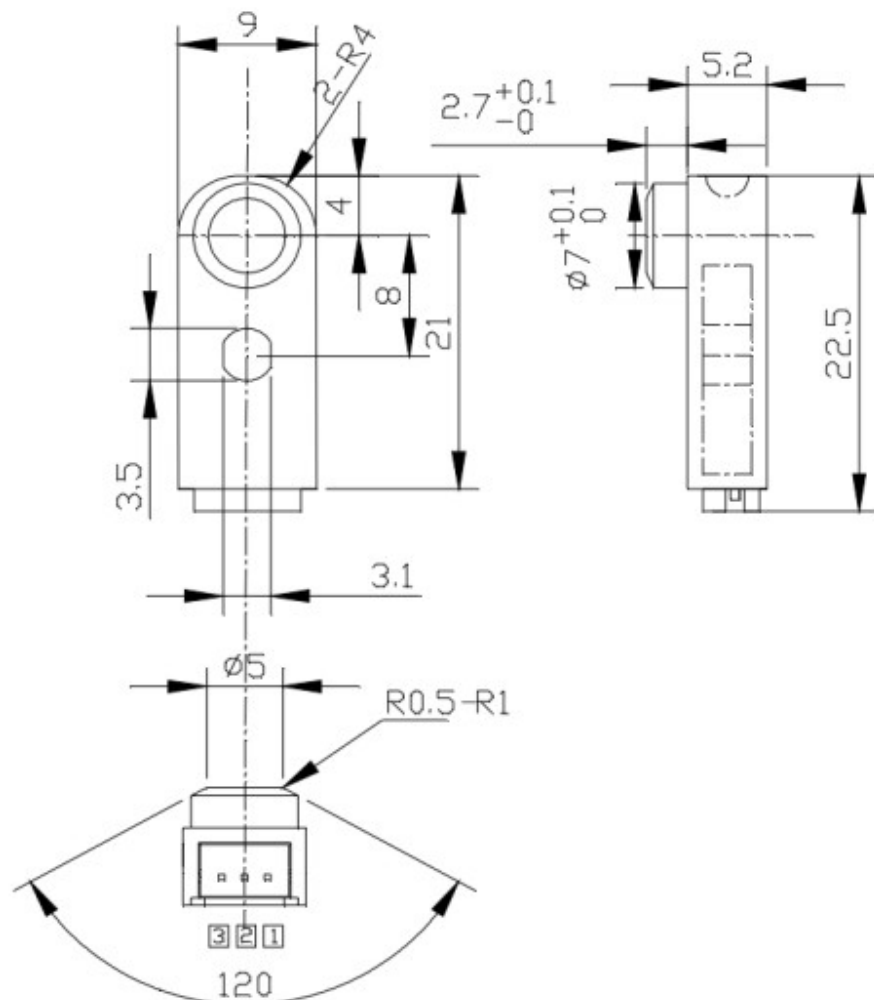


# INTRODUCTION

Infrared (IR) break-beam sensors are a simple way to detect motion. They work by having an emitter side that sends out a beam of human-invisible IR light, then a receiver across the way which is sensitive to that same light. When something passes between the two, and it's not transparent to IR, then the "beam is broken" and the receiver will output a signal.

This IR break beam sensor works up to 4m with a fast and stable response of 0.5 ms. With a small size, the module can be conveniently installed in a narrow space. Besides, it can operate within a temperature of -10°C to 60°C.

Power the sensor by a voltage of DC 5V. It can be used with Arduino in smart robot competitions for simple motion detection, speed detection, timing, etc.



## FEATURES

- IR Photoelectric switch with 4m detection range
- Small in size, fast response

## APPLICATIONS

- Simple motion detection
- Speed detection
- Timing

## SPECIFICATION

- Operating Voltage: DC 5V
- Output Current: 30mA
- Output Power: 100mW
- Sensing Range: 4m
- Sensing Mode: thru-beam(Non-transparent Objects)
- Wavelength: 830nm
- Emitting Angle: straight line (infrared light)
- Receiving Angle:  $\pm 5^\circ$
- Response Time: 0.5ms
- Operating Temperature:  $-10\sim+60^\circ\text{C}$
- Storage Temperature:  $-20\sim+80^\circ\text{C}$
- Transmitter: red wire-5V, black wire-GND, green wire-floating
- Receiving: red wire-5V, black wire-GND, blue wire-out
- Green PCB for the transmitter, black PCB for the receiver

## SHIPPING LIST

- 5V IR Photoelectric Switch (4m) x1