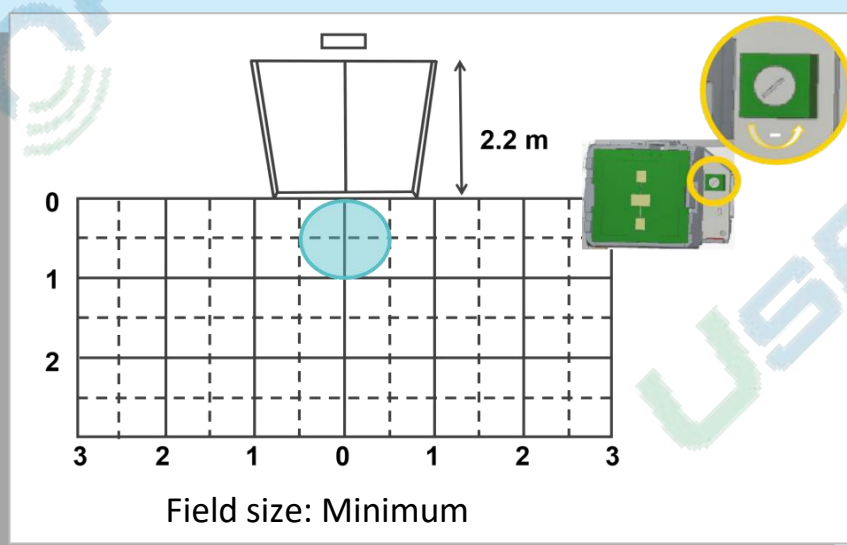
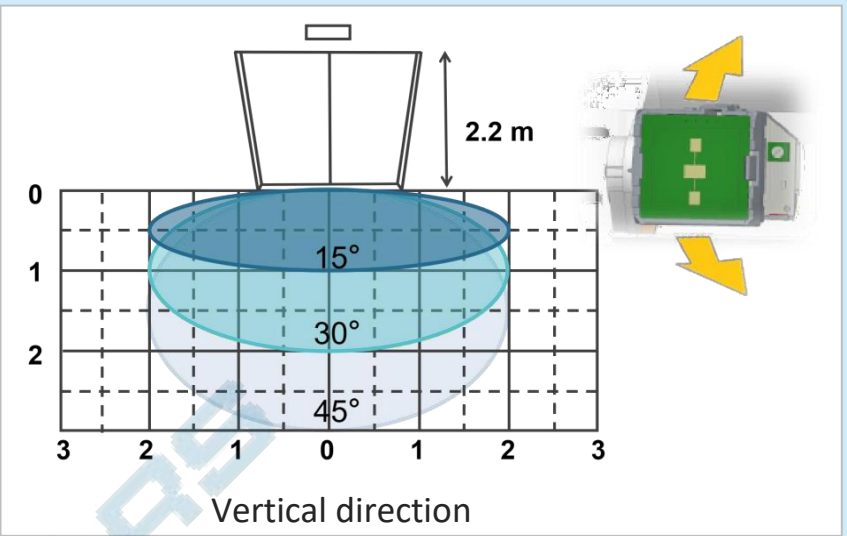
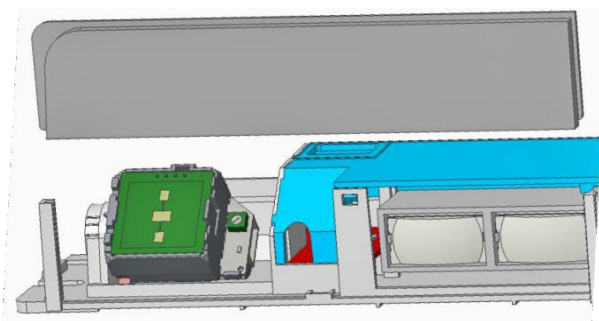
## 1. OPENING THE SENSOR



