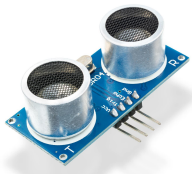


PRODUCT DATASHEET



Ultrasonic Module HC-SR04

555041

The HC-SR04 Ultrasonic Sensor measures distances from 2cm to 400cm with high accuracy, ideal for various DIY and automation projects.

Full product documentation, files and tutorials: solde.red/555041

CORE ATTRIBUTES

SKU 555041

WEIGHT 12 g

BARCODE 101202

DESCRIPTION

A truly classic sensor! The HC-SR04 Ultrasonic Sensor is a cost-effective solution for distance measurement in a wide array of projects. With ultrasonic waves, this module accurately determines distances from 2cm to 400cm with a high resolution of 0.3cm, making it a great choice for applications requiring a wide range of proximity detection. Its design, featuring an ultrasonic transmitter, receiver, and control circuit, ensures stable performance and ease of integration. Engineered for compatibility, the HC-SR04 is a favourite among Arduino and Raspberry Pi enthusiasts. Its 4-pin interface (VCC, Trig, Echo, GND) simplifies setup, allowing for rapid prototyping and development. Whether you're building obstacle avoidance robots, smart parking systems, or interactive art installations, this sensor provides the foundational data needed to bring your visions to life with minimal effort. Its technical prowess, the HC-SR04, stands out for its value and broad applicability. It empowers hobbyists, students, and professional developers to implement ranging capabilities without significant investment. Its proven reliability and extensive community support further solidify its position as a go-to component for educational purposes, DIY electronics, and advanced automation systems, ensuring your projects benefit from accurate and consistent performance.

TECHNICAL DETAILS

- **Range:** 2cm - 400cm
- **Accuracy:** 3mm (1cm in our library)
- **Measurement angle:** 15 degrees
- **Voltage:** 5V
- **Current:** <2mA
- Comes with 4-pin soldered male headers

SPECIFICATIONS

INTERFACE	Digital Gpio
QWIIC COMPATIBLE	No
BREADBOARD COMPATIBLE	Yes
MEASUREMENT TYPES	Distance
MEASUREMENT RANGE	2cm - 400cm
MEASUREMENT ACCURACY	1cm
IC PART NUMBER	HC-SR04
SUPPLY VOLTAGE MIN V	5
SUPPLY VOLTAGE MAX V	5
LOGIC LEVEL	5V Only

LINKS

MicroPython Module	https://github.com/SolderedElectronics/Soldered-UltrasonicSensor-MicroPython-Library
Arduino Library	https://github.com/SolderedElectronics/Soldered-Ultrasonic-Sensor-easyC-Arduino-Library
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-UltrasonicSensor-MicroPython-Library

GALLERY

