📞 (800) 346-6873   Change Location 🇺🇸

MOUSER ELECTRONICS.

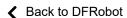| All ⌄ | Part # / Keyword | 🔍 |

☰   👤   🛒 **0**

Home ❯ NEWEST Products ❯ New by Manufacturer ❯ DFRobot ❯ SEN0503 IR Break Beam Sensor (50cm) - DFRobot

NEWEST PRODUCTS

❮ Back to DFRobot

DFROBOT DRIVE THE FUTURE

DFRobot SEN0503 IR Break Beam Sensor (50cm)

🔍 Enlarge

| View Details |

| More About DFRobot |

DFRobot SEN0503 IR Break Beam Sensor (50cm) are infrared break-beam sensors that are a simple way to detect motion. This IR break beam sensor works up to 50cm with a fast and stable response of < 2ms. The module can be conveniently installed in a narrow space with a small 20mm x 10mm x 9mm size. It can also operate within a temperature of -25°C to 60°C. Power the sensor by a voltage of 3.0V to 5V DC. In smart robot competitions, it can be used with Arduino for some simple motion detection, speed detection, timing, etc.

The DFRobot SEN0503 works 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 is not transparent to IR, the beam is broken, and the receiver will output a signal to let the user know.

FEATURES

- Fast and stable response speed
- It can be conveniently installed in a narrow space

SPECIFICATIONS

- Induction distance (50cm/(5V), 20cm/(3.3V))
- Induction method (through-beam type (non-transparent))
- 3.0V to 5V DC working voltage
- 25mA working current
- NPN normally open output mode
- 100mA (can directly drive the relay) output current
- Straight line (infrared light) emitting angle
- < 10° receiving angle
- 2ms response time

- -25°C to 60°C working temperature
- Indoor (not waterproof) working environment
- 20mm x 10mm x 9mm (LxWxH) dimensions
- 25cm / 9.84 inch cable length
- 3mm / 0.12 inch light hole
- Transmitter (red wire = 5V DC, black wire = GND)
- Receiving (red wire = 5V DC, black wire = GND, white wire = OUT (NPN))

KIT CONTENTS

- 1x IR break beam sensor (50cm) - receiver
- 1x IR break beam sensor (50cm) - transmitter

APPLICATIONS

- Simple motion detection
- Speed detection
- Timing

ADDITIONAL RESOURCE

- Product Overview

Published: 2021-09-27 | Updated: 2023-01-09

Get the Latest News

Enter your Email | Subscribe

📞 Call Us

✉ Email Us

MOUSER ELECTRONICS®

1000 North Main Street

Mansfield, TX 76063

USA

CONNECT WITH US

Feedback

Privacy Center

Terms and Conditions

Accessibility

Sitemap

Copyright ©2023 Mouser Electronics, Inc.

Mouser® and Mouser Electronics® are trademarks of Mouser Electronics, Inc. All other trademarks are the property of their respective owners. Corporate headquarters and logistics center in Mansfield, Texas USA.