

INFRARED SENSORS AND TOOLKIT FOR DISTANCE MEASUREMENT

A complete distance measurement system

With its eight infrared sensors, the Wany IR8s gives you an easy way to integrate distance measurement ability in your own research, educational, and prototyping projects. A key component of Wany Robotics' Peeke robot, as well as consumer appliances and toys by major manufacturers, this toolkit offers a simple solution for enabling higher-level obstacle avoidance and navigation applications in mobile robotic devices.

The IR8s has a standard serial port for easy connections to your host machine, whether it's a mobile robot or a development PC. You also get Wany's graphical software that shows you what the sensors are detecting and lets you adjust sensor range and sensitivity.



Ready-to-use solutions for projects requiring embedded distance measurement ability

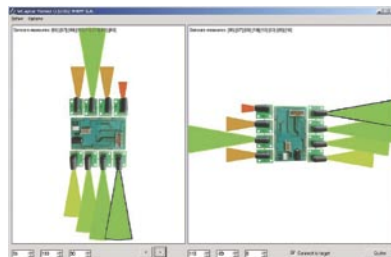
Distance measurement from a few inches up to 10 feet

The IR8s toolkit comes with eight infrared sensors and connector cables so you can position them to meet your own specific needs. Each sensor offers an opening angle of around 15°, measuring distances up to 10 feet. Sensitivity, accuracy, and range can be calibrated by software. This makes IR8s ideal for:

- Embedded applications, devices, and experiments
- Proof of concept prototyping

Infrared measurement is divided into 50 zones that you can adjust in order cover critical ranges with confidence. For example, your measurements can be made with high accuracy in the first few inches, with long range coverage but lower precision in the farthest few feet.

In addition, the eight sensors perform their measurements simultaneously, giving you an accurate picture all around your device. That, plus the fact that the sensors are resistant to sunlight and ambient heat, means that the IR8s can be used efficiently both indoors and outdoors. With its low power consumption, this solution is especially useful in autonomous mobile platforms.



Visualization software shows you how your IR8s perceives obstacles

You can connect the IR8s board to your platform's microcontroller or to a remote terminal. Using its built-in command set, you can start measurements directly or via software. When you connect the board to a serial port on a Windows PC, you can use Wany's SensorViewer software to see a visual representation of the IR cones covered by your board.

Wany's IR8s distance measurement toolkit has a small form factor and robust sensor system that will add advanced features to your mobile projects and prototypes of all kinds.

SPECIFICATIONS

- 8 Sensors per card
- Sensor opening angle: approximately 15°
- Range 5 cm to 3 meters (2 in. to 10 ft.)
- Software settable resolution
- Frequency of measurement: 10 Hz
- Synchronous mode
- Insensitive to colors and reflected sunlight
- 12 v DC power supply
- Consumption at rest: 25 mA
- Peak consumption: 60 mA (10 ms)
- Main module size: 50 mm x 80 mm x 30 mm (appr. 2 x 3 x 1 inches)
- Sensor size: 20 mm x 25 mm x 25 mm (appr. 0.75 x 1 x 1 inches)
- Weight: 80 g (2.8 oz.)
- 9600 baud TTL serial port
- IR communication between IR8s cards



The sensors and software technologies used in the IR8s toolkit are also available in whole or part for licensing and custom integration. Please contact us directly for more details on Wany Robotics technology licensing services.



For orders in North America

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