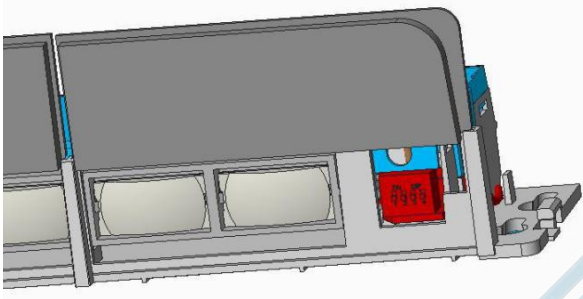
## 2. MOUNTING AND WIRING



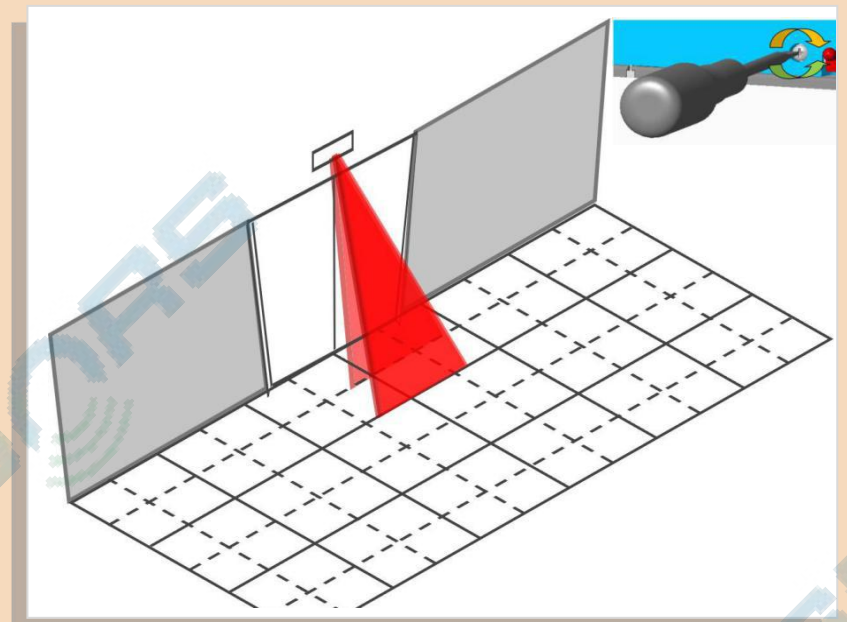
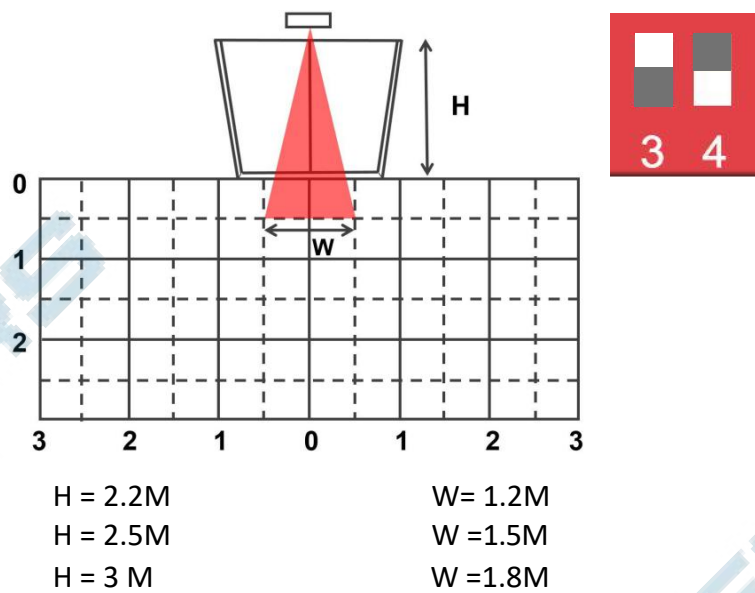
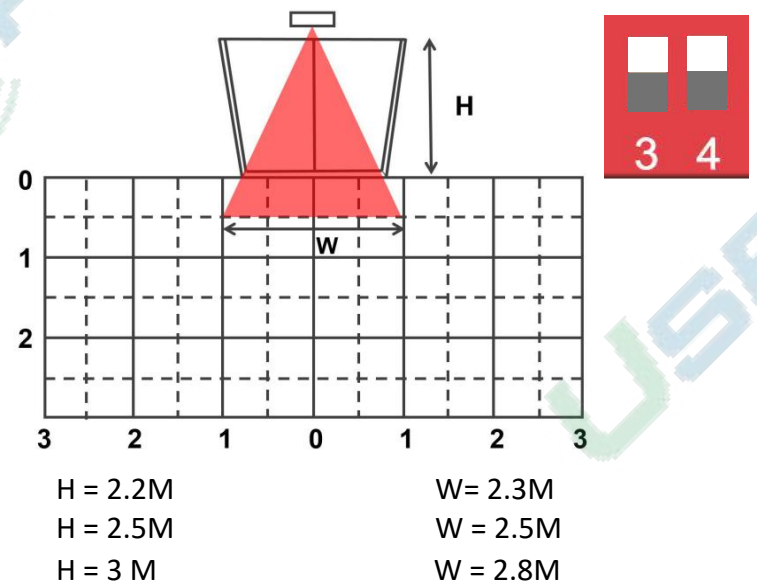
## 3. RADAR DETECTION & ADJUSTMENT



