

INDUSTRIAL PRODUCT DATASHEET

# One Wire Temperature Sensor - DS18B20

High-accuracy  $\pm 0.5\%$  temperature sensor with alarm search, waterproofing, and Grove socket, ideal for long-range, water quality, and wireless applications.

SKU

101990019

UPDATED

2026-04-24 02:29:41

PRICE

\$8.30(Excl. VAT)



# Overview



The DS18B20 One Wire Temperature Sensor delivers accurate temperature measurement with  $\pm 0.5\%$  accuracy from  $-10^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  and an operating range of  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ . Featuring an alarm search command, waterproof design, and a Grove unified socket, it suits applications like long-range sensors, water quality detection, and wireless communication.

## Key Features

- **Outstanding measurement accuracy:** Measure temperature with  $\pm 0.5\%$  accuracy, absolute temperature. (  $-10^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  )
- **Robust measurement range:** The sensor can operate even from  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$  degrees.
- **Alarm search command:** It identifies and addresses devices whose temperature is outside of programmed limits. (temperature alarm condition)
- **Excellent waterproof function:** Suitable for immersive temperature detection.
- **Grove unified socket:** The sensor ensures "Plug and Play" and could be versatile for various applications.

# Product Gallery



## Specification

|                       |                 |
|-----------------------|-----------------|
| Weight                | G.W 54g         |
| Battery               | Exclude         |
| Operating Voltage     | 3.0-5.5V        |
| Chip                  | DS18B20         |
| Length                | 2m              |
| Operating Temperature | -55°C to +125°C |

# Applications

- Design your own Long Range sensor
- Construct project for water quality detection
- Support any wireless communication applications

## Part List

|                             |   |
|-----------------------------|---|
| One Wire Temperature Sensor | 1 |
|-----------------------------|---|

## Compliance & Logistics



|          |              |
|----------|--------------|
| HSCODE   | 9025199090   |
| USHSCODE | 9025194000   |
| UPC      | 841454105299 |
| EUHSCODE | 9013101000   |
| COO      | CHINA        |

## Resource Links

- <https://www.seeedstudio.com/One-Wire-Temperature-Sensor-p-1235.html>
- [DS18B20-Datasheet](#)

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