

# Hand Sweep Sensor Switch

- Hand sweep sensor switch, hole-free installation, connected directly to the low voltage LED strip.
- When hand sweep, LED strip turn on gradually.
  When hand sweep again, LED strip turn off gradually.
  When hold hand for more than 2 seconds, adjust the brightness.
- Max 4A output current, max output power 96W@24V.
- Sensing distance 5-8 cm, infrared signal can transmit through plastic, glass and other transparent materials.
- Generally installed in the aluminum profile.
- 3M paste in the bottom of the PCBA make easy installation and security.
- Low cost and high stability.
- Suitable for wardrobe lights, cabinet lights, etc.

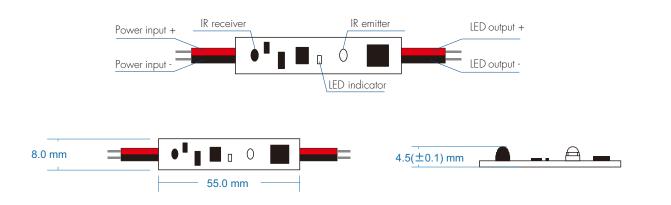


# C€ RoHS

#### **Technical Parameters**

Input and Output		Sensor data		Safety and EMC	
Input voltage	5-24VDC	—— Sensing distance	5-8cm (with cover) 18cm (without any cover)	EMC standard	EN IEC 55015:2019+A11:2020 EN 61547:2023 EN IEC 61000-3-2:2019+A1:2021
Output voltage	5-24VDC				
Output current	4A	Dimming data			EN 61000-3-3:2013+A1:2019
Output power	20W/@5V 48W/@12V 96W/@24V	Dimming range	1%-100%	Safety standard	EN 61347-1:2015+A1:2021 EN 61347-2-13:2014+A1:2017
		Dimming curve	Logarithmic		
Output type	Constant Voltage	PWM Frequency	2000Hz(default)	Certification	CE
Warranty and Protecti	ion			Package	
Warranty	5 years	Environment		Size	L130xW90mm
Protection	Reverse	Operation temperature	Ta:-30°C ~ +55°C	Gross weight	0.011kg

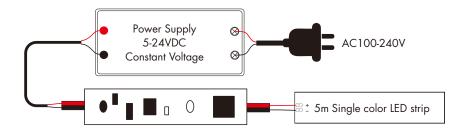
## Mechanical Structures and Size



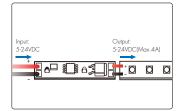
# Working Principle

The sensor switch is designed to be used in LED aluminum profile. It is dedicated for switching LED lights "on" and "off" without touching the switch. The sensor switch periodically sends out a string of infrared impulses and measures the strength of the reflected signal.

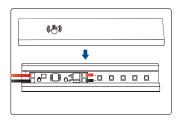
When a hand is close to the sensor the infrared impulses reflect from the hand and bounce back to the sensor, the output of the sensor will reverse its state. The sensor switch is resistant to signals coming from other sources such as infrared remote controls, lamps or sunlight.



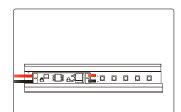
#### Installation steps:



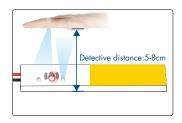
① Input is connected to the power supply, output is connected to the LED strip.



③ Install the PC cover to the aluminum profile, and adhere the hand-sweep logo sticker directly above the sensor switch.



2 Adhere the sensor switch and LED strip to the aluminum profile with paster.



④ When hand sweep, LED strip turn on gradually, the indicator is brighter. When hand sweep again, LED strip turn off gradually, the indicator is slightly lit; When hold hand for more than 2s, adjust the brightness, the indicator keeps flashing.

### Installation Attention

- The hand sweep sensor switch is 8mm wide and it is recommended that it be mounted in an aluminum profile of 10 x 10mm (width x height) and above to help dissipate the heat. It is recommended that the maximum temperature should not exceed 70°C.
- It is recommended to choose an isolated switching power supply with voltage ripple less than 5%.
- Don't install with power on.
- Pay attention to the polarity of the power input and LED output.
- Multiple sensor switches should not be too close to each other, or they may interfere with each other.
- If a cover is installed above the sensor, please choose a material with good light transmittance, and the cover should avoid the possibility of displacement caused by vibration and wind.