## 4. INFRARED DETECTION & ADJUSTMENT



The light blocking cover should be removed before adjustment



## 5. FUNCTION SWITCHING



All in OFF, not working



ON - open motion mode  
OFF - close motion mode



ON - common mode  
OFF - unidirectional mode

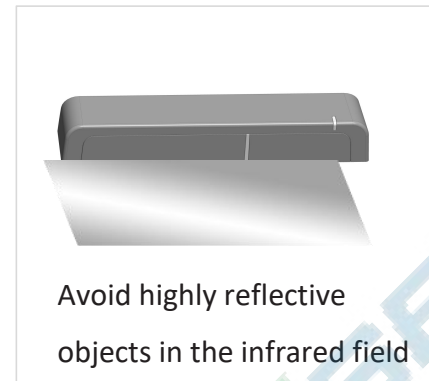
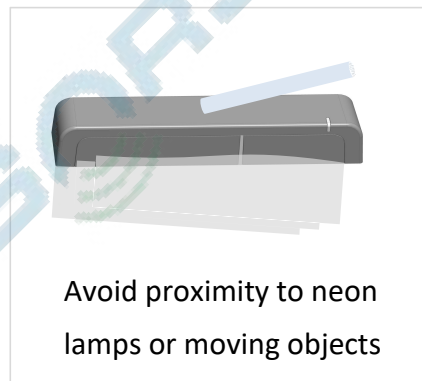


ON - open presence mode  
OFF - close presence mode



ON - enlarge Infrared detection range  
OFF - reduce Infrared detection range

## Tips



## Light Indicator

Green LED lights on	Motion part is on
Red LED lights on	Infrared part is on
Orange LED flashes	Setting model
The LED is off	Check wiring
When turning on sensor, orange LED flashes but green LED and red LED is off	Check if the dip switch turns on motion and infrared module
When turning on sensor, orange LED flashes but green LED is off	Check if the dip switch turns on motion module
When turning on sensor, orange LED flashes but red LED is off	Check if the dip switch turns on infrared module
Green LED keeps lighting up	<ol style="list-style-type: none"><li>1) Check if there are objects (e.g. rain drop) moving on the cover</li><li>2) Check if the sensor vibrates and fastened it firmly</li><li>3) Check if the sensor sees the door moving and adjust the radar angle</li></ol>
Red LED keeps lighting up	<ol style="list-style-type: none"><li>1) Check if there are objects (e.g. rain drop) on the cover</li><li>2) Check if the sensor vibrates and fastened it firmly</li><li>3) Check if the sensor sees the door and adjust the IR angle</li><li>4) Check if the sensor is disturbed by external conditions, and turn off the switch 4</li></ol>

\* The Guardian is tested and approved by the TÜV in compliance with EN 16005.

\* - this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

- children shall not play with the appliance.

- cleaning and user maintenance shall not be made by children without supervision.

